Response to the Notice of Disapproval for the
Phase II Investigation Report for Delta Prime Site Aggregate Area, Technical Area 21,
Los Alamos National Laboratory (LANL), EPA ID No: NM0890010515, HWB-LANL-10-025,
Dated June 24, 2010

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment. This response contains data on radioactive materials, including source, special nuclear, and byproduct material. Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with U.S. Department of Energy policy.

SPECIFIC COMMENTS

NMED Comment

1. Section 3.4, Deviations, page 5, bullet 2:

Permittees' Statement: *"At SWMU 21-024(g), boreholes at locations 2 and 9 could not be advanced past 11.5 ft because of auger refusal; therefore, samples were collected at 11.5 ft below ground surface (bgs) rather than at 15 ft bgs as prescribed in the work plan."*

NMED Comment: *The locations 2 and 9 refer to sample location IDs in the approved Work Plan. The Permittees must revise the text to identify the sample location IDs in the Report for these two sample locations.*

LANL Response

1. The text for Solid Waste Management Unit (SWMU) 21-024(g) has been revised to the following under section 3.4, bullet 2:

    - At SWMU 21-024(g), boreholes at locations 21-27610 and 21-27606 could not be advanced past 11.5 ft because of auger refusal; therefore, samples were collected at 11.5 ft below ground surface (bgs) rather than at 15 ft bgs as prescribed in the work plan.

NMED Comment

2. Section 6.1.1, Soil and Rock Sampling and Analytical Results, page 12:

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

NMED Comment: *NMED acknowledges that the Tables and Figures only depict concentrations of inorganics and radionuclides above background values (BV). In many cases the deepest sampling interval does not appear on the Table or Figure because there were no detections above BV for*

inorganics or radionuclides and no detections for organics. For example, Table 6 (Proposed Sampling at SWMU 21-013(c)) in the approved Work Plan indicated that a deeper sample (8.0-9.0-feet) at location 21-25651 was necessary to determine the vertical extent of selenium. Figure 6.6-1 (Inorganic chemicals detected or detected above BVs at 21-013(c)) and Table 6.6-1 in the Report do not show a sampling interval from 8.0-9.0 feet. There is no way to know that a sample was collected from 8.0-9.0 feet without consulting the approved Work Plan. Without this knowledge, it would appear that the Permittees have not defined the extent of selenium at sample location 21-2561. The Permittees must revise all Tables and Figures, where appropriate, to include all sampling intervals and non-detects must be indicated as such.

LANL Response

2. As agreed at the July 14, 2010, meeting with NMED, the figures have been edited to show total depths for each sample location. The depth range is located next to the sample location identification number on each figure or plate.

NMED Comment

3. Section 6.2.2, Spatial Distribution of COPCs at Consolidated Unit 21-003-99 and SWMU 21-024(c), page 15, bullets 3 and 5:

The Permittees must explain why sample locations 21-605289 and 21-605292 have "no data" as indicated on Plate 2 in the Report.

LANL Response

3. There were no concentrations above background values (BVs) at these two locations. Plate 2 has been revised and the "no data" labels have been deleted.

NMED Comment

4. Section 6.2.2, Spatial Distribution of COPCs at Consolidated Unit 21-003-99 and SWMU 21-024(c), page 15, bullet 12:

Permittees' Statement: *"PCB extent is defined by decreasing concentrations with depth and all contamination above 1 mg/kg total PCBs has been removed from the site from within 10 ft bgs."*

NMED Comment: *At sample location 21-25748, Aroclor-1254 and Aroclor-1260 were detected at a depth of 14.0-15.0-feet at concentrations of 2.98 mg/kg and 1.16 mg/kg, respectively. SWMU 21-024(c) cannot achieve a "corrective action complete without controls" determination because total PCBs exceeds 1 mg/kg at the 14-15-foot depth interval at sample location 21-25748. A landuse restriction preventing construction of a building with a foundation deeper than 10-feet due to the presence of concentrations of PCBs that exceed l mg/kg would be required for this site if no further corrective action is conducted.*

LANL Response

4. Per agreement with the U.S. Environmental Protection Agency (EPA) sampling strategy and approval of the risk-based polychlorinated biphenyl (PCB) cleanup (EPA 2010, 108766), the site is found not to pose a potential unacceptable risk from the PCBs at depth under the construction worker and

residential scenarios. Although a risk screening assessment was not completed for this site in the Phase II investigation report (extent is not defined for other constituents), a preliminary risk screening assessment has been completed for the purpose of this response. All Aroclor-1254 and Aroclor-1260 data from 0 to 15 ft bgs, which includes sample location 21-25748, and the concentrations of 2.98 mg/kg and 1.16 mg/kg, respectively, were used to assess the potential risk to these two receptors. The preliminary risk screening results are as follows.

Preliminary Risk Screening Assessment of PCBs at SWMU 21-024(c)

COPC[a]	EPC[b] (mg/kg)	Construction Worker SSL[c] (mg/kg)	Construction Worker Results	Residential SSL (mg/kg)	Residential Results
Noncarcinogenic Hazard					
Aroclor-1254	0.116	4.36	**HQ**[d] 0.03	1.12	**HQ** 0.10
Carcinogenic Risk					
Aroclor-1260	0.196	75.8	**Excess Cancer Risk** 2.8E-08	2.22	**Excess Cancer Risk** 8.8E-07

[a] COPC = Chemical of potential concern.

[b] EPC = Exposure point concentration.

[c] SSL = Soil screening level.

[d] HQ = Hazard quotient.

The hazard quotients (HQs) and total excess cancer risks are below NMED target levels of an HQ of 1.0 and cancer risk of 1E-05 (NMED 2009, 108070). The risk screening assessment above is based on the reasonable maximum exposure (RME) using an upper confidence limit (UCL) as the exposure point concentration (EPC) because it is much more representative of site exposure. It is based on EPA guidance for assessing risk, which is standard risk assessment practice (EPA 1989, 008021). Using the maximum detected concentrations as EPCs, as noted in NMED's comment, represents worst-case exposures and not actual exposure conditions. The worst-case scenario assumes that construction workers would be exposed to these concentrations for 250 days for 1 year. If the site should be excavated, the amount of material removed containing these concentrations would be small because the concentrations are well bounded laterally and vertically; consequently, the exposure time would be minimal (less than the standard default values). Although this is a preliminary risk screening assessment, the imposition of land use restrictions and/or the statement that corrective action without controls cannot be achieved is unwarranted at this time. Once the extent of contamination is defined for this site and a risk screening assessment is conducted with all applicable data, the results will be used to recommend final site status.

NMED Comment

5. Section 6.3.2, Spatial Distribution of COPCs at Consolidated Unit 21-006(c)-99, page 16, bullet 6:

Permittees' Statement: *"Lateral extent is defined for americium-241, cesium-137, isotopic plutonium, strontium-90, tritium, and isotopic uranium south of location 21-601199 by decreasing or remaining essentially the same with depth. Tritium increased slightly laterally but was detected at trace levels."*

NMED Comment: *The Permittees must revise the text to identify the sample ID for the sample collected "south of location 21-601199." Additionally, the Permittees must define the lateral extent of tritium at this location. The Permittees must also revise the text, where appropriate, to indicate that the lateral extent of tritium south of location 21-601199 must be defined in the Phase III investigation.*

LANL Response

5. Section 6.3.2, bullet 6 has been revised to identify the location south of 21-601199. LANL agrees that the extent for tritium has not been defined. The text has been changed to the following: "Lateral extent is defined for americium-241, cesium-137, isotopic plutonium, strontium-90, and isotopic uranium south of location 21-601199 by decreasing activities south at location 21-605259. Tritium extent is not defined south of location 21-601199."

   In addition, other affected sections including the executive summary, conclusions sections 7.1 and 7.2, recommendations section 8.1, and Appendix H, section H-2.1 have been edited to reflect these changes.

NMED Comment

6. Section 6.3.3, Summary of Human Health Risk-Screening Results, page 17:

Permittees' Statement: *"PAHs are found in asphalt and are a product of incomplete combustion from the tailpipes of motor vehicles. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt road upslope from the outfall. Therefore, the slightly elevated cancer risk estimated for the residential scenario at this consolidated unit is not related to a release from the site and does not require further investigation or remediation."*

NMED Comment: *The cumulative cancer risk for the residential scenario slightly exceeded the target risk level of 1E-05. Polycyclic aromatic hydrocarbons (PAHs) were the primary driver for the excess cancer risk. While most of the detects for PAHs were in surface soil samples (0-0.5 feet below ground surface, ft bgs), there were several detections in subsurface soil at depths up to four ft bgs. The presence of PAHs in subsurface soil suggests that their presence are not due to runoff or vehicle exhaust, but could be the result of past site activities. The Permittees must either provide additional evidence supporting their conclusion that "the slightly elevated cancer risk estimated for the residential scenario at this consolidated unit is not related to release from the site" or revise the Report to recommend soil removal for PAHs.*

LANL Response

6. It has been concluded from the site history, as presented in section 2.5.1 of the Phase I investigation report (NMED 2008, 102290) and section H-2.3 of Appendix H in the Phase II investigation report, that levels of polycyclic aromatic hydrocarbons (PAHs) detected at the site are not attributable to site activities. The building associated with the consolidated unit was used for plutonium research and production. The site history is as follows.

   Operational History

   Consolidated Unit 21-006(c)-99 consists of SWMUs 21-006(a), 21-006(b), 21-006(c), and 21-006(d). These SWMUs are inactive underground seepage pits associated with buildings 21-002 and 21-003. In addition to a seepage pit, SWMU 21-006(b) also includes a drainline and outfall from the seepage pit.

SWMU 21-006(a) consists of an unmarked underground seepage pit of approximately 0.1 acre, located between building 21-002 and former building 21-003. Buildings 21-002 and 21-003 were used for plutonium processing and research.

- ~1945—The seepage pit was installed. According to the TA-21 Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) work plan (LANL 1991, 007529, p. 18-14), the pit received Hanford container wash water, bomb electrolytic decontamination solution (ethylene glycol, phosphoric acid, and plutonium), and chemical makeup room wastewater. Approximately 12 gal. of decontamination solution may have been emptied into the drain in room 322 at building 21-003 each day.
- Documentation is not available indicating when use of the seepage pit ended.
- The pit apparently was backfilled and is not visible. Documentation is not available indicating whether the pit was located on the north or south side of the corridor that connected the buildings. If it was on the south side, it may be the same pit as SWMUs 21-006(c) and 21-006(d).

SWMU 21-006(b) consists of a brick manhole placed within a trench (structure 21-118), including a drainline and outfall (LANL 1991, 007529; p. 15-103). The drainline and brick manhole/trench north of the outfall were installed to receive ether waste from the ethyl ether extraction process as part of the original TA-21 plutonium purification process (Christensen and Maraman 1969, 004779, p. 8).

- 1945—The manhole and associated lines were installed during the construction of building 21-003 (LANL 1991, 007529; p. 15-103). A 3-in. cast-iron drainline exited the southeast side of building 21-002 and extended approximately 160 ft southward to structure 21-118 (brick manhole/trench). A 2-in. cast-iron outlet line ran approximately 100 ft southward from the pit to an outfall approximately 8 ft above the surface of a bench below the mesa top.
- September 1945—The ether extraction process was discontinued (Christensen and Maraman 1969, 004779, p. 48).
- Documentation is not available indicating when use of the brick manhole/trench ended.

SWMUs 21-006(c) and 21-006(d) are thought to be the same site because descriptions place them in proximity (LANL 1991, 007529, p. 18-10).
SWMU 21-006(c) consists of a seepage pit located 15 ft outside the door to the bomb-cleaning room (room 322) at building 21-003. The pit reportedly received a bomb electrolytic decontamination solution from a drain in room 322. The pit is thought to be partially or entirely beneath current building 21-313 and/or the remaining central corridor portion of building 21-003. As with SWMUs 21-006(a) and 21-006(b), the period of operation has not been identified in any available documentation. Waste from a second-story chemical makeup room was reportedly dumped or pumped into a stone-filled seepage pit, most likely the pit identified as SWMU 21-006(c). SWMU 21-006(d) may have been associated with a concrete pad and French drain system called the 21-272 dock.

At this consolidated unit, one of two detected concentrations of benzo(a)pyrene exceeded the residential soil screening level (SSL) at location 21-600388 [SWMU 21-006(b)] at the outfall area, pictured in attached Figure 1. This outfall area received discharge from the brick manhole/trench (structure 21-118). Buildings 21-002 and 21-003 were used for plutonium processing and research. Samples collected from under the brick manhole/trench, which discharged to the outfall, had no detected concentrations of organic chemicals. For the site as a whole, semivolatile organic compounds (SVOCs) were not detected in the majority of samples collected and analyzed for SVOCs (47 of 55). This supports the conclusion that PAHs detected at the site are not associated with operational discharges, and the slightly elevated cancer risk from PAHs for the residential scenario at this consolidated unit is not related to releases from the site and does not require further investigation or remediation.

The detection of PAHs down to 4 ft bgs is at a location east of former building 21-002 in a former asphalt parking area. During decontamination and decommissioning (D&D) activities in this area in the 1990s, the concrete/asphalt material from the demolished parking area was rubbleized and spread around this site as fill material. This specific location is still covered with rubbleized building/ground materials resulting from these D&D activities. Evaluation of the site history and site analytical data resulted in the conclusion that PAHs detected in this area are attributable to small amounts of asphalt having been collected in the sample as the auger was advanced through the fill material.

Pertinent information has been added to the text in section 6.3.3 of the Phase II report and Appendix H sections H-4.4.2 and H-4.5.2.

NMED Comment

7. Section 6.8.2, Spatial Distribution of COPCs at Consolidated Unit 21-022(h)-99, page 25, bullet 3:

Permittees' Statement: *"Molybdenum increases to the south; however, detections are at trace levels at approximately 1 mg/kg. Therefore, the extent is defined for molybdenum."*

NMED Comment: *The Permittees must define the lateral extent of molybdenum, the vertical extent of barium at location 21-605282, and the Permittees must revise the text, where appropriate, to indicate that the lateral extent of molybdenum to the south of location 21-605284 must be defined as part of the Phase III investigation.*

LANL Response

7. Molybdenum is naturally occurring in soil. The concentration of molybdenum in the earth's crust is 1.5 mg/kg (http://environmentalchemistry.com/yogi/periodic/Mo.html). The concentrations detected at locations 21-601063 and 21-605284 (≤1.4 mg/kg) likely reflect naturally occurring concentrations. The text in section 6.8.2 has been revised to: "Molybdenum concentrations at locations 21-601063 and 21-605284 likely reflect naturally occurring concentrations; therefore, lateral extent is defined." The lateral extent of molybdenum does not need to be defined as part of the Phase III investigation.

   Barium was not detected above BV in the deepest sample (9 to 10 ft) at location 21-605282. Therefore, the vertical extent of barium is defined and no additional sampling in the Phase III investigation is necessary. See response to Specific Comment 2.

NMED Comment

8. Section 6.9.2, Spatial Distribution of COPCs at Consolidated Unit 21-023(a)-99, page 26, bullet 5:

Permittees' Statement: *"Vertical extent is defined for plutonium-239 at location 21-601114 by decreasing activities with depth."*

NMED Comment: *The Permittees must define the vertical extent of plutonium-239 (PU-239) at location 21-601114. The concentrations increase with depth at this location (2-3-feet: 2.25 pCi/g; 4-5-feet: 2.88 pCi/g; 9-10-feet: 3.77 pCi/g). The Permittees must also revise the text, where appropriate, to indicate that the vertical extent of PU-239 at location 21-601114 must be defined as part of the Phase III investigation.*

LANL Response

8. A deeper sample (MD21-09-12421) was collected from 19 to 20 ft bgs at location 21-601114 and analyzed for plutonium-239 (Table 4.2-9). Because plutonium-239 was not detected in the 19 to 20 ft sample, vertical extent of plutonium-239 is defined. See response to Specific Comment 2. No other revisions are necessary.

NMED Comment

9. Section 6.9.3, Summary of Human Health Risk-Screening Results, 21-023(a)-99, page 27:

Permittees' Statement: *"The operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene. Benzo(a)pyrene is probably from runoff from the road, which is upslope of the site."*

NMED Comment: *The cumulative cancer risk for the residential scenario exceeded the target risk level of 1E-05. The primary drivers for the excess risk were PAHs and arsenic. The Report indicates that "the operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene. Benzo(a)pyrene is probably from runoff from the road, which is upslope of the site." However, PAHs were detected consistently in samples to a depth of 17 ft bgs. The presence of PAHs in subsurface soil suggests that their presence is not due to runoff, but could be the result of past site activities. The Permittees must either provide additional evidence supporting their conclusion that the elevated cancer risk estimated for the residential scenario is not related to a release from the site, or revise the Report to recommend soil removal for PAHs. The Report also indicates that the arsenic exposure point concentration (EPC) is similar to background concentrations, resulting in an overestimation of the risk. However, no quantitative evidence (e.g., a statistical comparison of background to site levels to see if they are significantly different) has been provided to support this assumption. The Permittees must either provide additional information demonstrating that the arsenic detected at the site is statistically the same as background, or revise the Report to recommend limited soil removal for arsenic.*

LANL Response

9. It has been concluded from the site history, as presented in section 2.5.4 of the Phase I investigation report (NMED 2008, 102290) and section H-2.9 of Appendix H of the Phase II investigation report, that levels of PAHs detected at the site are not attributable to site activities. The building associated

with the consolidated unit was used for plutonium research and production. The site history is as follows.

Operational History

Consolidated Unit 21-023(a)-99 consists of SWMU 21-023(a), a septic tank and drainlines that reportedly serviced a janitor's mop sink in building 21-003; SWMU 21-023(b), a septic tank and drainlines that received wastewater from the shower room in building 21-003; and SWMU 21-023(d), a septic tank and drainlines that received industrial waste and sewage from building 21-003.

SWMU 21-023(a) consists of a steel-reinforced concrete septic tank (structure 21-223), 4-in.-diameter cast-iron inlet and outlet lines connected to building 21-003 waste lines to the north, and a manhole (structure 21-274) to the south (Andrews and Eshleman 1999, 071295).

- 1945—Building 21-003 was constructed for plutonium research and production. Documentation of the septic system construction date is not available. The septic system was connected to restroom areas of building 21-003.
- 1966—Septic tank (structure 21-225, 5 ft × 9 ft × 6 ft deep) and lines were removed when additions were made to building 21-003 and the new sewage treatment plant opened.

SWMU 21-023(b) consists of a septic tank (structure 21-142), 4-in.-diameter cast-iron inlet and outlet lines connected to building 21-003 waste lines to the north, and a manhole (structure 21-274) to the south (Andrews and Eshleman 1999, 071295).

- 1945—Building 21-003 and the septic system were constructed.
- 1966—Septic tank (circular, 500-gal., approximately 6.5-ft-diameter) and lines may have been removed when the new sewage treatment plant opened.

SWMU 21-023(d) consists of a septic tank (structure 21-187) and 4-in.-diameter cast-iron inlet and outlet lines that were probably connected to the north to the 4-in.-diameter line leading to the treatment facilities (building 21-035) and to the south to manhole 21-273 (Andrews and Eshleman 1999, 071295).

- 1960—The 5-ft × 3-ft × 5.5-ft-deep steel-reinforced concrete septic tank (structure 21-187) was installed under room 364 of building 21-003 and received industrial waste and sewage.
- ~1966—The septic tank was bypassed and the pipeline was connected to the new sewage treatment plant.
- 1966—The septic tank and lines were removed when additions were made to building 21-003 and the new sewage treatment plant opened.

Low concentrations of PAHs were detected at sampling location 21-601129 at 16 to 17 ft bgs, beneath former septic tank 21-225 [SWMU 21-023(a)]. This septic tank was removed in the 1990s during the D&D of building 21-003, which was used for plutonium processing and research. Also

demolished during the 1990s in this specific area was a former asphalt parking area. During this demolition, the concrete/asphalt material from the parking area was rubbleized and spread around this site as fill material. This specific location is still covered with rubbleized building/ground materials resulting from these D&D activities. Evaluation of the site history and site analytical data resulted in the conclusion that PAHs detected in this area are attributable to small amounts of asphalt having been collected in the sample as the auger was advanced through the fill material.

Benzo(a)pyrene concentrations exceed the residential SSL at locations 21-603010 and 21-601127 [SWMU 21-023(d)]. These locations were sampled from under the former septic tank discharge pipe south of an asphalt-paved road (attached Figures 2 and 3). There were no detections of PAHs under this pipe north of the road and south of building 21-003, indicating that the benzo(a)pyrene detected is from the asphalt road and not from building 21-003. For the site as a whole, SVOCs were not detected in the majority of samples collected and analyzed for SVOCs (42 of 71). Therefore, the slightly elevated cancer risk from PAHs for the residential scenario is not related to releases from the site and does not require further investigation or remediation. Pertinent information has been added to the text in section 6.9.3 of the Phase II report and Appendix H sections H-4.4.2 and H-4.5.8.

The statement noted in NMED's comment regarding arsenic is not related to statistical comparisons, but rather to what the receptor is exposed to on average across the site, and therefore, what the potential risk may be to that receptor. The uncertainty discussion related to exposure, background, and risk states that exposure to arsenic across the site is similar to that at background locations. Although concentrations of arsenic were detected above background, the 95% UCL of the mean concentration (3.21 mg/kg) is within the ranges of arsenic background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at Consolidated Unit 21-023(a)-99 (only three sample results at three locations are above the maximum background concentration), the potential exposure and residential risk from arsenic are substantially overestimated by the screening level comparison.

The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

Because the arsenic EPC of 3.21 mg/kg falls within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the conclusion that arsenic contributes risk to a scenario at the RME concentration overestimates the potential incremental risk and does not reflect actual exposure and risk. The removal of soil is not warranted.

The uncertainty analysis in Appendix H (sections H-4.4.2 and H-5.4.4) has been revised to include a general discussion of exposure relative to background. In addition, the EPCs and ranges of background concentrations have been included in relevant sections of the report and in Appendix H.

NMED Comment

10. Section 6.11.2, Spatial Distribution of COPCs at SWMU 21-024(b), page 29:

Permittees' Statement: *"Lateral extent was defined for nitrate west of location 21-600504 by decreasing concentrations at location 21-605285."*

NMED Comment: *According to Table 18 in the approved Work Plan, the sample was also analyzed for strontium. The Permittees must revise the text to discuss the results of strontium sampling at location 21-605285.*

LANL Response

10. The approved work plan text (section 3.0, p. 4) does not require analysis of strontium; inclusion of strontium in Table 18 was an error. Therefore, sample 21-605285 was only intended for nitrate and not strontium. No revision to the text is necessary.

NMED Comment

11. Section 6.12.3, Summary of Human Health Risk-Screening Results, SWMU 21-024(d), page 31, paragraph 3:

Permittees' Statement: *"Arsenic risk contributes to approximately half of the total risk at the site and is the main contributor to the cancer risk. The arsenic EPC is similar to background concentrations and results in an overestimation of the risk."*

NMED Comment: *The cumulative cancer risk for the residential scenario exceeded the target risk level of 1E-05 due to the presence of arsenic. While the Report states that the concentrations of arsenic are similar to background, no quantitative evidence (e.g., a statistical comparison of background to site levels to see if they are significantly different) has been provided to support this assumption. The Permittees must either provide additional information demonstrating that the arsenic detected at the site is statistically the same as background, or revise the Report to recommend limited soil removal for arsenic.*

LANL Response

11. The statement noted in NMED's comment regarding arsenic is not related to statistical comparisons, but rather to what the receptor is exposed to on average across the site, and therefore, what the potential risk may be to that receptor. The uncertainty discussion related to exposure, background, and risk states that exposure to arsenic across the site is similar to that at background locations. Although concentrations of arsenic were detected above background, the 95% UCL of the mean concentration (3.56 mg/kg) is within the ranges of arsenic background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at SWMU 21-024(d) (only two sample results at one

location are above the maximum background concentration), the potential exposure and residential risk from arsenic are substantially overestimated by the screening level comparison.

The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

Because the arsenic EPC of 3.56 mg/kg falls within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the conclusion that arsenic contributes risk to a scenario at the RME concentration overestimates the potential incremental risk and does not reflect actual exposure and risk. The removal of soil is not warranted.

The uncertainty analysis in Appendix H (sections H-4.4.2 and H-5.4.4) has been revised to include a general discussion of exposure relative to background. In addition, the EPC and range of background concentrations have been included in relevant sections of the report and in Appendix H.

NMED Comment

12. Section 6.14.1, Soil and Rick Sampling and Analytical Results, page 33:

The Permittees reference Tables 6.14-1, 16.14-2, and 6.14-3 in this section of the Report; however, these Tables were not included in the Report. The Permittees must revise the Report to include Tables 6.14-1, 16.14-2 and 6.14-3.

LANL Response

12. Tables 6.14-1 through 6.14-3 have been added to the revised report.

NMED Comment

13. Section 6.18.2, Spatial Distribution of COPCs at SWMU 21-024(k), page 39, bullet 1:

Permittees' Statement: *"Vertical extent is not defined for barium, calcium, or strontium at this location because the auger hole could not be advanced deeper given the proximity of the sloped mesa edge."*

NMED Comment: *The Permittees must include this explanation in Section 3.4, Deviations. Section 3.4 must be revised as necessary.*

LANL Response

13. The following has been added as the third bullet in section 3.4:

    At SWMU 21-024(k), the borehole at location 21-600859 could not be advanced deeper given the proximity of the sloped mesa edge; therefore, samples could not be analyzed for barium, calcium, or strontium as directed in the Phase II work plan.

NMED Comment

14. Section 6.19.3, Summary of Human Health Risk-Screening Results, Consolidated Unit 21-024(l)-99, page 41:

Permittees' Statement: *"The operations associated with this building would not have resulted in the release of PAHs, such as benzo(a)pyrene, which comprise the majority of the carcinogenic COPCs. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt north, east, and west of former building 21-021."*

NMED Comment: *The cumulative cancer risk for the residential scenario exceeded the target risk level of 1E-05. PAHs were the primary driver for the excess cancer risk. There were several detections in subsurface soil at depths up to eight ft bgs. The presence of PAHs in subsurface soil suggests that their presence may not be due to runoff, but could be the result of past site activities. The Permittees must either provide additional evidence supporting their conclusion that the slightly elevated cancer risk estimated for the residential scenario at this consolidated unit is not related to a release from the site, or revise the Report to recommend limited soil removal for PAHs.*

LANL Response

14. PAHs present at this site may be due to operations, specifically from the two separate machine rooms [SWMU 21-024(l)] located within the building. Therefore, LANL agrees to remove limited soil at this site to reduce residential risk from exposure to PAHs in the subsurface. Pertinent information has been added and/or deleted in the text executive summary, section 6.19.3, recommendations sections 8.1 and 8.2, and Appendix H sections H-4.4.2, H-4.5.17, and H-6.1 of the Phase II report.

NMED Comment

15. Section 6.24.2, Spatial Distribution of COPCs at SWMU 21-027(c), page 49, bullet 3:

Permittees' Statement: *"Lead concentrations increased southeast of location 21-27142 at location 21-605234; however, no additional samples can be collected on the slope and extent is defined by sampling conducted at Los Alamos Canyon (LANL 2004, 087390)."*

NMED Comment: *The Permittees have not adequately described the field conditions which prevented collecting a sample beyond location 21-605234 to define the lateral extent of lead. The Permittees have also not identified the sampling locations in Los Alamos Canyon that define the lateral extent of lead. The Permittees must either define the extent of lead at SWMU 21-027(c), or provide a detailed description of the field conditions at the site and identify the Los Alamos Canyon sampling locations that define the extent of lead. The Permittees must also include the lead concentrations detected at each of the Los Alamos Canyon sampling locations.*

LANL Response

15. Samples were collected as far downgradient from SWMU 21-027(c) as possible. The furthest downgradient locations were on the bench below the mesa edge where no additional samples could be collected because of the proximity of the end of the bench. Figure 1 (attached) is a picture from the furthest downgradient sample location looking south, showing the edge of the bench and the canyon below.

    The following has been added to section 6.24.2, bullet 3:

    The nearest down-canyon reach from SWMU 21-027(c) in Los Alamos Canyon is LA-2W. The sediment data collected in this reach as part of the Los Alamos/Pueblo Canyon investigation had a maximum lead concentration of 46.9 mg/kg (LANL 2004, 087390). This concentration is less than that detected at SWMU 21-027(c), which demonstrates lateral extent is defined for lead.

NMED Comment

16. Section 6.25.1.1, Inorganic Chemicals in Soil, page 51, paragraph 8:

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

NMED Comment: *The Permittees must explain why the detection limit for silver is greater than the background value (BV) of 1 mg/kg.*

LANL Response

16. There are two main aspects of the nondetect results with detection limits above BVs relevant to this comment: the method detection limit (MDL) and the quantitation limit (also termed the estimated detection limit or practical quantitation limit). The MDL is the minimum level of an analyte used to determine whether the analyte is present with 99% confidence. It is not the level at which a result is quantified. The quantified level (both for a nondetect and a detect) is represented by the quantitation limit, which is the value reported for each inorganic chemical in the data tables in the report. The MDLs and quantitation limits are provided in the electronic data deliverable for each laboratory and are also provided on the data DVDs in each report.

    The MDLs for silver were below the soil and tuff BVs, and the quantitation limits were above the BVs in a subset of samples. It is often the case that the quantitation limit exceeds the BV, although the MDL is less than the BV. Sources of variability in MDLs and quantitation limits can be tracked to sample preparation steps of the standard methodology. The inductively coupled plasma mass spectrometry (ICPMS) method is a fast and cost-effective way to identify and quantify inorganic elements. However, several aspects of this method affect the MDLs and/or quantitation limits for all inorganic chemicals. The MDLs and quantitation limits are established from analyses of liquid standards and are derived based on variable factors (among others) such as the initial sample weight, percent moisture, and sample volume adjustment. These variable factors, together with the instrument calibration variability (within acceptable limits) and the standard rounding curve used to quantify the result, can result in the MDL and/or quantitation limit varying between and among analyses and in higher limits, depending on the magnitude of change related to each factor. For example, if sample mass changes from 0.5 to 1.5 grams, percent moisture is between 0.5% and 20% (this is a typical range of moisture for LANL samples), and the same volumetric flask is used to adjust

the sample volume, the MDLs and quantitation limits can vary by a factor of approximately 4. In addition, the high natural levels of iron oxide and aluminum in New Mexico soil cause high levels of interference during the ICP process, making it difficult to accurately quantify low levels of inorganic chemicals in samples, particularly the inorganic chemicals with nondetect results that exceed BV. The ICPMS method is also subject to interferences, carryover, and blank contamination that may affect quantification of the results.

Although ICPMS is an adequate analytical method for most inorganic chemicals, it is not equally effective for all inorganic chemicals. Because of sample, instrument, and analysis variables in addition to interferences, carryover, and blank contamination, the MDLs and quantitation limits for inorganic chemicals may vary and be high relative to the BVs for some samples. The low MDLs obtained by the analysis lead to the conclusion that no detected analytes are below BVs and allow confidence that the results are not missing detections above BVs. Because there is uncertainty associated with some results, the inorganic chemicals with detection limits above the BVs are evaluated to determine whether they should be retained as chemicals of potential concern (COPCs) at the site.

NMED Comment

17. Section 6.25.1.2, Inorganic Chemicals in Tuff, page 52, paragraphs 12-14:

Permittees' Statement: *"Selenium was not detected but had DLs (0.49 mg/kg to 1 mg/kg) above the BV (0.3 mg/kg) in all seven tuff samples. Selenium is identified as a COPC in tuff."*

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

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

NMED Comment: *The Permittees must explain why the detection limits for selenium, silver, and thallium are greater than their established background values (BV) of 0.3 mg/kg, 1 mg/kg, and 1.7 mg/kg, respectively*.

LANL Response

17. There are two main aspects of the nondetect results with detection limits above BVs relevant to this comment: the MDL and the quantitation limit (also termed the estimated detection limit or practical quantitation limit). The MDL is the minimum level of an analyte used to determine whether the analyte is present with 99% confidence. It is not the level at which a result is quantified. The quantified level (both for a nondetect and a detect) is represented by the quantitation limit, which is the value reported for each inorganic chemical in the data tables in the report. The MDLs and quantitation limits are provided in the electronic data deliverable for each laboratory and are also provided on the data DVDs in each report.

    The MDLs for silver and thallium were below the soil and tuff BVs, although the MDLs for selenium were below or slightly above the tuff BV in a few samples. Additionally, quantitation limits for each inorganic chemical are above the BVs (mainly tuff BVs) in a subset of samples. It is often the case that the quantitation limit exceeds the BV, although the MDL is less than the BV. Sources of variability

in MDLs and quantitation limits can be tracked to sample preparation steps of the standard methodology. The ICPMS method is a fast and cost-effective way to identify and quantify inorganic elements. However, several aspects of this method affect the MDLs and/or quantitation limits for all inorganic chemicals. The MDLs and quantitation limits are established from analyses of liquid standards and are derived based on variable factors (among others) such as the initial sample weight, percent moisture, and sample volume adjustment. These variable factors, together with the instrument calibration variability (within acceptable limits) and the standard rounding curve used to quantify the result, can result in the MDL and/or quantitation limit varying between and among analyses and in higher limits, depending on the magnitude of change related to each factor. For example, if sample mass changes from 0.5 to 1.5 grams, percent moisture is between 0.5% and 20% (this is a typical range of moisture for LANL samples), and the same volumetric flask is used to adjust the sample volume, the MDLs and quantitation limits can vary by a factor of approximately 4. In addition, the high natural levels of iron oxide and aluminum in New Mexico soil cause high levels of interference during the ICP process, making it difficult to accurately quantify low levels of inorganic chemicals in samples, particularly the inorganic chemicals with nondetect results that exceed BV.

The ICPMS method is also subject to interferences (especially for selenium) in addition to carryover and blank contamination (especially for thallium) that may affect quantification of the results. These issues affect all inorganic chemical results, but particularly affect detection and quantification of selenium and thallium, and often result in quantitation levels that are biased high. In addition, selenium has a poor ionization response in the plasma used for ICPMS, resulting in less resolution of the results and higher MDLs and quantitation limits.

Although ICPMS is an adequate analytical method for most inorganic chemicals, it is not equally effective for all inorganic chemicals. Because of sample, instrument, and analysis variables in addition to interferences, carryover, and blank contamination; the MDLs and quantitation limits for inorganic chemicals may vary and be high relative to the BVs for some samples. The low MDLs obtained by the analysis lead to the conclusion that no detected analytes are below BVs and allow confidence that the results are not missing detections above BVs. Because there is uncertainty associated with some results, the inorganic chemicals with detection limits above the BVs are evaluated to determine whether they should be retained as COPCs at the site.

NMED Comment

18. Section 7.1, Nature and Extent of Contamination, page 55, SWMUs 21-024(l)-99 and 21-027(c):

The Permittees state that nature and extent have been defined for SWMU 21-027(c). See Specific Comment 15.

LANL Response

18. See response to Specific Comment 15.

NMED Comment

19. Section 7.2.1, Human Health Risk-Screening Assessments, page 55:

Permittees' Statement: *"A human health risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99] because samples were collected from*

depths greater than 5 ft where no complete pathways are present and receptors are not exposed to contaminants."

NMED Comment: *Human health risk-screening assessments for the residential and construction worker scenarios utilize samples obtained from depths of 0 to 10 feet below ground surface (bgs), not 5 feet bgs. While no samples were collected from depths of less than 10 feet at this SWMU, the Permittees must revise the text to state "[a] human health risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99] because samples were collected from depths greater than 10 ft where no complete pathways are present and receptors are not exposed to contaminants."*

LANL Response

19. The text in section 7.2.1 has been revised to read "A human health risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99)] because samples were collected from depths greater than 10 ft where no complete pathways are present and receptors are not exposed to contaminants."

NMED Comment

20. Section 8.2, Recommendations for Corrective Actions Complete, page 58:

Permittees' Statement: *"Thirteen sites for which nature and extent of contamination are defined do not pose potential unacceptable risks or doses under the current and reasonably foreseeable future land use scenarios (residential, industrial, and construction worker)... [t]hese 14 sites are appropriate for corrective action complete without controls because they do not pose potential unacceptable risks or doses under a residential scenario and to the environment."*

NMED Comment: *The Permittees must revise the text to reflect that there are 12 sites for which nature and extent of contamination are defined. See Specific Comment 15.*

In accordance with Section III.W.3.b of the March 1, 2005 Order on Consent (Order), the Permittees may obtain a Certificate of Completion for each site where corrective action is complete. The Permittees must submit their request for Certificates of Completion under separate cover. NMED reminds the Permittees that approval of the Report does not constitute approval of a corrective action complete determination pursuant to Section III.W.3.b of the Order. If a Certificate of Completion is obtained, the Permittees may initiate a Class 3 Permit Modification Request for Corrective Action Complete subject to NMED's review and approval. Only through this process can a "Corrective Action Complete" determination be obtained.

LANL Response

20. See response to Specific Comment 15. Because the extent of lead is defined based on the data provided in response to Specific Comment 15, LANL maintains that the conclusions made in the Phase II investigation report are valid. Consolidated Unit 21-024(l)-99 has now been added to the list of sites that need limited soil removal. Therefore, a total of 12 sites is appropriate for corrective actions complete without controls. The sentence stating "14 sites" has been changed to "12 sites" to accurately reflect the list now presented in the report.

NMED Comment

21. Section 8.3, Schedule for Recommended Activities, page 58:

Permittees' Statement: *"A Phase III Investigation work plan will be developed and submitted to NMED 6 mo after this investigation report is reviewed and approved."*

NMED Comment: *NMED will establish a due date for the Phase III Investigation Work Plan in its approval of the Report.*

LANL Response

21. Comment noted. The text in section 8.3 referring to "6 mo" has been removed from the report.

NMED Comment

22. Table 1.1-1, DP Site Aggregate Area Sites Addressed in this Report, Pages 137-138:

NMED Comment: *Table 1.1-1 (DP Site Aggregate Area Sites Addressed in this Report) is identical to Table 1 (SWMUs and AOCs Addressed in This Plan) in the approved Work Plan with one exception--the last row in Table 1 in the approved Work Plan is presented as follows:*

Consolidated Unit	SWMU/AOC Number	Site Description

The Report only discusses two PCB-contaminated areas: SWMU 21-003-99 and SWMU 21-024(c). The Permittees must explain in what document this "PCB-contamination area near SWMU 21-024(m)" is addressed and why it is not included in Table 1.1-1 of the Report.

LANL Response

22. SWMU 21-024(m) was not addressed in the Phase II work plan. It was inadvertently left in the work plan table, which was copied from the Phase I investigation report (NMED 2008, 102290). No Phase II sampling was necessary to address SWMU 21-024(m). As stated in the approved Phase I investigation report, the objective of the suspected PCB-contaminated outfall investigation conducted in response to NMED's request was to determine the source of the PCBs detected in stormwater samples that NMED collected in a drainage area located below SWMU 21-024(m). LANL concluded in section 7.1 of the Phase I investigation report that data collected at the suspected PCB-contaminated outfall could not be tied to SWMU 21-024(m). No further recommendations were made, and NMED made no further comment or request for further information/investigation. Therefore, the PCB-contamination area near SWMU 21-024(m) was not included in the Phase II investigation report and is not included in Table 1.1-1.

NMED Comment

23. Figure 6.8-1 (Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-022(h)-99), Figure 6.8-2 (Organic chemicals detected at Consolidated Unit 21-022(h)-99, and Figure 6.8-3 (Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-022(h)-99), pages 90-92:

The Permittees must revise Figures 6.8-1 through 6.8-3 to identify the location of each individual SWMU (21-022(h), 21-022(i), and 21-022(j)) that make up Consolidated Unit 21-022(h)-99.

LANL Response

23. Figures 6.8-1 through 6.8-3 have been revised to identify the location of each individual SWMU that make up Consolidated Unit 21-022(h)-99.

NMED Comment

24. Appendix E, Diesel Tank 21-57 Spill Site Investigation, Figure E.1.0-1:

Figure E.1.0-1 appears to be cut off at the edges (e.g., the legend is illegible) and does not have a title. The Permittees must replace Figure E.1.0-1 with the complete Figure.

LANL Response

24. The complete figure for Figure E-1.0-1 has been provided in the revised report.

NMED Comment

25. Appendix E, Diesel Tank 21-57 Spill Site Investigation:

Based on a review of Appendix E, it appears that the nature and extent of contamination resulting from the diesel tank 21-57 spill has been defined. However, the data indicate elevated levels of total petroleum hydrocarbon-diesel range organics (TPH-DRO) at levels above New Mexico screening levels. The Report does not address these elevated levels nor does it indicate whether any additional action or investigation will be conducted on this area. The Permittees must remediate contaminated soil in the vicinity of the TA-21-57 aboveground diesel tank in accordance with NMED's TPH Screening guidelines. The Permittees must include this work as part of the Phase III Investigation Work Plan.

LANL Response

25. The soil data for this aboveground diesel fuel tank was included in Appendix E because the work was done at the same time as the work being performed pursuant to the Consent Order. This tank is not listed in Table 1, SWMUs and Areas of Concern (AOCs) Addressed in This Plan, of the DP Site Phase II work plan (LANL 2008, 104989) and was not part of the scope of work for the Phase II investigation at the DP Site Aggregate Area. Therefore, this site will not be included in the Phase III work plan. However, a revised Tier 1 report will be submitted separately, as discussed below.

    As recommended by NMED in March 2002, a risk-based corrective action Tier 1 evaluation was conducted for this tank, as documented in the February 2003 Tier 1 Evaluation TA-21-57 Aboveground Storage Tank Diesel Fuel Oil Release report (Shaw Environmental Inc. 2003, 110706).

The results of this evaluation, which was performed in accordance with the petroleum storage tank rules for corrective action at 20.5.12 NMAC, found no contaminants of concern above Tier 1 risk-based screening levels (RBSL), with the exception of the benzene RBSL for indoor air for onsite construction workers. The follow-up indoor air samples that were collected for benzene, toluene, ethylbenzene, and xylenes from the adjacent steam plant were all below MDLs. A revised Tier 1 report, which includes additional soil and groundwater data, will be submitted to the Petroleum Storage Tank Bureau in October 2010 and a copy sent to the Hazardous Waste Bureau.

NMED Comment

Appendix H

26. Appendix H, Section H-3.4, Exposure Point Concentration Calculations, pages H-18 – H-19;

In the discussion of the determination of exposure point concentrations (EPCs), the Permittees state that the minimum number of detected data required to statistically determine an EPC, with an acceptable level of confidence, is five. It appears that the use of five detected data points follows the Permittees' guidance contained in Standard Operating Procedure (SOP)-5250, R0, Attachment 10, dated May 20, 2009. In past discussions concerning this issue, the Permittees indicated that the "minimum number of samples needed to conduct statistical comparisons is 10 per medium evaluated" (Response to the Notice of Disapproval for the Investigation Report for Upper Los Alamos Canyon Aggregate Area, Los Alamos National Laboratory, Dated December 3, 2009). While this statement was referencing comparisons to background, this theory should apply to any type of statistical comparison, including statistically estimating an EPC. NMED requires consistency between sites and consistency with past approvals concerning the minimum number of samples required to statistically determine the EPC. The Permittees must clarify what steps will be taken to ensure that the methods used to calculate EPCs for sites within DP Site Aggregate Area are identical to those used for other sites across LANL.

LANL Response

26. The statement in section H-3.4 refers to the total number of detects in a data set, not the total number of data points in a data set and the general rule used to determine when ProUCL will be used and when the maximum detected concentration will be used as the EPC. The approach of using at least five detects as the basis for calculating UCLs is consistent with past LANL reports. Although ProUCL software recommendations include using a minimum of 8 to 10 data points total when calculating a UCL, values are produced using ProUCL for all parametric and nonparametric statistics of data sets of 5 or more data points with 4 or more detects. For some DP sites, results included COPC data sets containing as few as six data points and at least five detects. In these cases, the ProUCL calculated UCLs were used as the EPCs for the respective COPCs whenever the calculated UCL was less than the maximum concentration.

    Consistent with previous LANL reports, ProUCL has been used to calculate UCLs. As stated in Appendix H, section H-3.4, "Calculation of UCLs of the mean concentrations was done using the U.S. Environmental Protection Agency (EPA) ProUCL 4.00.04 software (EPA 2007, 096530), which is based on EPA guidance (EPA 2002, 085640)." This approach will be used at all sites evaluated for risk when a UCL is calculated.

NMED Comment

27. Appendix H, Section H-5.3, Screening Evaluation, page H-53, paragraph 3:

Permittees' Statement: *"Individual HQs for a receptor are summed to derive an HI; an HI greater than 1.0 is an indication that further assessment may be needed to be sure that exposure to multiple COPECs [constituents of potential ecological concern] at a site will not lead to potential adverse impacts to a given receptor population."*

NMED Comment: *For several ecological receptors, the screening assessment indicated hazard quotients (HQs) and hazard indices (HIs) above the target level of 1.0. Where HIs were above 1.0, additional evaluation was conducted to include area use factors, population use factors, and information from Dourson and Stara (1983). The Report indicates that a conclusion of Dourson and Stara is "that the LOAEL [lowest-observed adverse effect level] to NOAEL adjustment [no-observed adverse effect level] indicates that HIs up to 10 <u>may</u> not adversely affect ecological receptors. To maintain conservatism, [Dourson and Stara] state that HIs less than 3 do not adversely affect ecological receptors." The paper indicates that if a 10-fold uncertainty factor is applied, the ratio of the average subchronic to chronic NOAEL or LOAEL for one-half the data are below 2.0 and approximately 96% of the ratios are below a value of 10. The intent of this analysis appears to be to determine whether or not the uncertainty factor as applied is appropriate, rather than whether or not the ratios are indicative of acceptable risk. This paper further discusses the use of uncertainty factors and indicates that use of a default uncertainty factor (10-100) may not be appropriate. The paper indicates that additional uncertainty factors may be appropriate to account for the sensitivity of the adverse effect and interspecies adjustments. Based upon review of the categories of uncertainty, several issues should be addressed: intertaxon extrapolation, study duration extrapolation, and endpoint extrapolation. Use of the generic uncertainty factor as applied for the Delta Prime (DP) Aggregate Area sites (as well as addressed in EcoRisk) may not be appropriate and additional evaluation and review of uncertainty factors may be warranted. Further, because uncertainty factors consistent with those addressed in the paper were not applied, it is not clear that the assumption that an HI of less than 10 is indicative of acceptable risk. Also noteworthy is that this study appears to be directed at pesticides and may not be directly applicable to all contaminants.*

Dourson and Stara also specifically address ratios below a value of 10.0. In reviewing the adjusted ecological HIs provided in Appendix H, there are several sites where the HIs greatly exceed the target level of 1.0 and are significantly above a ratio of 10.0. It is noted that the EPCs for several of these constituents are based on upper confidence levels (UCL) of the mean and not a maximum detected concentration. Therefore, it does not appear that a single detection is driving the risk in all cases. A qualitative statement is made in the Report that the HIs are acceptable as the concentrations of contaminants driving the risks are similar to either background or levels of contaminants detected in other canyons/areas where biota studies are on-going. However, data were not provided demonstrating the levels of contamination are statistically similar (e.g., Wilcoxon Rank Sum test) to either background or other areas in the canyon. Further, it is understood that the biota studies are on-going and that data for all COPECs have not been collected (e.g., dioxins/furans). Additional evaluation of risk to ecological receptors where the HI is greater than 1.0 in the adjusted HI calculations is warranted. The Permittees must conduct a bounding analysis using the LOAEL to demonstrate that the levels of contamination present do not pose unacceptable harm to the environment.

LANL Response

27. The aspect of the Dourson and Stara (1983, 073474) article cited in the DP Site Phase II report is the ratio of the chronic lowest observed adverse effect level (LOAEL) to chronic no observed adverse effect level (NOAEL) in Figure 4 (middle panel) of the article. This figure shows that the most common ratio between these two effects levels is 10. Thus, to interpret an HQ based on a chronic NOAEL-based ecological screening level (ESL), an HQ <3 is likely between the chronic NOAEL and the chronic LOAEL. This approach has been used in various LANL work plans and reports dating to the biota sampling plan for Los Alamos and Pueblo Canyons.

    A bounding analysis using LOAEL-based ESLs has been conducted for all applicable sites. The LOAEL-based ESLs were obtained and/or calculated based on toxicity information in the ECORISK Database, Version 2.4. This analysis has been incorporated into Appendix H as part of the ecological risk screening assessments.

    The statement noted in NMED's comment is related to what the receptor is exposed to on average across the site, and therefore, what the potential risk may be to that receptor. The uncertainty discussion related to exposure, background, and risk states that exposure to inorganic chemicals across the site is similar to that at background locations. Although concentrations were detected above background, the 95% UCLs of the mean concentrations are within the ranges of background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. This relationship is presented in Tables H-5.4-1 to H-5.4-20.

    The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels. For example, if the chromium EPC is 15 mg/kg and the ranges of background concentrations are 1.9 to 36.5 mg/kg for soil and 0.25 to 13 mg/kg for Qbt 2,3,4, the EPC is not a true reflection of potential exposures to concentrations greater than ambient levels, indicating that site risk is not substantially different from the risk from background concentrations. Therefore, the conclusion that inorganic chemicals contribute risk at the RME concentration overestimates the potential risk and does not reflect actual exposure and risk. The uncertainty analysis (sections H-4.4.2 and H-5.4.4) has been revised to include a general discussion of exposure relative to background.

    The uncertainty analysis in section H-5.4.11 has been revised to include a summary table of concentrations detected in the canyons where ecological studies have been conducted (Table H-5.4-89). Site-specific studies in the canyons document levels of exposure where no adverse effects have been found. It is reasonable to compare site-specific EPCs to the concentrations detected in the canyons. Statistical comparisons are not relevant because this information is simply relating what has been reported elsewhere. The intent of including the canyon ecological assessments by reference is to indicate that field studies have been conducted that go beyond the screening assessment. These studies indicate that chemicals of potential ecological concern (COPECs) have been detected at comparable concentrations as reported at individual SWMUs/AOCs, and that these COPECs and COPEC concentrations do not pose a potential ecological risk. The exceptions for DP Site are lead at SWMU 21-022(h) and 2,3,7,8-TCDD

equivalent at SWMU 21-027(a), which have concentrations markedly elevated above those in the canyons. These data are provided as another line of evidence relating studies already performed and reported. Because COPECs have been more rigorously evaluated in the field and have not been shown to pose risks to receptors at the same or similar concentrations, this line of evidence supports the screening level conclusions using actual empirical results.

NMED Comment

28. Appendix H, Table H.4.1-3 (Parameter Values Used to Calculate Radionuclide SALs for the Industrial and Construction Worker Scenarios), page H-258:

NMED Comment: *In reviewing the exposure parameters used to develop the radionuclide screening action levels (SALs), NMED noted that an exposure time of nine hours per day was applied. The Report indicated that this was representative of a normal work day at the Laboratory. In contrast, the screening levels for chemicals (NMED 2009) for the industrial and construction worker are based upon an exposure time of eight hours per day, which may result in under-conservative screening levels for these two receptors. The Permittees must explain whether or not the chemical screening levels are appropriate and protective of the industrial and construction worker scenarios and whether or not modifications to the exposure times are warranted to more accurately reflect worker activities at the Laboratory. If appropriate, the Permittees must update Section H-5.4 (Uncertainty Analysis) to address this issue.*

LANL Response

28. The exposure time of nine hours versus eight hours applies only to the construction worker radionuclide screening action levels and not the industrial values. The footnote in Table H-4.1-3 regarding the exposure time for the construction worker is not accurate. The correct footnote as presented in LANL guidance (LANL 2005, 088493), Table 6.1-3, p. 8, is: “Calculated as (9 hr/day × 250 day/yr) / 8766 hr/yr, where 9 hr/day is an estimate of the average length of the work day, including a 1-hr break onsite.” The extra hour is intended to account for time spent onsite during a break from work, i.e., lunch, assuming that a construction worker is more likely to bring a lunch than go off-site for lunch. This extra hour is overly protective of a construction worker because during this extra hour, the soil ingestion rate, inhalation rate, and particulate emission factor are much lower than during the eight active work hours. A longer construction work day was assumed for evaluating radionuclide dose with the RESRAD computer code because, unlike chemical intake, radiation dose for all construction exposure pathways is linearly related to the length of time spent in the contaminated area. The chemical SSLs are sufficiently protective and appropriate for this scenario because the exposure parameters are conservative (upper bound estimates of exposure), and no modifications are warranted. The uncertainty analysis for exposure (section H-4.4.2) has been revised to include this discussion and the footnote in Table H-4.1-3 has been revised accordingly.

NMED Comment

29. Appendix H, Section H-4.3, Evaluation of Vapor Intrusion, page H-33:

Permittees’ Statement: *“The vapor intrusion indoor air pathway was not evaluated because all buildings within the DP Site Aggregate Area are abandoned and are scheduled for D&D. There are no receptors in the reasonably foreseeable future; therefore, the pathway is incomplete.”*

NMED Comment: *Several volatile organic compounds (VOCs) were detected at low concentrations across the aggregate area. Because VOCs were not detected above residential screening levels and the Permittees do not intend to release the land and/or re-develop the area for residential use, the exclusion of the vapor intrusion scenario is reasonable. However, as previously discussed with the Permittees, the evaluation of the vapor intrusion scenario is not limited to the residential scenario. Evaluation of the potential exposure through inhalation of indoor air by an indoor worker must also be addressed. The Permittees must clarify whether or not the assumptions used to justify exclusion of vapor intrusion for the residential scenario also apply to an industrial worker and the businesses that currently occupy property within DP Site Aggregate Area.*

LANL Response

29. The vapor intrusion pathway was not evaluated for the DP Site Aggregate Area sites for several reasons.

    1. Volatile organic compounds (VOCs) are not being currently used at DP Site Aggregate Area SWMUs/Consolidated Units/AOCs. These sites were/are also not used for storage or disposal of any VOCs.

    2. Most sites have only a few VOCs detected (1–6 compounds) with concentrations at or below estimated quantitation limits (EQLs). In addition, most detected concentrations are shallow (6 ft or less) and sporadic in nature (5 or fewer detections per VOC). Sites with more VOCs detected had very few detections at depth and most or all were below EQLs. The data indicate that VOCs are not commonly detected and are at trace levels. In addition, the extent of VOCs is defined and is relatively shallow. Given these conditions, a VOC plume is not present at any of these sites that would impact the vapor intrusion pathway.

    3. Some sites in the DP Site Aggregate Area are wholly [e.g., SWMU 21-024(o)] or mostly located on the slope leading to the canyon wall (e.g., outfall portions of sites). These sites are unsuitable for building. There are currently no businesses occupying the property. Therefore, vapor intrusion modeling results for these areas would not be applicable to indoor workers or residents.

    4. Some sites are located away from the mesa edge and, although currently vacant land, may have buildings erected on them in the future. During the preconstruction phase, earth moving and land contouring occur. The earth is usually scraped to a depth that allows for pouring a foundation and/or footings. After the earth has been moved by the developer to accommodate a building, the land will not be as it is currently. Because of the shallow nature of the VOCs detected at DP Site, any VOCs remaining after D&D of TA-21, regrading, and covering with fill material would not present a pathway for vapor intrusion into buildings that may be constructed in the future.

    This information has been added to the text in Appendix H, section H-4.3.

NMED Comment

30. Appendix H, Section H-4.2.10, SWMU 21-024(b), pages H-25 – H-26:

At solid waste management unit (SWMU) 21-024(b), limited soil removal is proposed as part of the Phase III work. The removal action is driven by elevated levels of plutonium and americium in soil. However, the risk assessment also showed areas of elevated arsenic contamination, which resulted

in excess risk above the target level of 1E-05. The Permittees must propose to remove the areas with elevated arsenic as part of the Phase III removal action.

LANL Response

30. The removal of soil for plutonium and americium is necessary based on the estimated dose for the construction worker and residential scenarios. However, the removal of arsenic is not warranted, as described below.

    The uncertainty discussion related to exposure, background, and risk states that exposure to arsenic across the site is similar to that at background locations. Although concentrations of arsenic were detected above background, the 95% UCL of the mean concentration (4.7 mg/kg) is within the ranges of arsenic background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at SWMU 21-024(b) (only three sample results at two locations are above the maximum background concentration), the potential exposure and risk from arsenic are substantially overestimated by the screening-level comparison.

    The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

    Because the arsenic EPC of 4.7 mg/kg falls within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the conclusion that arsenic contributes risk to a scenario at the RME concentration overestimates the potential incremental risk and does not reflect actual exposure and risk.

    The uncertainty analysis in Appendix H (sections H-4.4.2 and H-5.4.4) has been revised to include this general discussion of exposure relative to background. In addition, the EPC and range of background concentrations have been included in relevant sections of the report and in Appendix H.

NMED Comment

31. Appendix H, Section H-4.2.19, Consolidated Unit 21-026(a)-99, page H-31:

The Permittees propose limited soil removal to address radionuclide contamination at SWMU 21-026(a)-99. The Permittees must also propose to remove any soil containing elevated levels of benzo(a)pyrene and dibenz(a,h)anthracene, which are driving the risk assessments

(benzo(a)pyrene for industrial and dibenz(a,h)anthracene for residential and construction) as part of the Phase III corrective action activities.

LANL Response

31. Dose from radionuclide contamination is not a concern for this consolidated unit. Estimated radionuclide doses are 15 mrem/yr or less for the three scenarios. No soil removal for radionuclides is necessary or proposed in the report for this site. The report recommendations include proposing to remove site-related PAHs that contribute to the elevated cancer risk at this site (section 8.1).

NMED Comment

32. Appendix H, Section H-4.4.2, Exposure Assessment, SWMU 21-022(f), page H-35:

Permittees' Statement: *"The construction worker HI of approximately 3 (HI of 2.5) is primarily from manganese, which has an HQ of 2.4. Manganese was detected above background at one location with an EPC (1121 mg/kg), which is similar to the maximum soil background concentration (1100 mg/kg). In addition, the construction worker SSL (463 mg/kg) is similar to the background concentrations for Qbt 2, 3, 4 and soil. If manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. Therefore, this SWMU does not require further investigation or remediation and there is no potential unacceptable risk for the construction worker scenario from site operations."*

NMED Comment: *Due to manganese, the construction worker HI exceeds the target hazard level of 1.0. The Permittees state that this is due to a single detection of 1,100 milligrams per kilogram (mg/kg) of manganese at location 21-603142 at a depth of 8.5 to 9.5 ft. However, in reviewing the data summary figure (Figure 6.7-1), manganese was also detected at the same sample location from 6.5 to 7.5 feet bgs at a concentration of 1,580 mg/kg. The Permittees must explain why this data point was not included in the risk assessment for the construction worker and revise the risk calculations as appropriate.*

LANL Response

32. The text states that manganese was detected above background at one location (which is location 21-603145; both depths at this location had detections above background). The EPC calculation for manganese included all relevant data, including the 1100 mg/kg and 1580 mg/kg concentrations detected above background from 0 to 10 ft at this SWMU. This is verified by the input files provided on DVD for UCL calculations (Attachment H-1). The EPC of 1121 mg/kg is similar to the maximum background concentration of 1100 mg/kg, which coincidentally is the same as one of the concentrations detected above background. For clarity, the text in section H-4.4.2 has been revised as follows.

    The construction worker hazard index (HI) of approximately 3 (HI of 2.5) is primarily from manganese, which has an HQ of 2.4. **The manganese EPC is 1121 mg/kg, which is similar to the maximum soil background concentration (1100 mg/kg). In addition, the construction worker SSL (463 mg/kg) is within the ranges of background concentrations for Qbt 2, 3, 4 and soil (22 mg/kg to 752 mg/kg and 76 mg/kg to 1100 mg/kg, respectively).** If manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. Therefore, this SWMU does not require further investigation or remediation and there is no potential unacceptable risk for the construction worker scenario from site operations.

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Figure 1 Outfall area at Consolidated Unit 21-006(c)-99 and SWMU 21-027(c) south of DP Road

Figure 2 Area north of elevated PAH detections at Consolidated Unit 21-023(a)-99

Figure 3 Area with elevated PAHs at Consolidated Unit 21-023(a)-99

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EXECUTIVE SUMMARY

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

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

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

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

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

Sixteen of the 21 sites evaluated have been determined to pose no potential unacceptable risk or dose to human health under the industrial, construction worker, and/or residential scenarios or to the environment. Corrective actions are complete for 12 of the 16 sites, while 4 sites need additional sampling to define extent. Five sites within the DP Site Aggregate Area were determined to pose potential unacceptable risk or dose to human health under the industrial, residential, and/or construction worker risk scenarios, and one site also poses potential risk to ecological receptors. Limited soil removal and confirmation sampling will be conducted at these sites.

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

Summary of Field Characterization Activities and Risk-Screening Results

Site	Nature and Extent Defined?	Extent Sampling Required?	Risk-Screening Assessments Performed?	Meets Acceptable Potential Hazard, Risk, or Dose Level?	Corrective Actions Complete?	Remediation Necessary?
AOC 21-002(b)	Yes	No	Yes	Yes	Yes	No
Consolidated Unit 21-003-99	No	Yes	No	High potential	No	No
Consolidated Unit 21-006(c)-99	No	Yes	Yes*	Yes	No	No
SWMU 21-009	Yes	No	Yes	Yes	Yes	No
SWMU 21-012(b)	Yes	No	Yes	Yes	Yes	No
SWMU 21-013(c)	Yes	No	Yes	Yes	Yes	No
SWMU 21-022(f)	Yes	No	Yes	Yes	Yes	No
Consolidated Unit 21-022(h)-99	No	Yes	Yes	No	No	Yes, limited soil removal
Consolidated Unit 21-023(a)-99	No	Yes (>10 ft bgs)	Yes	Yes	No	No
SWMU 21-024(a)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(b)	Yes	No	Yes	No	No	Yes, limited soil removal
SWMU 21-024(c)	No	Yes	No	High potential	No	No
SWMU 21-024(d)	No	Yes (>10 ft bgs)	Yes	Yes	No	No
SWMU 21-024(e)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(g)	No	Yes (>10 ft bgs)	Yes	Yes	No	No
SWMU 21-024(h)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(i)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(j)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(k)	No	Yes	No	High potential	No	No
Consolidated Unit 21-024(l)-99	Yes	No	Yes	No	No	Yes, limited soil removal
SWMU 21-024(n)	No	Yes	No	High potential	No	No
SWMU 21-024(o)	Yes	No	Yes	Yes	Yes	No
Consolidated Unit 21-026(a)-99	No	Yes (>10 ft bgs)	Yes	No	No	Yes, limited soil removal
SWMU 21-027(a)	Yes	No	Yes	No	No	Yes, limited soil removal
SWMU 21-027(c)	Yes	No	Yes	Yes	Yes	No
AOC C-21-027	No	Yes	No	Unknown	No	Unknown
Total Sites	**15**	**11**	**21**	**16**	**12**	**5**

* Risk will be rerun for the construction worker and residential scenarios to include the one sample collected for tritium at 3 to 4 ft bgs.

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1.0 INTRODUCTION

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

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

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

1.1 General Site Information

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

1.2 Investigation Overview

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

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

1.3 Document Organization

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

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

2.0 TA-21 BACKGROUND

2.1 Background of TA-21

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

3.0 SCOPE OF ACTIVITIES

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

3.1 Field Activities

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

3.1.1 Geodetic Survey

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

3.1.2 Field Screening

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

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

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

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

3.1.3 Surface and Subsurface Soil Investigation

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

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

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

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

3.1.4 Borehole Drilling and Subsurface Sampling

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

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

3.1.5 Borehole Abandonment

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

3.2 Health and Safety Measures

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

3.3 Waste Management

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

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

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

3.4 Deviations

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

- At Consolidated Unit 21-003-99 and SWMU 21-024(c), samples from location 5 were not collected as directed by the Phase II work plan (LANL 2008, 104989). This area was excavated during the PCB site remediation activities. At location 21-25763, cobalt was analyzed for instead of copper. Mercury was inadvertently analyzed for at this location.
- At SWMU 21-024(g), boreholes at locations 21-27610 and 21-27606 could not be advanced past 11.5 ft because of auger refusal; therefore, samples were collected at 11.5 ft below ground surface (bgs) rather than at 15 ft bgs as prescribed in the work plan.
- At SWMU 21-024(k), the borehole at location 21-600859 could not be advanced deeper given the proximity of the sloped mesa edge; therefore, samples could not be analyzed for barium, calcium, or strontium as directed in the Phase II work plan.
- At Consolidated Unit 21-024(l)-99, samples from location 21-605272 were inadvertently analyzed for cesium-137 and strontium-90 in the 0–0.5 ft depth interval. The 7- to 8-ft sample was inadvertently analyzed for americium-241, strontium-90, and isotopic plutonium.
- AOC C-21-027 investigation was added to the Phase II investigation activities. This site was previously addressed in the DP Site Aggregate Area supplemental work plan (LANL 2006, 092079). This site is collocated with SWMU 21-027(a) and could be addressed at the same time as Phase II investigation activities.
- At AOC C-21-027, samples from location 5 were not collected as directed by the DP Site Aggregate Area supplemental work plan (LANL 2006, 092079) because samples had already been collected from this area as part of activities at adjoining SWMU 21-027(a) and Consolidated Unit 21-006(c)-99 (locations 21-600866 and 21-605256).
- At AOC C-21-027, dioxin and furans were only analyzed for in samples from location 21-610686 because this area was previously sampled as part of SWMU 21-027(a) extent sampling (location 21-605279).

4.0 FIELD INVESTIGATION RESULTS

4.1 Current Site Conditions

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

combined because their sampling locations overlap, and these areas were treated as one site during remediation.

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

4.1.1 Surface and Subsurface Conditions

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

4.2 Surface Surveys and Sampling

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

4.2.1 Field Screening for Radioactivity

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

4.2.2 Field Screening for Organic Vapors

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

4.2.3 Surface and Subsurface Sampling

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

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

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

At AOC 21-002(b), Phase II work plan locations 1 through 9 (LANL 2008, 104989, Table 2 and Figure 2) were sampled in May 2009. Six surface samples and three subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-1). Based on the results from the Phase II sampling, an additional surface sample was collected in December 2009 at location 21-609834 to define lateral extent of isotopic plutonium.

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

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

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

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

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

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

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

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

At SWMU 21-024(a), Phase II work plan locations 1 through 4 (LANL 2008, 104989, Table 7 and Figure 7) were sampled in June and August 2009. Four subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-10). Based on the results from the Phase II sampling, an additional deeper sample was collected in September 2009 at location 3 from 9 to 10 ft to define the vertical extent of isotopic plutonium.

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

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

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

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

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

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

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

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

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

At SWMU 21-024(n), Phase II work plan locations 1 through 13 (LANL 2008, 104989, Table 24 and Figure 24) were sampled in June 2009. Four surface samples and 10 subsurface samples were collected and analyzed as prescribed in the Phase II work plan (Table 4.2-20). Based on the results from the Phase II sampling, an additional surface sample was collected in September 2009 10 ft downslope of location 6 to define the lateral extent of isotopic plutonium. In December 2009, an additional surface sample was collected to define the extent of isotopic plutonium downslope of the sample collected in September 2009.

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

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

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

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

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

- one sample 10 ft east of location 21-605340 (BH-4) for isotopic plutonium in the surface
- one sample 10 ft east of BH-3 for isotopic plutonium in the surface

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

5.0 REGULATORY CRITERIA

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

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

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

5.1 Current and Future Land Use

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

5.2 Screening Levels

Human health and ecological risk-screening evaluations were conducted for the solid media at the DP Site Aggregate Area. The human health screening assessment (Appendix H) was performed on inorganic and organic COPCs using NMED SSLs (NMED 2009, 108070) for the industrial, construction worker, and residential scenarios. Radionuclides were assessed using the Laboratory SALs (LANL 2005, 088493). When an NMED SSL was not available for a COPC, EPA regional screening levels (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) were used (adjusted to a risk level of 10^{-5} for carcinogens). EPA regional screening levels are not available for construction workers; therefore, when

regional screening levels were used for a COPC, the construction worker SSLs were calculated using toxicity values from EPA regional screening tables (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) and equation parameters from NMED (2009, 108070). A surrogate SSL is used for some COPCs based on structural similarity or breakdown products. Section 6 data tables include the applicable SSLs for inorganic and organic COPCs and SALs for radionuclide COPCs for the DP Site Aggregate Area sites.

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

5.3 Cleanup Goals

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

6.0 SITE CONTAMINATION

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

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

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

Thirty-six QC samples were collected in association with the Phase II samples collected to define extent at the 26 sites addressed in this report. QC samples included 12 field duplicates, 11 field trip blanks, and 13 rinsate samples. At the PCB site, nine preexcavation field duplicate samples were collected with the preexcavation PCB characterization samples. Thirty-eight field-duplicate samples and two rinsate

samples were collected with the postexcavation PCB characterization samples. The QC samples were collected at the frequency specified in the investigation work plans submitted to NMED (LANL 2004, 087461; LANL 2006, 092079), the application for PCB risk-based cleanup submitted to the EPA and NMED (LANL 2009, 105184), and the notice of self-implementation of on-site PCB cleanup submitted to the EPA and NMED (LANL 2009, 105182).

6.1 Site Contamination at AOC 21-002(b)

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

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

6.1.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Lateral extent is defined for americium-241, plutonium-239, and SVOCs east of location 21-25693 by decreasing concentrations/activities at location 21-604519.
- Vertical extent is defined for barium and selenium between locations 21-25682 and 21-25690, respectively, by decreasing concentrations with depth at location 21-604520.
- Vertical extent is defined for barium and selenium at location 21-25696 by decreasing concentrations with depth.
- Lateral extent is defined for lead and zinc south of location 21-25687 by decreasing concentrations at location 21-604521.
- Lateral extent is defined for lead and zinc west of location 21-25687 by decreasing concentrations at location 21-604522.
- Lateral extent is defined for plutonium-238 north of 21-25685 by decreasing activities at location 21-604524.
- Vertical extent is defined for SVOCs at location 21-25679 by decreasing concentrations with depth or concentrations detected below estimated quantitation limits (EQLs).
- Lateral extent is defined for selenium northeast of 21-25692 by decreasing concentrations at location 21-604525. Lateral extent is defined for isotopic plutonium northeast of locations 21-25692 and 21-604525 by decreasing activities at location 21-609834.
- Lateral extent is defined for selenium east of location 21-25689 by decreasing concentrations at location 21-604523.

6.1.3 Summary of Human Health Risk-Screening Results

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

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

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

6.1.4 Summary of Ecological Risk-Screening Results

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

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

- The sections below summarize the results of laboratory analyses for Phase II soil and tuff samples at Consolidated Unit 21-003-99 and SWMU 21-024(c). The data needs identified in the Phase II investigation work plan (LANL 2008, 104989) are as follows:
- Vertical extent of aluminum, barium, and nickel at location 21-25719
- Vertical extent of americium-241, chromium, copper, lead, mercury, plutonium-239, and SVOCs at location 21-25748
- Vertical extent of arsenic, chromium, copper, lead, silver, uranium, and zinc at location 21-25763
- Lateral extent of barium west of location 21-25728
- Lateral extent of cesium-137 and tritium west of location 21-25764
- Lateral and vertical extent of cobalt east of 21-25716
- Vertical extent of cobalt at location 21-25716
- Lateral extent of mercury, zinc, uranium, and isotopic uranium north of location 21-25708
- Lateral extent of nitrate west of location 21-25761
- Lateral extent of nitrate east of location 21-25726
- Vertical extent of trichloroethene at location 21-25750
- Lateral extent of zinc northeast of location 21-25715

6.2.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

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

- Vertical extent is defined for aluminum, barium, and nickel at location 21-25719 by decreasing concentrations with depth.
- Vertical extent is not defined for chromium at location 21-25719; concentrations increased with depth. Chromium was detected above BVs as part of the target analyte list (TAL) metals suite. This sample was analyzed for the entire TAL metals suite, instead of a suite selected based on the sample objectives presented in the Phase II work plan.
- Vertical extent is defined for americium-241, chromium, copper, lead, mercury, plutonium-239, and SVOCs at location 21-25748 by concentrations/activities decreasing with depth.
- Vertical extent is defined for arsenic, chromium, lead, silver, uranium, and zinc at location 21-25763 by decreasing concentrations with depth (bottom two depths had no detections or detections below BVs). At location 21-25763, cobalt was analyzed instead of copper. Therefore, extent is not defined for copper.
- Lateral extent is defined for barium west of location 21-25728 by decreasing concentrations at location 21-605289.
- As part of the PCB remediation, the area where location 5 samples were to be collected was excavated. Therefore, lateral extent is not defined for cesium-137 or tritium west of location 21-25764 west of the outfall area.
- Lateral and vertical extent is defined for cobalt east of 21-25716 by decreasing concentrations at location 21-605292.
- Vertical extent is defined for cobalt at location 21-25716 by decreasing concentrations with depth.
- Lateral extent is defined for mercury, zinc, uranium, and isotopic uranium north of location 21-25708 by decreasing concentrations/activities at location 21-605293.
- Lateral extent is not defined for nitrate west of location 21-25761; concentrations increased at location 21-605294.
- Lateral extent was defined for nitrate east of location 21-25726 by decreasing concentrations at location 21-605295.
- Vertical extent is defined for trichloroethene at location 21-25750 by decreasing concentrations with depth.
- Lateral extent is defined for zinc northeast of location 21-25715 by decreasing concentrations at location 21-605290.
- PCB extent is defined by decreasing concentrations with depth and all contamination above 1 mg/kg total PCBs has been removed from the site from within 10 ft bgs.

6.2.3 Summary of Human Health and Ecological Risk-Screening Results

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

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

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

- Vertical extent of americium-241 at location 21-601211
- Vertical extent of americium-241, isotopic plutonium, and tritium at location 21-601213
- Lateral extent of nitrate and cesium-137 west of location 21-600388
- Lateral extent of nitrate southwest of location 21-600390
- Lateral extent of isotopic plutonium and uranium-238 [for adjoining SWMU 21-027(a)] southeast of location 21-600392
- Lateral extent of americium-241, cesium-137, isotopic plutonium, strontium-90, tritium, and isotopic uranium south of location 21-601199
- Lateral extent of copper, isotopic plutonium, tritium, and isotopic uranium south of location 21-601200
- Lateral extent of isotopic plutonium and isotopic uranium north of location 21-601201
- Vertical extent of VOCs at location 21-600391

6.3.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is not defined for americium-241 at location 21-601211; its activities increased with depth.
- Vertical extent is defined for americium-241, isotopic plutonium, and tritium at location 21-601213 by decreasing activities with depth.
- Lateral extent is defined for nitrate and cesium-137 west of location 21-600388 by decreasing concentrations/activities at location 21-605256.
- Lateral extent is defined for nitrate southwest of location 21-600390 by decreasing concentrations at location 21-605257.
- Lateral extent is defined for isotopic plutonium and uranium-238 [for adjoining SWMU 21-027(a)] southeast of location 21-600392 by decreasing concentrations at location 21-605258.
- Lateral extent is defined for americium-241, cesium-137, isotopic plutonium, strontium-90, and isotopic uranium south of location 21-601199 by decreasing activities south at location 21-605259. Tritium extent is not defined south of location 21-601199.
- Lateral extent is defined for copper, isotopic plutonium, and tritium south of location 21-601200 by decreasing concentrations at locations 21-605260 and 21-608018. Isotopic uranium was not detected above BVs at this location during Phase I or Phase II sampling.
- Lateral extent is defined for isotopic uranium north of location 21-601201 by decreasing activities at location 21-605261. Lateral extent is defined for isotopic plutonium north of location 21-605261 by decreasing activities at location 21-609835.
- VOCs were not detected at location 21-600391 during Phase I or Phase II sampling.

6.3.3 Summary of Human Health Risk-Screening Results

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

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

The total excess cancer risk for the residential scenario is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene contributes 1.5×10^{-5} to the risk. Consolidated Unit 21-006(c)-99 consists of inactive underground seepage pits associated with buildings 21-002 and 21-003 and also includes a drainline and outfall from a seepage pit. The operations associated with these buildings would not have resulted in the release of polycyclic aromatic hydrocarbons (PAHs), such as benzo(a)pyrene. PAHs are found in asphalt and are a product of incomplete combustion from the tailpipes of motor vehicles. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt road upslope from the outfall. At this consolidated unit, one of two detected concentrations of benzo(a)pyrene exceeds the residential SSL at location 21-600388 in the outfall area. This outfall area received discharge from the brick manhole/trench

(structure 21-118). Samples collected from under the manhole/trench, which discharged to the outfall, had no detected concentrations of organic chemicals. SVOCs were not detected in the majority of samples collected and analyzed for SVOCs (47 of 55). This supports the conclusion that PAHs detected at the site are not associated with operational discharges. Therefore, the slightly elevated cancer risk estimated for the residential scenario at this consolidated unit is not related to release from the site and does not require further investigation or remediation. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 11 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

6.3.4 Summary of Ecological Risk-Screening Results

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

6.4 Site Contamination at SWMU 21-009

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

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

6.4.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

6.4.2 Spatial Distribution of COPCs at SWMU 21-009

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

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

6.4.3 Summary of Human Health Risk-Screening Results

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

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

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

6.4.4 Summary of Ecological Risk-Screening Results

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

6.5 Site Contamination at SWMU 21-012(b)

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

- Vertical extent of chromium at location 21-25800
- Lateral extent of chromium east of location 21-25816

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

6.5.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

- Vertical extent is defined for plutonium-238 at location 21-25804 by decreasing activities with depth.
- Vertical extent is defined for strontium at location 21-25810 by decreasing concentrations with depth.
- Lateral extent is defined for zinc east of location 21-25788 by decreasing concentrations at location 21-604528.

6.5.3 Summary of Human Health Risk-Screening Results

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

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

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

6.5.4 Summary of Ecological Risk-Screening Results

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

6.6 Site Contamination at SWMU 21-013(c)

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

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

- Lateral extent of selenium west of location 21-25657
- Lateral extent of selenium southeast of location 21-25661

6.6.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is defined for americium-241 and plutonium-239 at location 21-25653 by decreasing activities with depth.
- Lateral extent is defined for americium-241 and SVOCs northwest of location 21-25666 by decreasing concentrations/activities or concentrations below the EQLs at location 21-604500.
- Lateral extent is defined for americium-241 and lateral and vertical extent is defined for perchlorate southwest of location 21-25664 by decreasing activities/concentrations laterally and vertically at location 21-604502.
- Lateral extent is defined for americium-241 to the north of SWMU 21-013(c) by decreasing activities at location 21-604504.
- Lateral extent is defined for americium-241 and vertical extent is defined for barium southwest of location 21-25663 by decreasing activities/concentrations laterally and vertically at location 21-604503.
- Lateral extent is defined for americium-241 east of location 21-25669 by decreasing activities at location 21-604505.
- Lateral extent is defined for plutonium-239 and SVOCs west of location 21-25647 by decreasing activities or concentrations below EQLs at location 21-604501.
- Vertical extent is defined for selenium at location 21-25651 by decreasing concentrations with depth.
- Vertical extent is defined for perchlorate at location 21-25664 by decreasing concentrations with depth.

- Lateral extent is defined for selenium west of location 21-25657 by decreasing concentrations at location 21-604506.
- Lateral extent is defined for selenium southeast of location 21-25661 by decreasing concentrations at location 21-604507.

6.6.3 Summary of Human Health Risk-Screening Results

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

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

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

6.6.4 Summary of Ecological Risk-Screening Results

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

6.7 Site Contamination at SWMU 21-022(f)

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

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

6.7.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.7.3 Summary of Human Health Risk-Screening Results

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

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

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

6.7.4 Summary of Ecological Risk-Screening Results

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

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

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

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

6.8.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is defined for barium at location 21-600240 by decreasing concentrations with depth.
- Lateral extent is defined for barium and molybdenum west of locations 21-600238 and 21-600240 by decreasing concentrations at location 21-605282. Vertical extent is not defined for barium at location 21-605282; its concentrations increased with depth.
- Lateral extent is defined for molybdenum, nitrate, and perchlorate west of location 21-600232 by decreasing concentrations or concentrations remaining essentially the same at location 21-605283.
- Lateral extent of americium-241, cesium-137, isotopic plutonium, selenium, strontium-90, and tritium is defined at SWMU 21-022(j) south of 21-601063 by decreasing concentrations/activities at location 21-605284. Molybdenum concentrations at locations 21-601063 and 21-605284 likely reflect naturally occurring concentrations. Therefore, the lateral extent is defined for molybdenum.

6.8.3 Summary of Human Health Risk-Screening Results

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

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

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

6.8.4 Summary of Ecological Risk-Screening Results

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

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

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

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

6.9.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is defined for americium-241 at location 21-603015 by decreasing activities with depth.

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

6.9.3 Summary of Human Health Risk-Screening Results

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

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

The total excess cancer risk for the residential scenario is approximately 5×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene and arsenic are the primary contributors to the cancer risk at this site. Consolidated Unit 21-023(a)-99 consists of septic tanks and drainlines that reportedly serviced a janitor's mop sink in building 21-003, received wastewater from the shower room in building 21-003, and received industrial waste and sewage from building 21-003. The operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene. Benzo(a)pyrene is probably from runoff from the road, which is upslope of the site. Benzo(a)pyrene concentrations exceed the residential and/or construction worker SSL at locations 21-603010 and 21-601127 [SWMU 21-023(d)]. These locations were sampled from under the former septic tank discharge pipe south of an asphalt-paved road. There were no detections of PAHs under this pipe north of the road and south of building 21-003, indicating that the benzo(a)pyrene detected is from the asphalt road and not from building 21-003. SVOCs were not detected in the majority of samples collected and analyzed for SVOCs (42 of 71). Therefore, the slightly elevated cancer risk estimated for the residential scenario at this consolidated unit resulting from PAHs is not related to release from the site and does not require further investigation or remediation.

The arsenic EPC is similar to background concentrations and results in an overestimation of the risk. Therefore, the total excess cancer risk is overestimated and if the PAHs, particularly benzo(a)pyrene, and arsenic are not included, the cancer risk is approximately 5×10^{-6}, which is less than the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

6.9.4 Summary of Ecological Risk-Screening Results

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

6.10 Site Contamination at SWMU 21-024(a)

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

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

6.10.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.10.3 Summary of Human Health Risk-Screening Results

The total excess cancer risk for the industrial scenario is approximately 2×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below

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

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

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

6.10.4 Summary of Ecological Risk-Screening Results

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

6.11 Site Contamination at SWMU 21-024(b)

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

- lateral extent of nitrate west of location 21-600504

6.11.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

6.11.3 Summary of Human Health Risk-Screening Results

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

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

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

6.11.4 Summary of Ecological Risk-Screening Results

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

6.12 Site Contamination at SWMU 21-024(d)

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

- Vertical extent of americium-241, copper, lead, and selenium, SVOCs, and tritium at location 19-601285
- Lateral extent of americium-241, isotopic plutonium, isotopic uranium, tritium cadmium, chromium, copper, cyanide, lead, mercury, nitrate, silver, uranium, zinc, toluene, and trichloroethene west of location 21-27372
- Vertical extent of lead and strontium-90 at location 21-27366
- Vertical extent of plutonium-239 at location 21-601283
- Vertical extent of several SVOCs at location 21-601281
- Vertical extent of Aroclor-1242, Aroclor-1254, and Aroclor-1260 at location 21-27365

6.12.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is defined for copper, lead, and selenium at location 19-601285 by decreasing concentrations with depth. Vertical extent is not defined for americium-241 or tritium at this location; the data were rejected at the deepest depth sampled because the associated matrix spike recovery was less than 10%. SVOCs were also detected and increased slightly with depth; therefore, vertical extent is not defined.
- Lateral extent is defined for americium-241, isotopic plutonium, isotopic uranium, tritium cadmium, chromium, copper, cyanide, lead, mercury, nitrate, silver, uranium, zinc, toluene, and trichloroethene west of 21-27372 by decreasing activities/concentrations at location 21-605286.
- Vertical extent is defined for lead and strontium-90 at location 21-27366 by decreasing concentrations/activities with depth.
- Vertical extent is defined for plutonium-239 at location 21-601283 by decreasing activities with depth.
- Vertical extent is defined for several SVOCs at location 21-601281 by decreasing concentrations with depth.
- Vertical extent is defined for Aroclor-1242, Aroclor-1254, and Aroclor-1260 at location 21-27365 by decreasing concentrations with depth.

6.12.3 Summary of Human Health Risk-Screening Results

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

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

The total excess cancer risk for the residential scenario is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic risk contributes to approximately

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

6.12.4 Summary of Ecological Risk-Screening Results

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

6.13 Site Contamination at SWMU 21-024(e)

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

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

6.13.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.13.3 Summary of Human Health Risk-Screening Results

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

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

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

6.13.4 Summary of Ecological Risk-Screening Results

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

6.14 Site Contamination at SWMU 21-024(g)

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

- Lateral extent of americium-241, plutonium-239, and SVOCs north of 21-27598
- Vertical extent of chromium at location 21-27610
- Vertical extent of chromium at location 21-27599
- Vertical extent of chromium northeast of 21-27599
- Lateral extent of chromium downslope of location 21-27618
- Vertical extent of lead, cesium-137, and isotopic uranium at location 21-27614
- Lateral extent of several SVOCs north of location 21-27606
- Lateral extent of several SVOCs east of location 21-27613
- Vertical extent of plutonium-239 at location 21-27606
- Lateral extent of plutonium-239 and americium-241 east of 21-27601

6.14.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Lateral extent is defined for americium-241, plutonium-239, and SVOCs north of 21-27598 by decreasing concentrations/activities at location 21-605245.
- Vertical extent is defined for chromium at location 21-27610 by decreasing concentrations with depth.
- Vertical extent is defined for chromium at location 21-27599 by decreasing concentrations with depth.
- Lateral and vertical extent is defined for chromium northeast of 21-27599 by decreasing concentrations with depth at location 21-605246.
- Lateral extent is defined for chromium downslope of location 21-27618 by decreasing concentrations at location 21-605247.
- Vertical extent is defined for lead at location 21-27614 by decreasing concentrations/activities with depth. Cesium-137 was not detected above its FV at this location during Phase I or Phase II sampling. Vertical extent is not defined for isotopic uranium at this location; its activities increase with depth.
- Lateral extent is defined for several SVOCs north of location 21-27606 by decreasing concentrations at location 21-605248.
- Lateral extent is defined for several SVOCs east of location 21-27613 by decreasing concentrations at location 21-605249.
- Vertical extent is defined for plutonium-239 at location 21-27606 by decreasing activities with depth.
- Lateral extent is defined for plutonium-239 and americium-241 east of 21-27601 by decreasing activities at location 21-605250.

6.14.3 Summary of Human Health Risk-Screening Results

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

The total excess cancer risk for the construction worker scenario is approximately 1×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below

the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

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

6.14.4 Summary of Ecological Risk-Screening Results

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

6.15 Site Contamination at SWMU 21-024(h)

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

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

6.15.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.15.3 Summary of Human Health Risk-Screening Results

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

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

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

6.15.4 Summary of Ecological Risk-Screening Results

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

6.16 Site Contamination at SWMU 21-024(i)

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

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

6.16.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.16.3 Summary of Human Health Risk-Screening Results

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

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

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

6.16.4 Summary of Ecological Risk-Screening Results

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

6.17 Site Contamination at SWMU 21-024(j)

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

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

6.17.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

6.17.3 Summary of Human Health Risk-Screening Results

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

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

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

6.17.4 Summary of Ecological Risk-Screening Results

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

6.18 Site Contamination at SWMU 21-024(k)

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

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

6.18.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.18.3 Summary of Human Health and Ecological Risk-Screening Results

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

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

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

- Vertical extent of americium-241, plutonium-239, and several SVOCs at location 21-27514
- Lateral extent of americium-241, cesium-137, and plutonium-239 downslope of location 21-27540
- Lateral and vertical extent of americium-241, cesium-137, isotopic plutonium, lead, mercury, and zinc north of location 21-27517
- Vertical extent of americium-241, cesium-137, isotopic plutonium, lead, mercury, and zinc at location at 21-27517
- Lateral extent of americium-241, isotopic plutonium, and selenium downslope and east of location 21-27533
- Vertical extent of cesium-137 at location 21-27540
- Vertical extent of lead at location 21-27522
- Vertical extent of lead and zinc at location 21-27539
- Lateral extent of plutonium-238 northeast of location 21-27537
- Vertical extent of zinc at location 21-27521
- Lateral extent of zinc east of location 21-27525

- Vertical extent of several SVOCs at location 21-27530
- Vertical extent of several SVOCs at location 21-27547
- Lateral extent of several SVOCs east of location 21-27534

6.19.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is defined for americium-241, plutonium-239, and several SVOCs at location 21-27514 by decreasing activities/concentrations with depth.
- Lateral extent is defined for americium-241 and plutonium-239 downslope of locations 21-27540 and 21-605272 by decreasing activities at location 21-27543. Cesium-137 was not detected above FVs at this location during Phase I or Phase II sampling.
- Lateral extent is defined for americium-241, isotopic plutonium, lead, mercury, and zinc north of location 21-27517 by decreasing concentrations/activities at location 21-605273. Cesium-137 was not detected above FVs at this location during Phase I or Phase II sampling.
- Vertical extent is defined for americium-241, cesium-137, isotopic plutonium, lead, mercury, and zinc at location at 21-27517 by decreasing concentrations/activities with depth.
- Lateral extent is defined for americium-241, isotopic plutonium, and selenium downslope and east of location 21-27533 by decreasing concentrations/activities at locations 21-605274 and 21-605275.
- Cesium-137 was not detected above FVs at location 21-27540 during Phase I or Phase II sampling. Vertical extent is defined for lead at location 21-27522 by decreasing concentrations with depth.
- Vertical extent is defined for lead and zinc at location 21-27539 by decreasing concentrations with depth.

- Lateral extent is defined for plutonium-238 northeast of location 21-27537 by decreasing activities at location 21-605276.
- Vertical extent is defined for zinc at location 21-27521 by decreasing concentrations with depth.
- Lateral extent is defined for zinc east of location 21-27525 by decreasing concentrations at location 21-605277.
- Vertical extent is defined for several SVOCs at location 21-27530 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-27547 by decreasing concentrations with depth.
- Lateral extent is defined for several SVOCs east of location 21-27534 by decreasing concentrations at location 21-605278.

6.19.3 Summary of Human Health Risk-Screening Results

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

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

The total excess cancer risk for the residential scenario is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the potential cancer risk at this site. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

6.19.4 Summary of Ecological Risk-Screening Results

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

6.20 Site Contamination at SWMU 21-024(n)

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

- Lateral extent of americium-241 and plutonium-239 downslope of location 21-600674
- Vertical extent of chromium at location 21-600682
- Vertical extent of chromium, uranium-234, and uranium-235 at location 21-600695
- Lateral extent of americium-241, chromium, copper, lead, zinc, uranium-234, and uranium-235 downslope of location 21-600682
- Vertical extent of copper, lead, and several SVOCs at location 21-600684

- Lateral extent of plutonium-239 downslope of location 21-600683
- Vertical extent of plutonium-239 and toluene at location 21-600669
- Vertical extent of zinc at location 21-601305
- Lateral extent of zinc downslope of location 21-600717
- Vertical extent of several SVOCs at location 21-600735
- Vertical extent of several SVOCs at location 21-600689
- Lateral extent of several SVOCs northwest of location 21-600716
- Vertical extent of lead at location 21-601312

6.20.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Lateral extent is defined for americium-241 and plutonium-239 downslope of location 21-600674 by decreasing activities at location 21-605251.
- Vertical extent is defined for chromium at location 21-600682 by decreasing activities with depth.
- Vertical extent is defined for chromium, uranium-234, and uranium-235 at location 21-600695 by decreasing concentrations/activities with depth.
- Lateral extent is defined for americium-241, chromium, copper, lead, zinc, uranium-234, and uranium-235 downslope of location 21-600682 by decreasing concentrations/activities at location 21-605252. Uranium-238 increased at 21-605252 because it was not detected above BV at 21-600682 during Phase I sampling.
- Vertical extent is defined for copper, lead, and several SVOCs at location 21-600684 by decreasing concentrations with depth.

- Lateral extent is not defined for plutonium-239 downslope of location 21-600683. Three additional samples from locations 21-608021, 21-609833, and 21-605253 were collected downslope of this location; its activities increased laterally.
- Vertical extent is defined for plutonium-239 and toluene at location 21-600669 by decreasing concentrations/activities with depth.
- Vertical extent is defined for zinc at location 21-601305 by decreasing concentrations with depth.
- Lateral extent is defined for zinc downslope of location 21-600717 by decreasing concentrations at location 21-605254.
- Vertical extent is defined for several SVOCs at location 21-600735 by decreasing concentrations with depth.
- Vertical extent is defined for several SVOCs at location 21-600689 by concentrations decreasing with depth.
- Lateral extent is defined for several SVOCs northwest of location 21-600716 by decreasing concentrations at location 21-605255.
- Vertical extent is defined for lead at location 21-601312 by decreasing concentrations with depth.

6.20.3 Summary of Human Health and Ecological Risk-Screening Results

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

6.21 Site Contamination at SWMU 21-024(o)

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

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

6.21.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.21.3 Summary of Human Health Risk-Screening Results

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

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

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

6.21.4 Summary of Ecological Risk-Screening Results

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

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

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

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

- Vertical extent of lead at location 21-27571
- Vertical extent of several SVOCs at location 21-27550

6.22.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

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

6.22.3 Summary of Human Health Risk-Screening Results

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

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

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

6.22.4 Summary of Ecological Risk-Screening Results

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

6.23 Site Contamination at SWMU 21-027(a)

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

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

6.23.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Vertical extent is defined for americium-241, isotopic plutonium, tetrachloroethene, and zinc at location 21-601227 by decreasing concentrations/activities with depth.
- Vertical extent is defined for americium-241 and plutonium-239 at location 21-601224 by decreasing activities with depth.
- Lateral extent is defined for chromium, copper, lead, mercury, zinc, SVOCs, americium-241, isotopic plutonium, uranium-234, and uranium-235 west of location 21-600863 by decreasing concentrations/activities at location 21-605279.
- Lateral extent is defined for chromium east of locations 21-600868 and 21-605280 by decreasing concentrations at location 21-608020.
- Vertical extent is defined for dioxin/furans at locations 21-601229 and 21-601225 by decreasing concentrations with depth.
- Lateral extent is defined for uranium-238 southwest of location 21-600866 by decreasing activities at location 21-605258, which was sampled as part of the Consolidated Unit 21-006(c)-99 Phase II investigation activities.
- Vertical extent is defined for tritium at location 21-601226 by decreasing activities with depth.

6.23.3 Summary of Human Health Risk-Screening Results

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

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

The total excess cancer risk for the residential scenario is approximately 4×10^{-4}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The 2,3,7,8-TCDD equivalent concentration

contributes 3.4×10^{-4} to the risk. The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 51 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 is the greatest contributor to the total dose at 28 mrem/yr, followed by plutonium-238 with a dose of 14 mrem/yr.

6.23.4 Summary of Ecological Risk-Screening Results

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

6.24 Site Contamination at SWMU 21-027(c)

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

- Lateral extent of americium-241 and isotopic plutonium southeast of location 21-27409
- Vertical extent of americium-241, cesium-137, and isotopic plutonium between locations 21-27402 and 21-27403
- Lateral extent of lead southeast of 21-27412
- Vertical extent of lead at location 21-27412
- Lateral extent of strontium-90 southwest of location 21-27410
- Vertical extent of several SVOCs at location 21-27401

6.24.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

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

- Lateral extent is defined for americium-241 and isotopic plutonium southeast of location 21-27409 by decreasing activities at location 21-605232.
- Vertical extent is defined for americium-241, cesium-137, and isotopic plutonium at locations 21-27402 and 21-27403 by decreasing activities with depth at location 21-605233.
- Lead concentrations increased southeast of location 21-27412 at location 21-605234; however, no additional samples can be collected on the slope and extent is defined by sampling conducted at Los Alamos Canyon (LANL 2004, 087390). The nearest down-canyon reach from SWMU 21-027(c) in Los Alamos Canyon is LA-2W. The sediment data collected in this reach as part of the Los Alamos/Pueblo Canyon investigation had a maximum lead concentration of 46.9 mg/kg (LANL 2004, 087390). This concentration is less than that detected at SWMU 21-027(c), which demonstrates lateral extent is defined for lead.
- Vertical extent is defined for lead at location 21-27412 by decreasing concentrations with depth.
- Lateral extent is defined for strontium-90 southwest of location 21-27410 by decreasing activities at location 21-605236.
- Vertical extent is defined for several SVOCs at location 21-27401 by decreasing concentrations with depth.

6.24.3 Summary of Human Health Risk-Screening Results

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

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

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

6.24.4 Summary of Ecological Risk-Screening Results

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

6.25 Site Contamination at AOC C-21-027

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

6.25.1 Soil and Rock Sampling and Analytical Results

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

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

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

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

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

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

If a site-specific datum exceeds its BV, an additional evaluation of the datum may be performed by comparing the chemical concentration with the range of background concentrations for that chemical. If the site concentration is within the range of background concentrations, the analyte is not retained as a COPC.

6.25.1.1 Inorganic Chemicals in Soil

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

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

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

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

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

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

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

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

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

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

6.25.1.2 Inorganic Chemicals in Tuff

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6.25.1.3 Organic Chemicals in Soil

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

6.25.1.4 Organic Chemicals in Tuff

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

pentachlorodibenzofuran[1,2,3,7,8-]; pentachlorodibenzofuran[2,3,4,7,8-]; and tetrachlorodibenzodioxin[2,3,7,8-].

6.25.1.5 Radionuclides in Soil

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

6.25.1.6 Radionuclides in Tuff

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

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

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

- Lateral extent is not defined for calcium, lead, nitrate, perchlorate, zinc, americium-241, isotopic plutonium, tritium, uranium-234, or uranium-235 east of location 21-610684.
- Lateral extent is not defined for chromium, nitrate, perchlorate, zinc, americium-241, or isotopic plutonium east of location 21-605338.
- Vertical extent is not defined for calcium at location 21-605339.
- Vertical extent is not defined for chromium, dioxin/furans, americium-241, or plutonium-239 at location 21-605340.
- Vertical extent is not defined for americium-241, isotopic plutonium, nitrate, or perchlorate at location 21-605341.
- Lateral extent is not defined for americium-241, isotopic plutonium, or nitrate west of location 21-605341.
- Lateral extent is not defined for americium-241 or isotopic plutonium east of location 21-610682.
- Lateral extent is not defined for dioxin/furans downslope of the outfall area.

6.25.3 Summary of Human Health and Ecological Risk-Screening Results

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

7.0 CONCLUSIONS

7.1 Nature and Extent of Contamination

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

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

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

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

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

7.2 Summary of Risk-Screening Assessments

Human health and ecological risk-screening assessments were performed for 15 sites for which the nature and extent of contamination have been defined. Risk-screening assessments were also performed for six additional sites [Consolidated Units 21-006(c)-99, 21-023(a)-99, and 21-026(a)-99 and SWMUs 21-022(h), 21-024(d), and 21-024(g)] where extent is not defined but where additional sampling

will not affect the risk assessment results. The samples needed to define extent at these sites will be collected from approximately 20 ft bgs, except at Consolidated Unit 21-006(c)-99. A lateral extent sample for tritium will be collected. Ecological risk-screening assessments were not performed for SWMUs 21-022(f) and 21-022(j) because the samples were collected below 5 ft bgs, and therefore, there are no complete pathways to receptors.

7.2.1 Human Health Risk-Screening Assessments

Human health risk-screening assessments were performed for 20 sites, and a portion of Consolidated Unit 21-022(h)-99 [SWMU 21-022(h)]. A human health risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99)] because samples were collected from depths greater than 10 ft where no complete pathways are present and receptors are not exposed to contaminants. Human health risk-screening assessments were not performed for Consolidated Unit 21-003-99, SWMUs 21-022(i) [part of Consolidated Unit 21-022(h)-99], 21-024(c), 21-024(k), and 21-024(n), or AOC C-21-027 because extent of contamination was not defined at these sites. Human health risk-screening assessments are presented in Appendix H, section H-4.0. Sixteen sites were determined to have no potential unacceptable risks or doses to human health under the industrial, residential, or construction worker scenarios. Five sites were determined to pose a potential unacceptable risk or dose to human health under the industrial, residential, and/or construction worker scenarios.

7.2.2 Ecological Risk-Screening Assessment

The ecological risk-screening assessments were performed for 20 sites. An ecological risk-screening assessment was not performed for SWMU 21-022(j) [part of Consolidated Unit 21-022(h)-99)] because samples were collected from depths greater than 5 ft where no complete pathways are present and receptors are not exposed to contaminants. Ecological risk-screening assessments were not performed for Consolidated Unit 21-003-99, SWMUs 21-022(i) [part of Consolidated Unit 21-022(h)], 21-024(c), 21-024(k) and 21-024(n) or AOC C-21-027 because extent of contamination was not defined at these sites. The ecological risk-screening assessments are presented in Appendix H, section H-5.0. At all but one of the sites, there is no potential ecological risk to receptors. There is a potential ecological risk to the deer mouse and montane shrew at SWMU 21-027(a) from dioxin/furans.

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

8.0 RECOMMENDATIONS

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

8.1 Additional Field Characterization Activities

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

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

The extent issues will be addressed in a Phase III investigation work plan to be submitted to NMED after the Phase II investigation report is reviewed and approved. Once additional data are available and extent is defined, human health and ecological risk-screening assessments will be conducted to determine if the sites pose a potential unacceptable risk or dose to human health or the environment.

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

SWMU 21-022(h):

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

SWMU 21-024(b):

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

Consolidated Unit 21-024(l)-99:

- Under the residential scenario, potential unacceptable risk from benzo(a)pyrene

Consolidated Unit 21-026(a)-99:

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

SWMU 21-027(a):

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

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

8.2 Recommendations for Corrective Actions Complete

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

- AOC 21-002(b)
- SWMU 21-009
- SWMU 21-012(b)
- SWMU 21-013(c)
- SWMU 21-022(f)
- SWMU 21-024(a)
- SWMU 21-024(e)

- SWMU 21-024(h)
- SWMU 21-024(i)
- SWMU 21-024(j)
- SWMU 21-024(o)
- SWMU 21-027(c)

These 12 sites are appropriate for corrective actions complete without controls because they do not pose potential unacceptable risks or doses under a residential scenario and to the environment.

8.3 Schedule for Recommended Activities

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

9.0 REFERENCES AND MAP DATA SOURCES

9.1 References

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

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

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LANL (Los Alamos National Laboratory), August 2004. "Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-04-5009, Los Alamos, New Mexico. (LANL 2004, 087461)

LANL (Los Alamos National Laboratory), December 2004. "Screening-Level Ecological Risk Assessment Methods, Revision 2," Los Alamos National Laboratory document LA-UR-04-8246, Los Alamos, New Mexico. (LANL 2004, 087630)

LANL (Los Alamos National Laboratory), May 2005. "Derivation and Use of Radionuclide Screening Action Levels, Revision 1," Los Alamos National Laboratory document LA-UR-05-1849, Los Alamos, New Mexico. (LANL 2005, 088493)

LANL (Los Alamos National Laboratory), April 2006. "Supplemental Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-06-1508, Los Alamos, New Mexico. (LANL 2006, 092079)

LANL (Los Alamos National Laboratory), March 2008. "Delta Prime Site Aggregate Area Investigation Report, Revision 1," Los Alamos National Laboratory document LA-UR-08-1834, Los Alamos, New Mexico. (LANL 2008, 102760)

LANL (Los Alamos National Laboratory), December 2008. "Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," Los Alamos National Laboratory document LA-UR-08-7794, Los Alamos, New Mexico. (LANL 2008, 104989)

LANL (Los Alamos National Laboratory), March 2009. "Application for Risk-Based Disposal Approval for the Septic Tank Area at Solid Waste Management Unit 21-024(c)," Los Alamos National Laboratory document LA-UR-09-1668, Los Alamos, New Mexico. (LANL 2009, 105184)

LANL (Los Alamos National Laboratory), March 2009. "Notice of Self-Implementation of On-Site Cleanup and Disposal of Polychlorinated Biphenyl Remediation Waste for Consolidated Unit 21-003-99 and Solid Waste Management Unit 21-024(c)," Los Alamos National Laboratory document LA-UR-09-1667, Los Alamos, New Mexico. (LANL 2009, 105182)

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NMED (New Mexico Environment Department), January 12, 2009. "Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

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)

9.2 Map Data Sources

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

Environmental Stewardship-Environmental Remediation & Surveillance Program

GIS Project PMR05046

Map Numbers of the Series with Prefix "PMR05046"

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

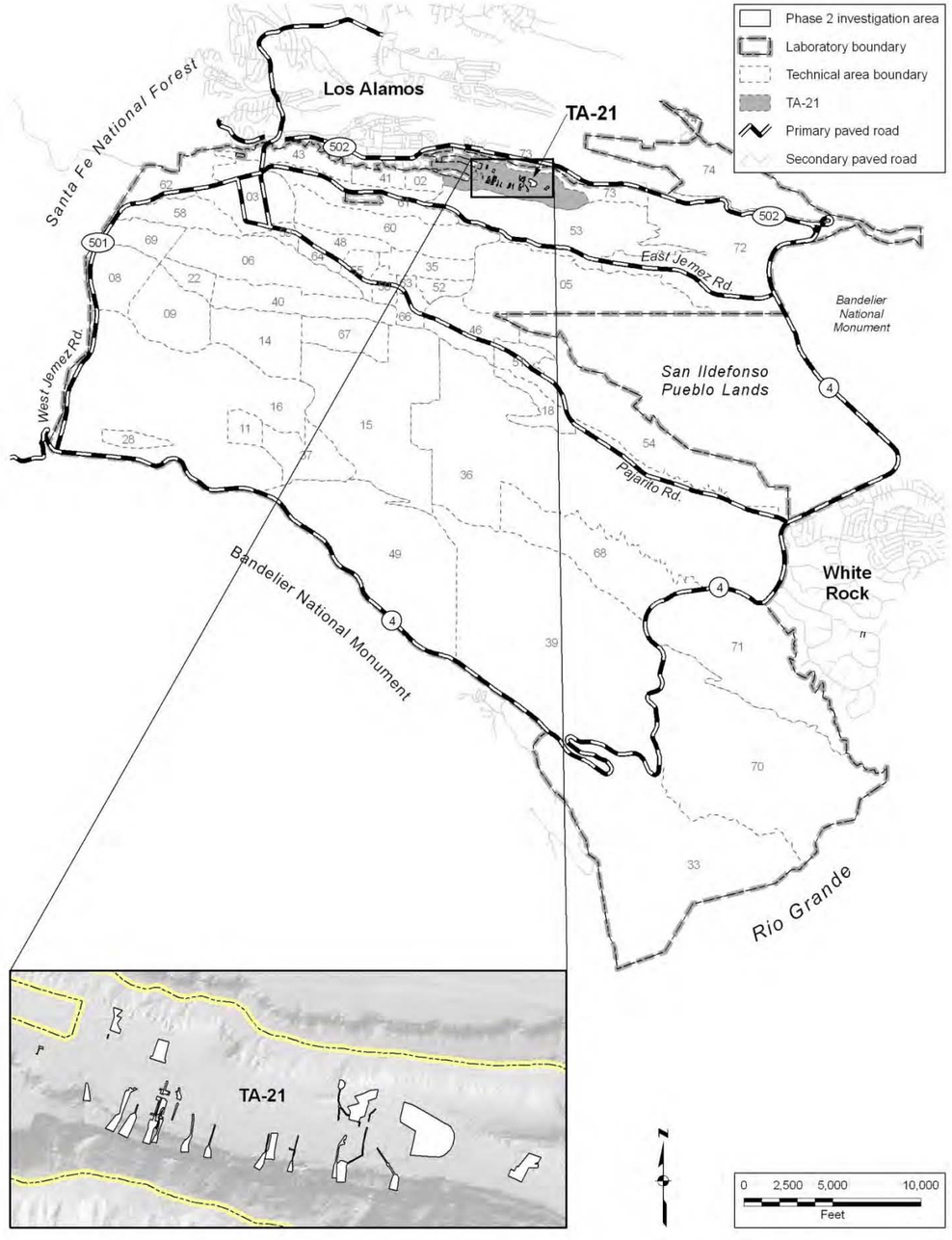


Figure 1.1-1 Location of DP Site Aggregate Area with respect to Laboratory TAs

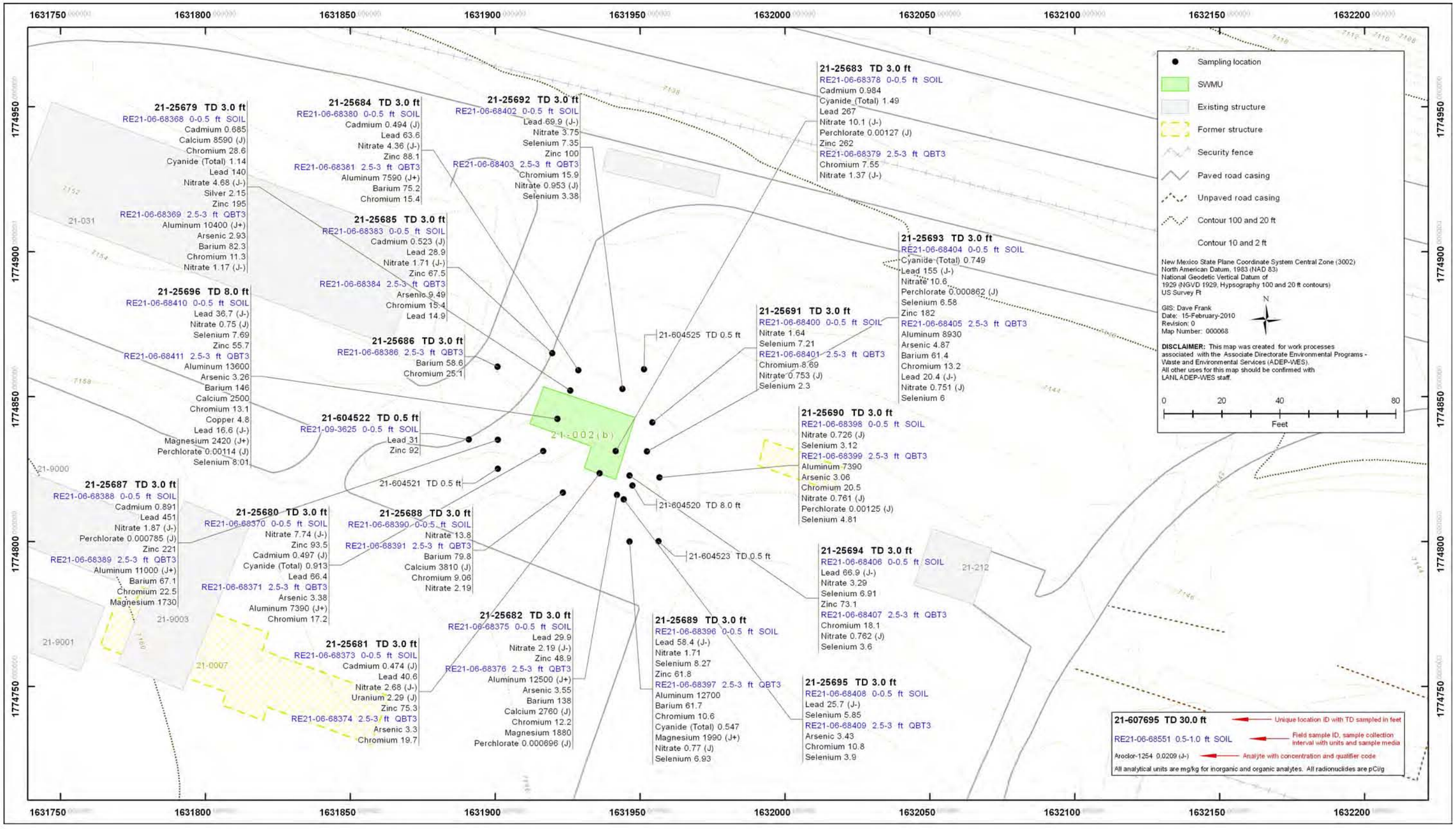


Figure 6.1-1 Inorganic chemicals detected or detected above BVs at AOC 21-002(b)

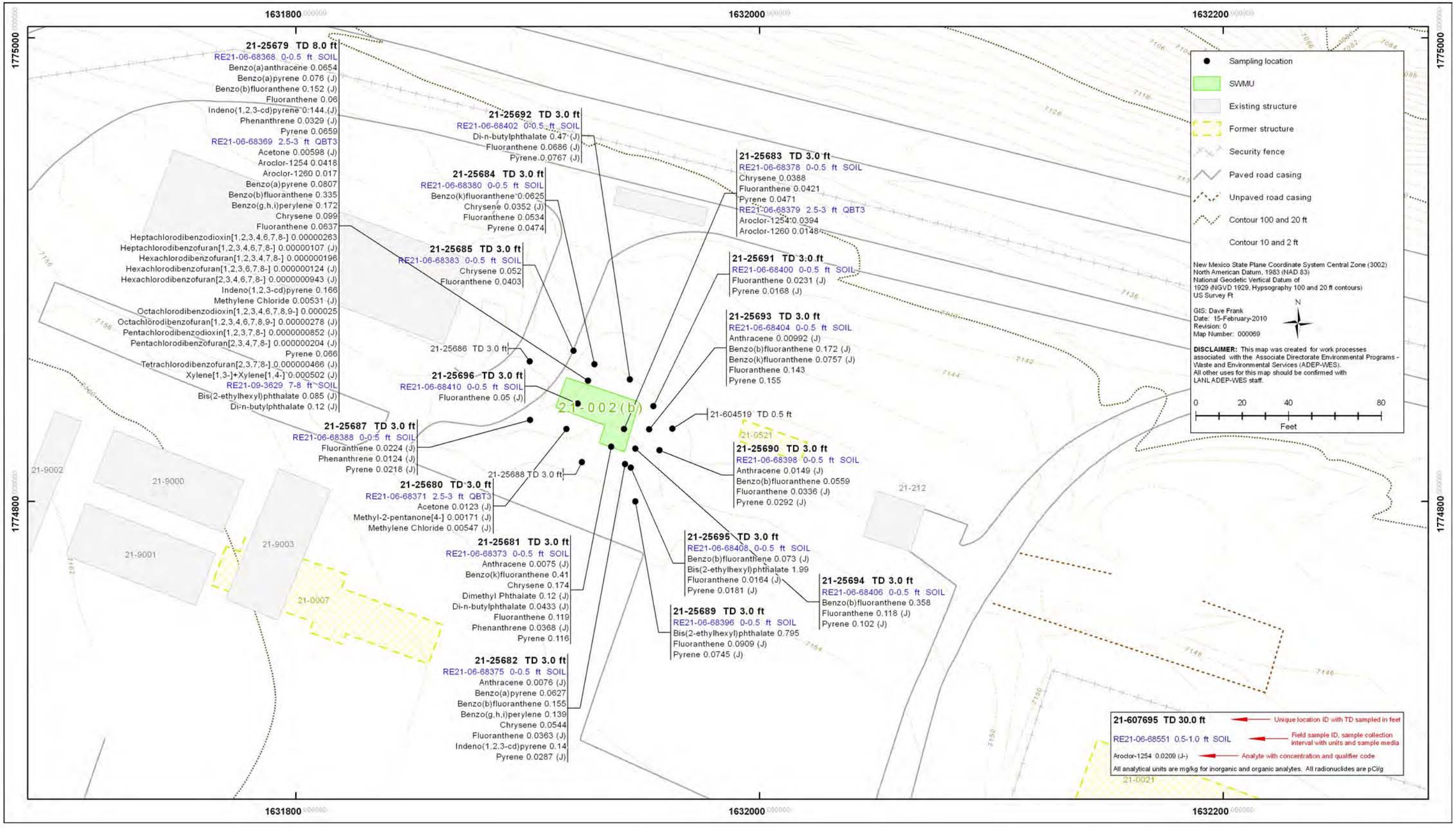


Figure 6.1-2 Organic chemicals detected at AOC 21-002(b)

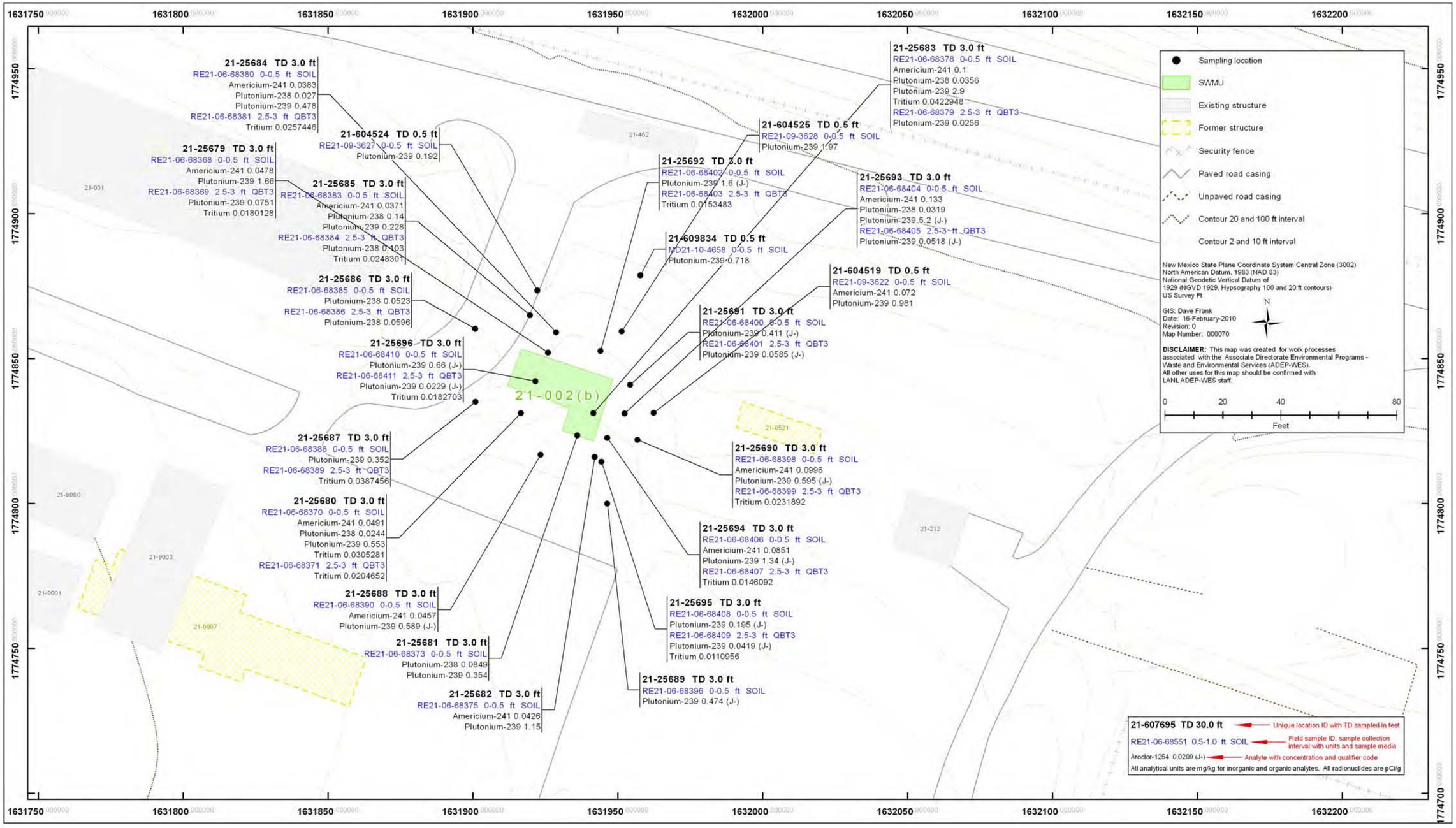
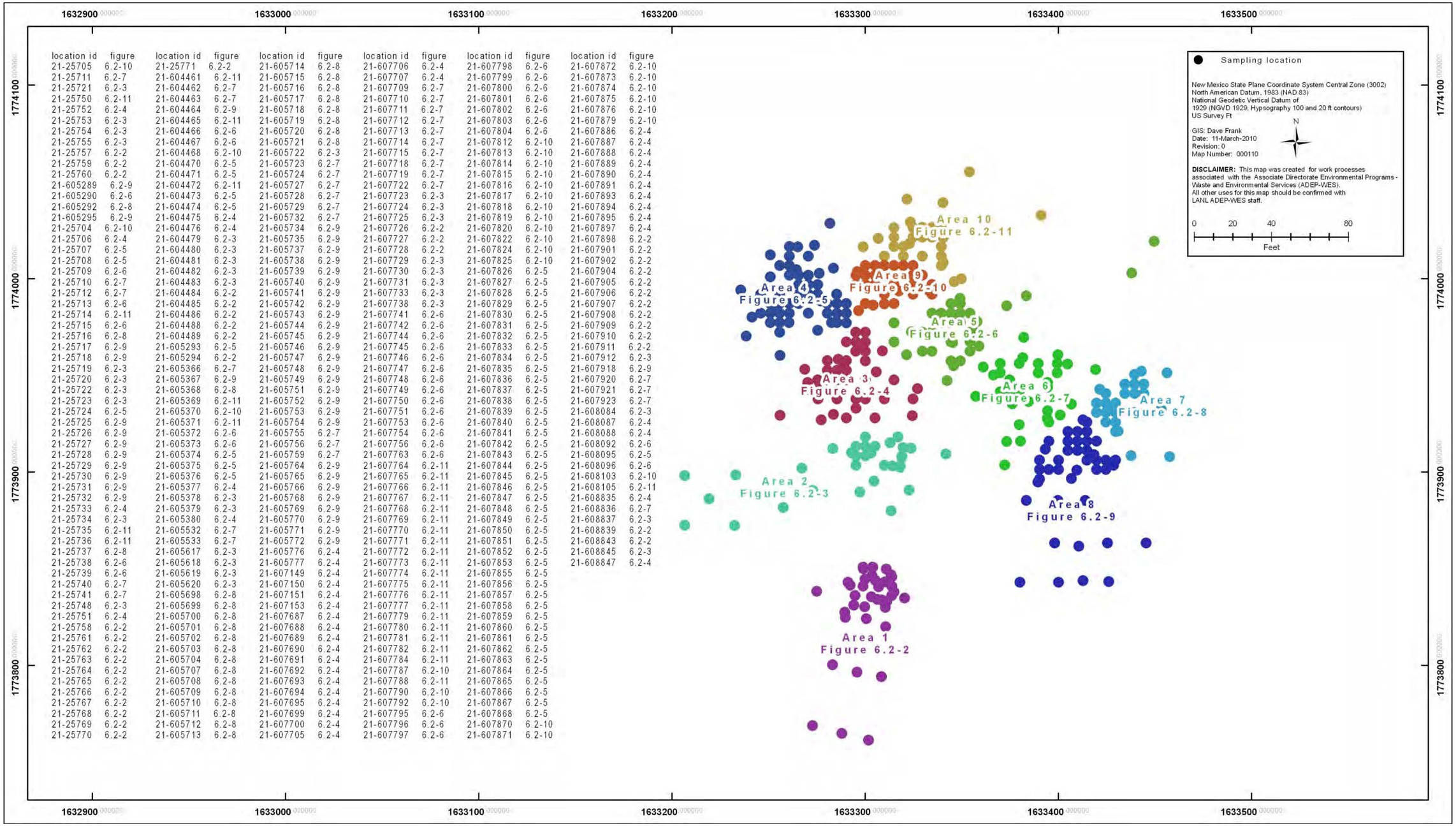


Figure 6.1-3 Radionuclides detected or detected above BVs/FVs at AOC 21-002(b)



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21-25765	6.2-2	21-605708	6.2-8	21-607693	6.2-4	21-607788	6.2-11	21-607865	6.2-5		
21-25766	6.2-2	21-605709	6.2-8	21-607694	6.2-4	21-607790	6.2-10	21-607866	6.2-5		
21-25767	6.2-2	21-605710	6.2-8	21-607695	6.2-4	21-607792	6.2-10	21-607867	6.2-5		
21-25768	6.2-2	21-605711	6.2-8	21-607699	6.2-4	21-607795	6.2-6	21-607868	6.2-5		
21-25769	6.2-2	21-605712	6.2-8	21-607700	6.2-4	21-607796	6.2-6	21-607870	6.2-10		
21-25770	6.2-2	21-605713	6.2-8	21-607705	6.2-4	21-607797	6.2-6	21-607871	6.2-10		

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

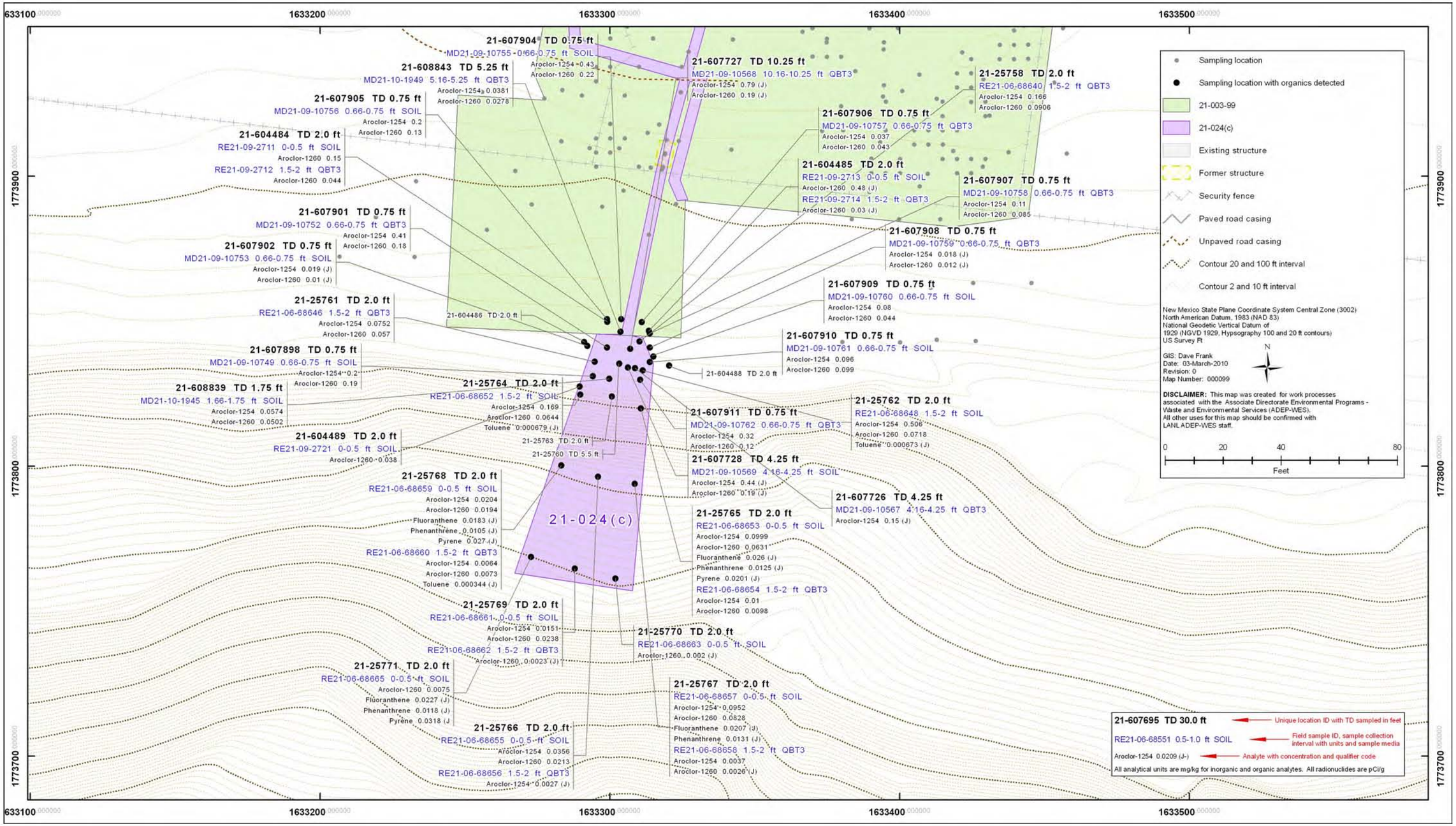

Figure 6.2-2 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 1

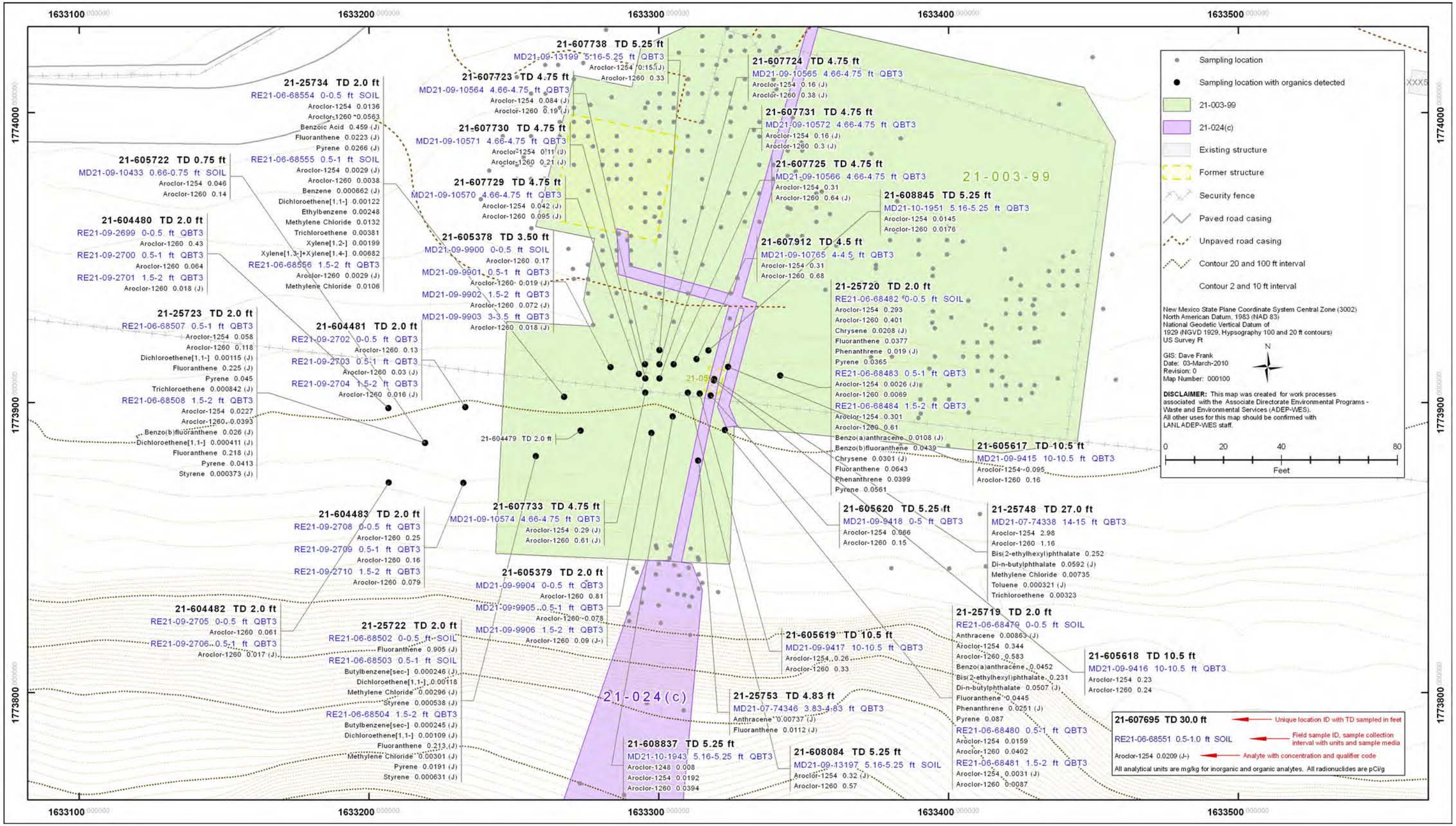

Figure 6.2-3 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 2

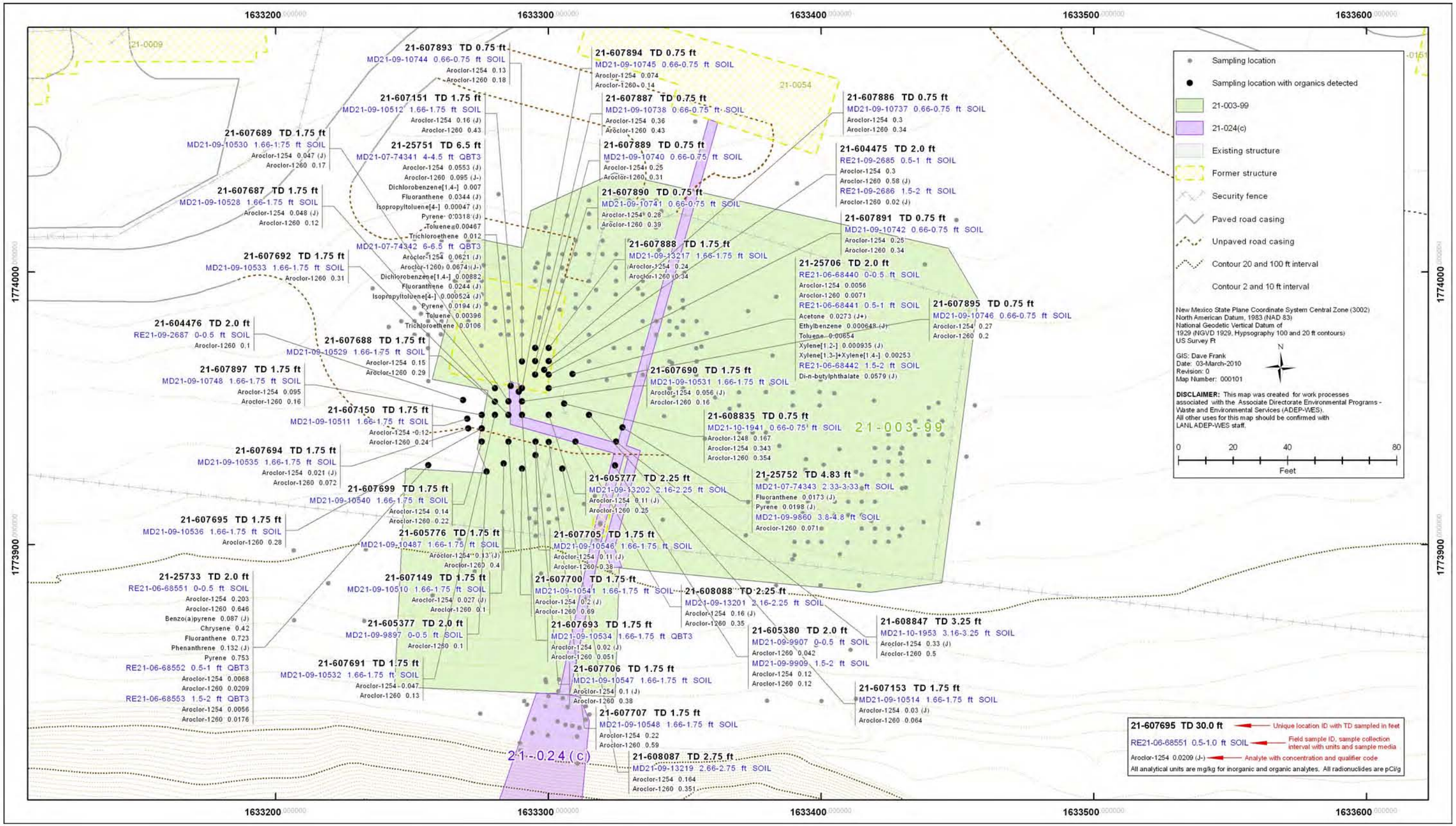

Figure 6.2-4 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 3

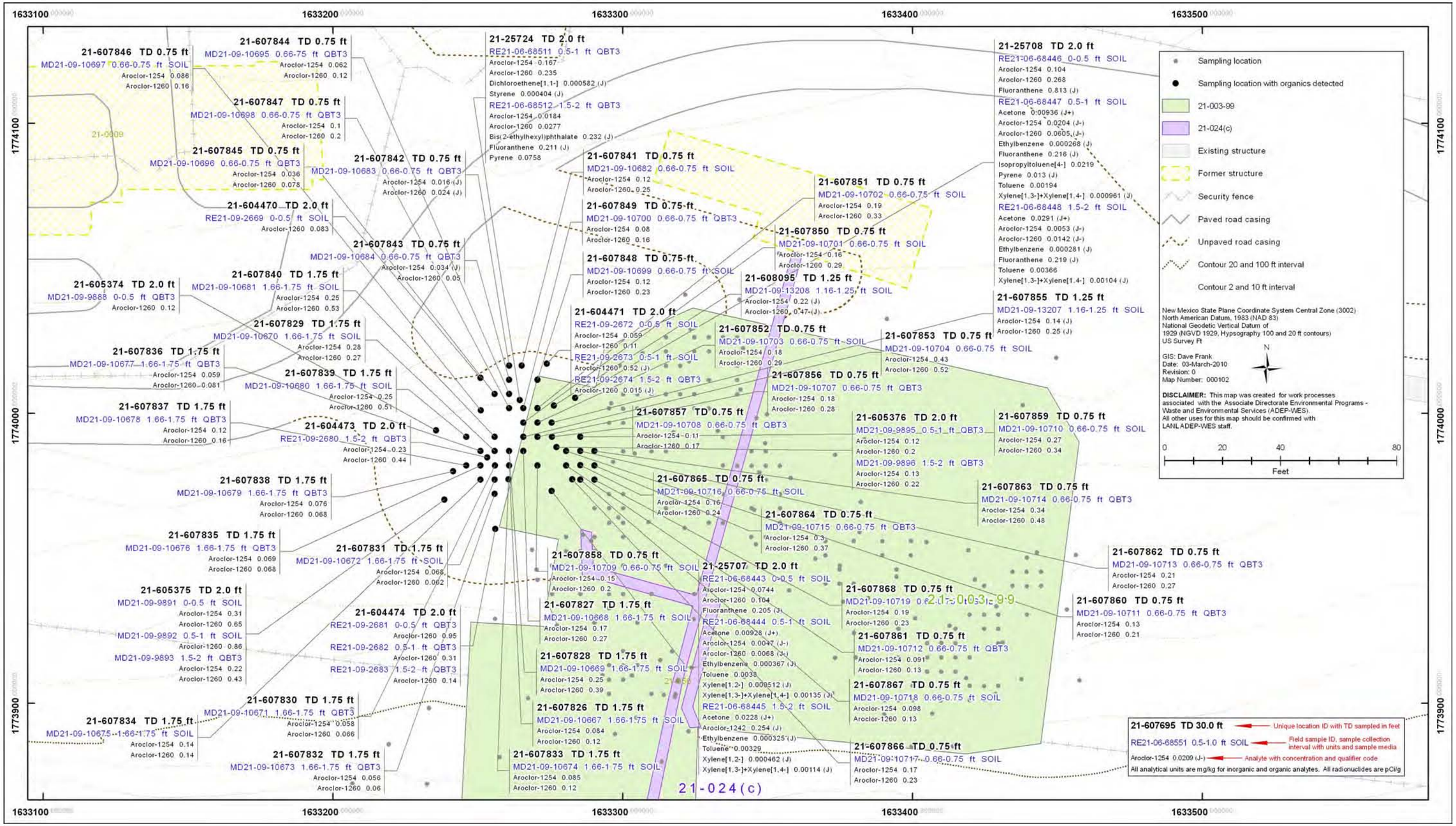

Figure 6.2-5 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 4

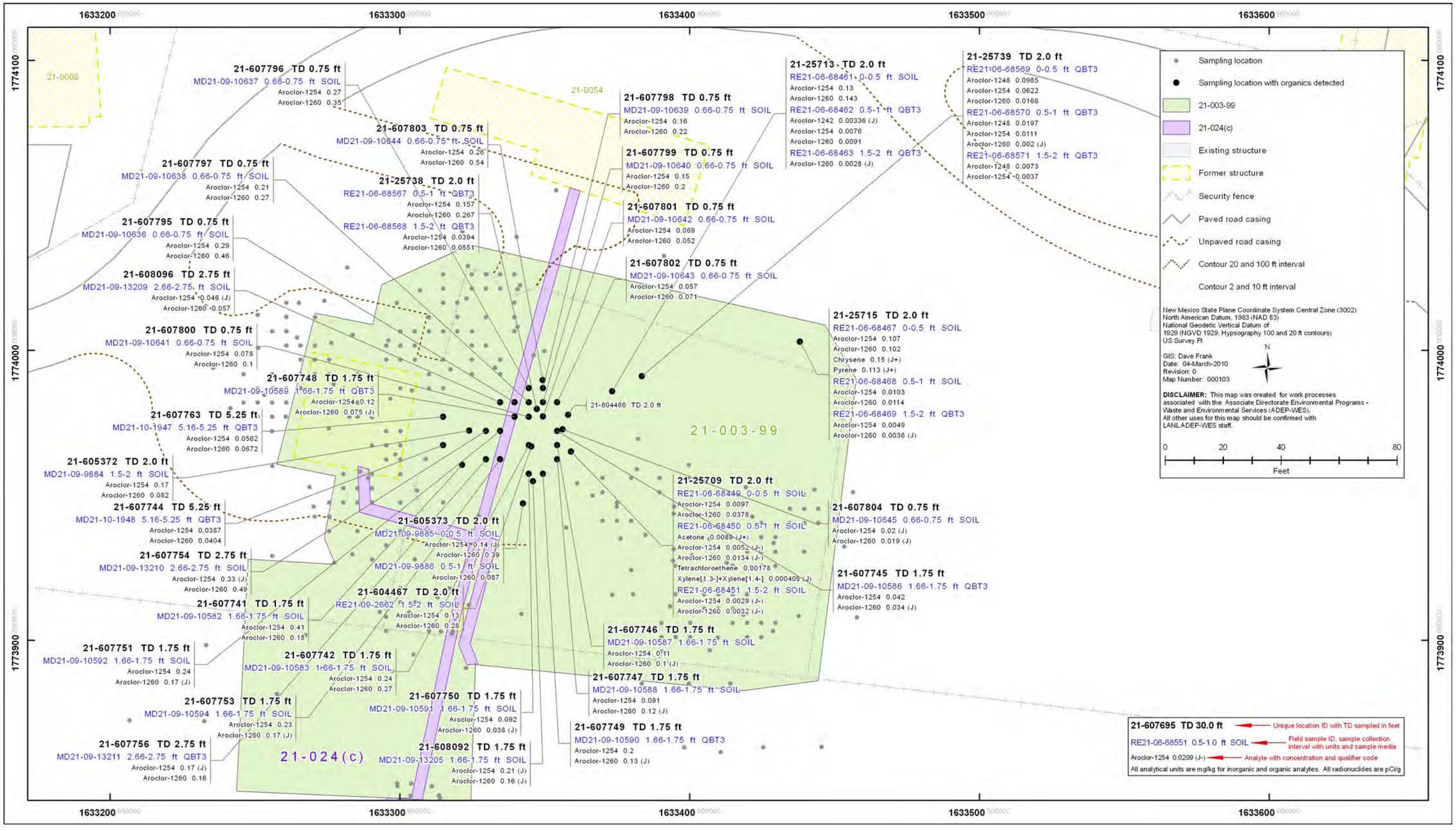

Figure 6.2-6 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 5

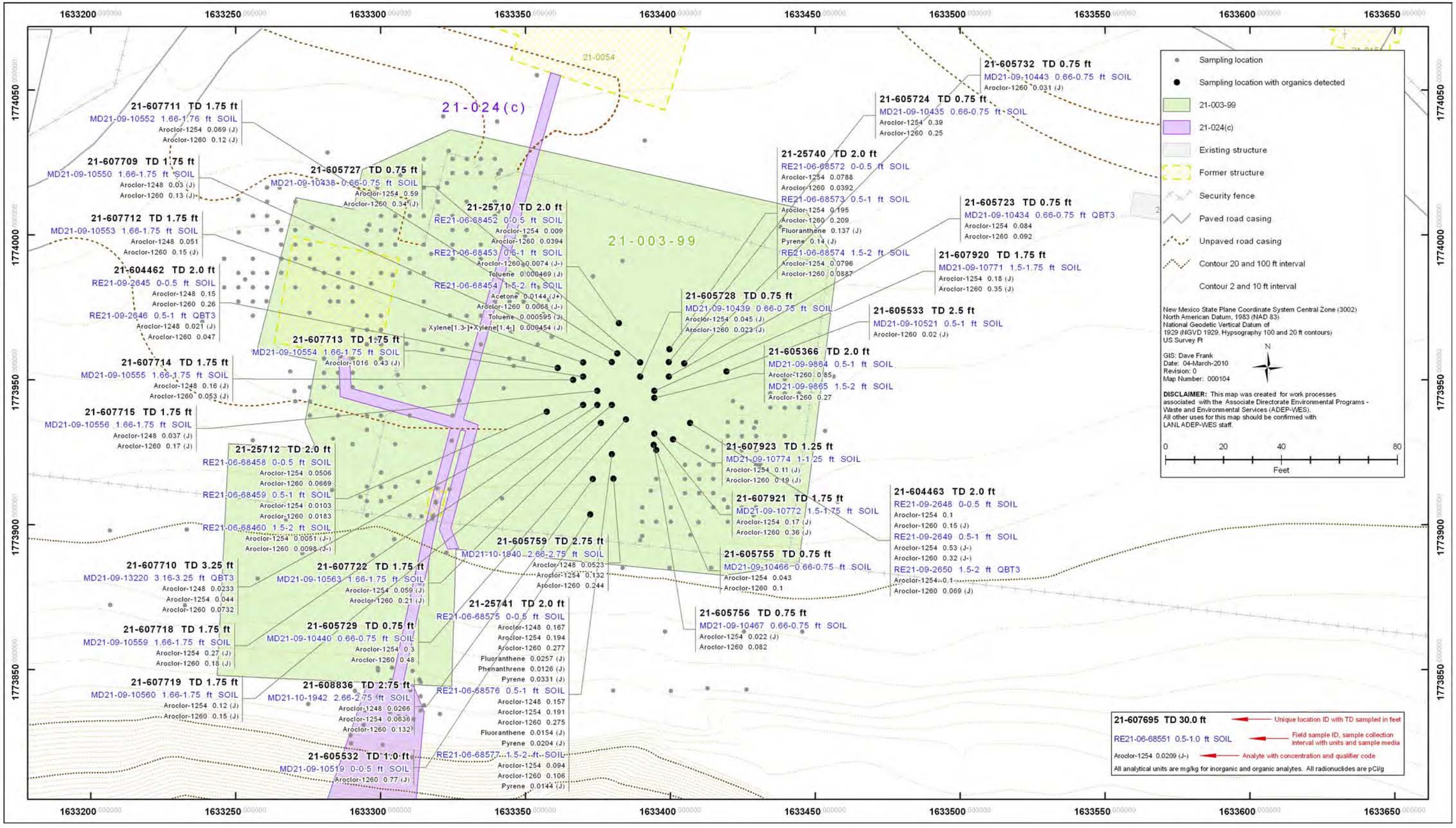

Figure 6.2-7 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 6

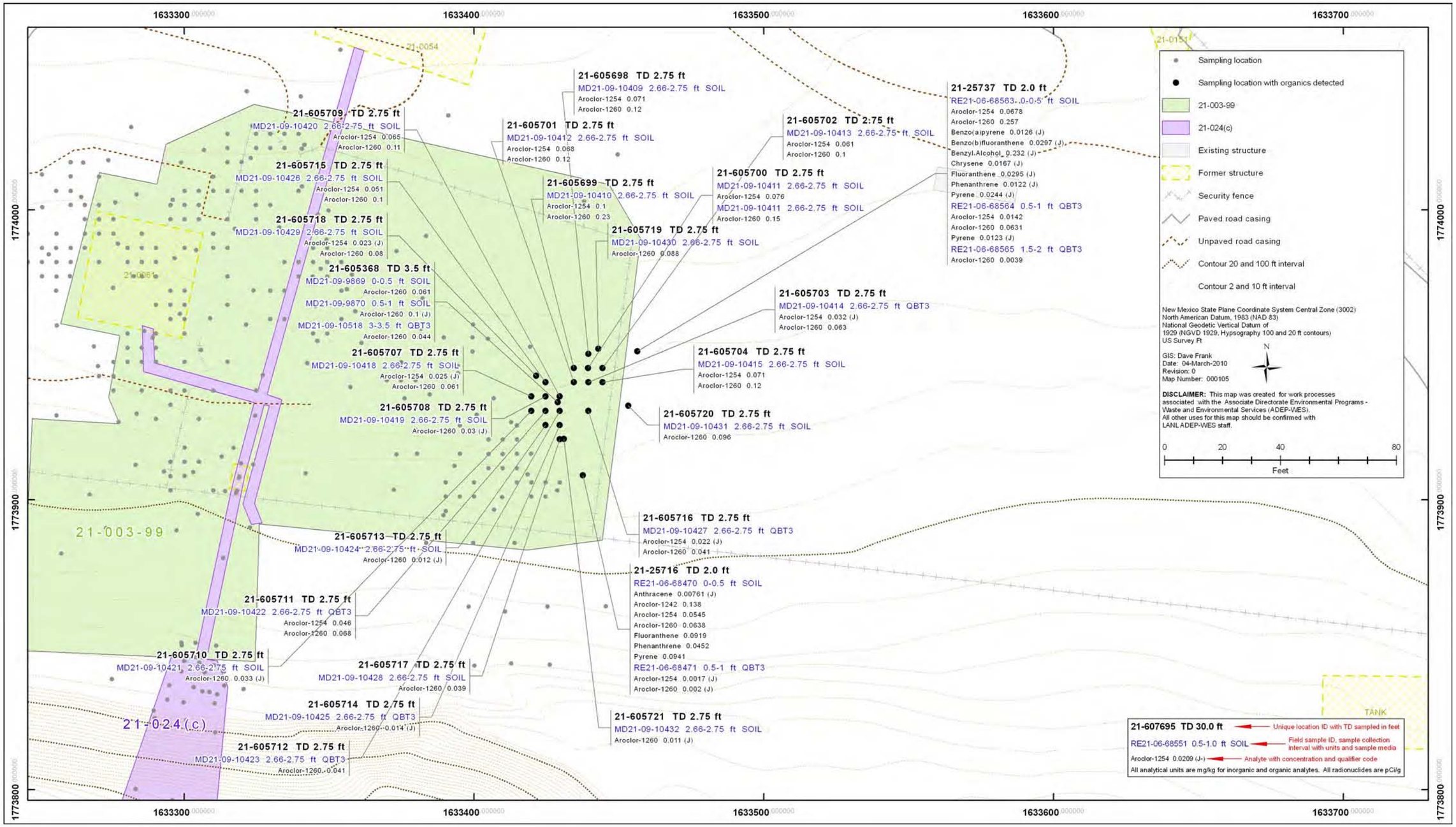

Figure 6.2-8 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 7

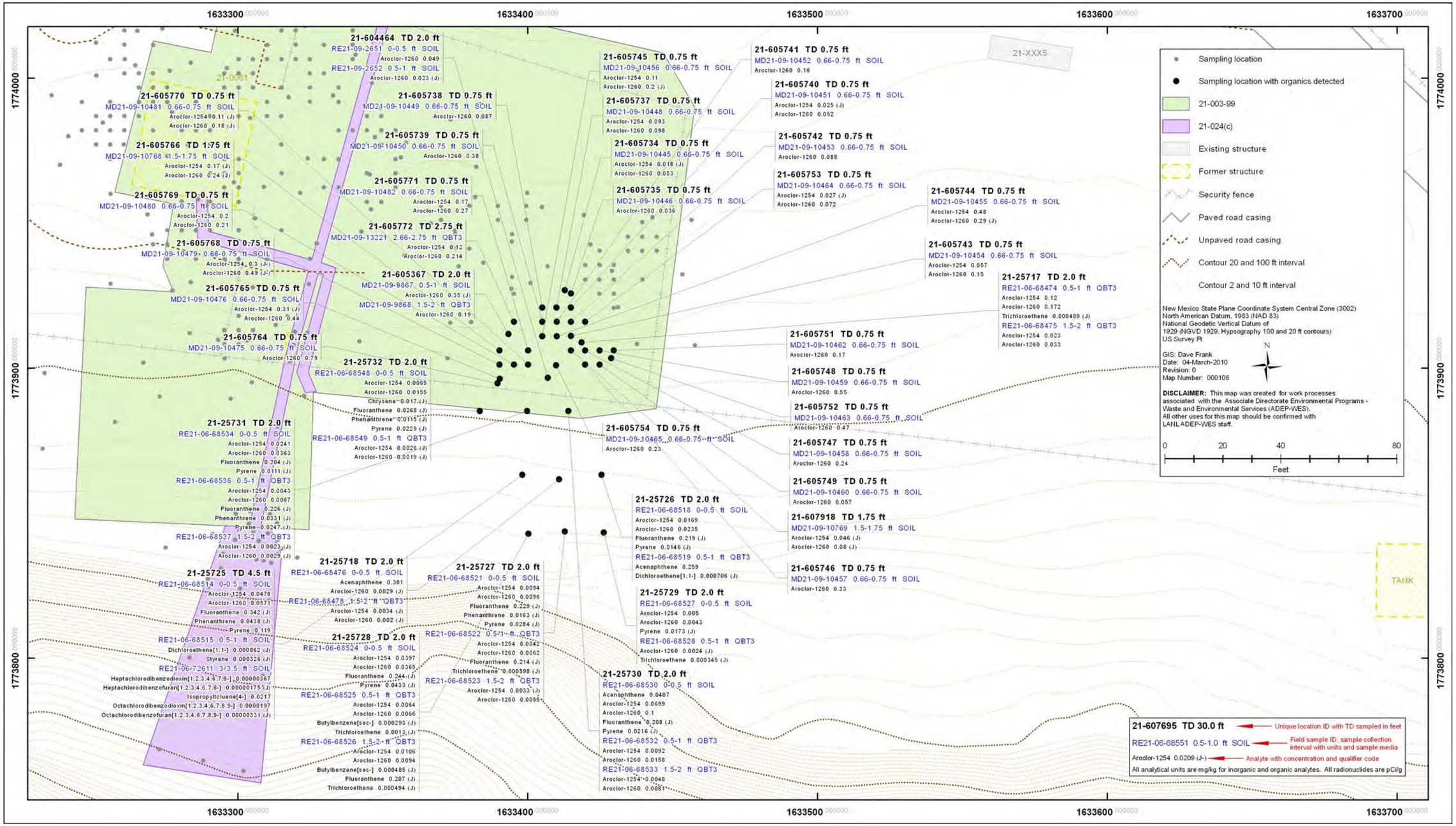

Figure 6.2-9 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 8

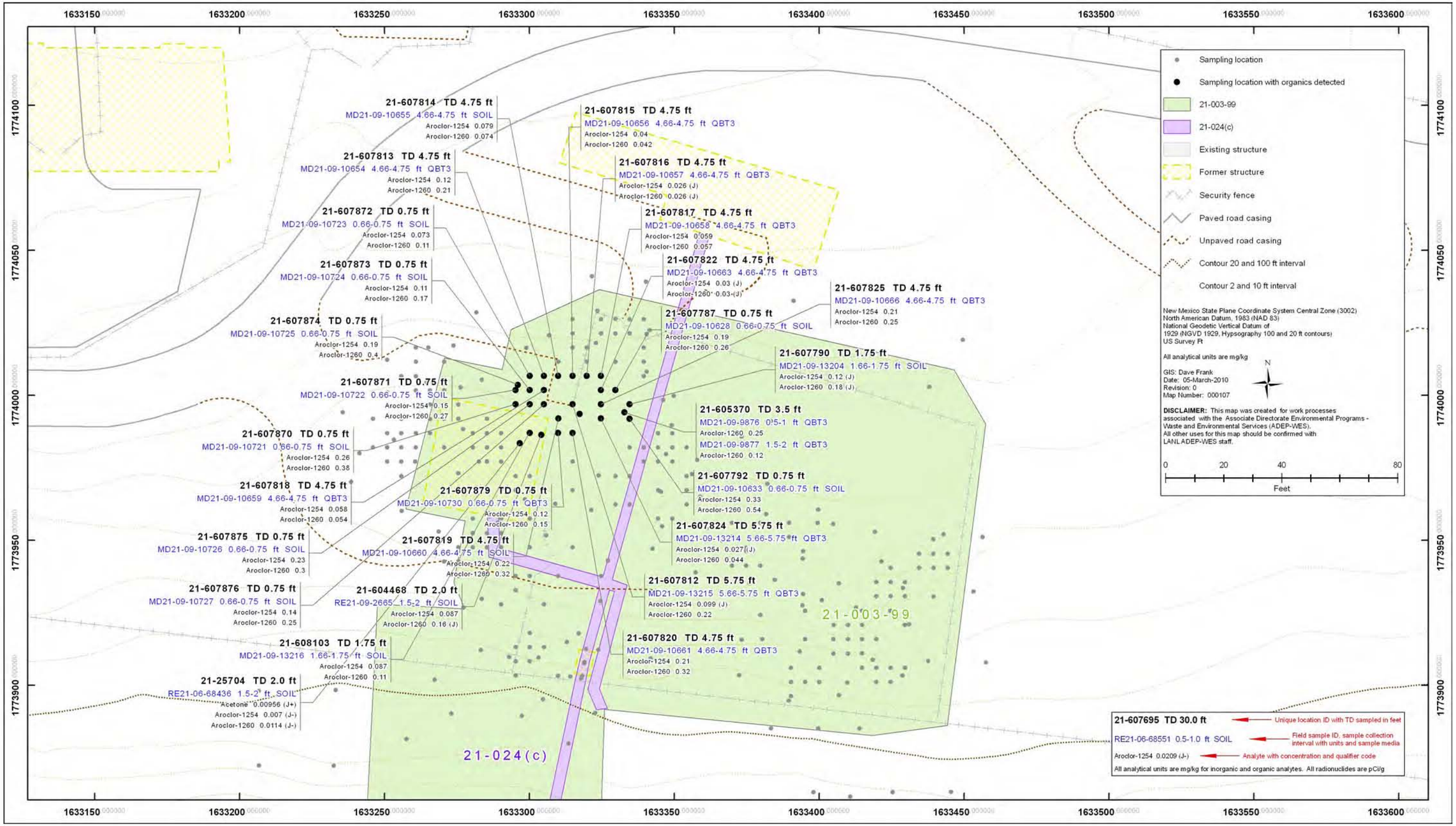

Figure 6.2-10 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 9

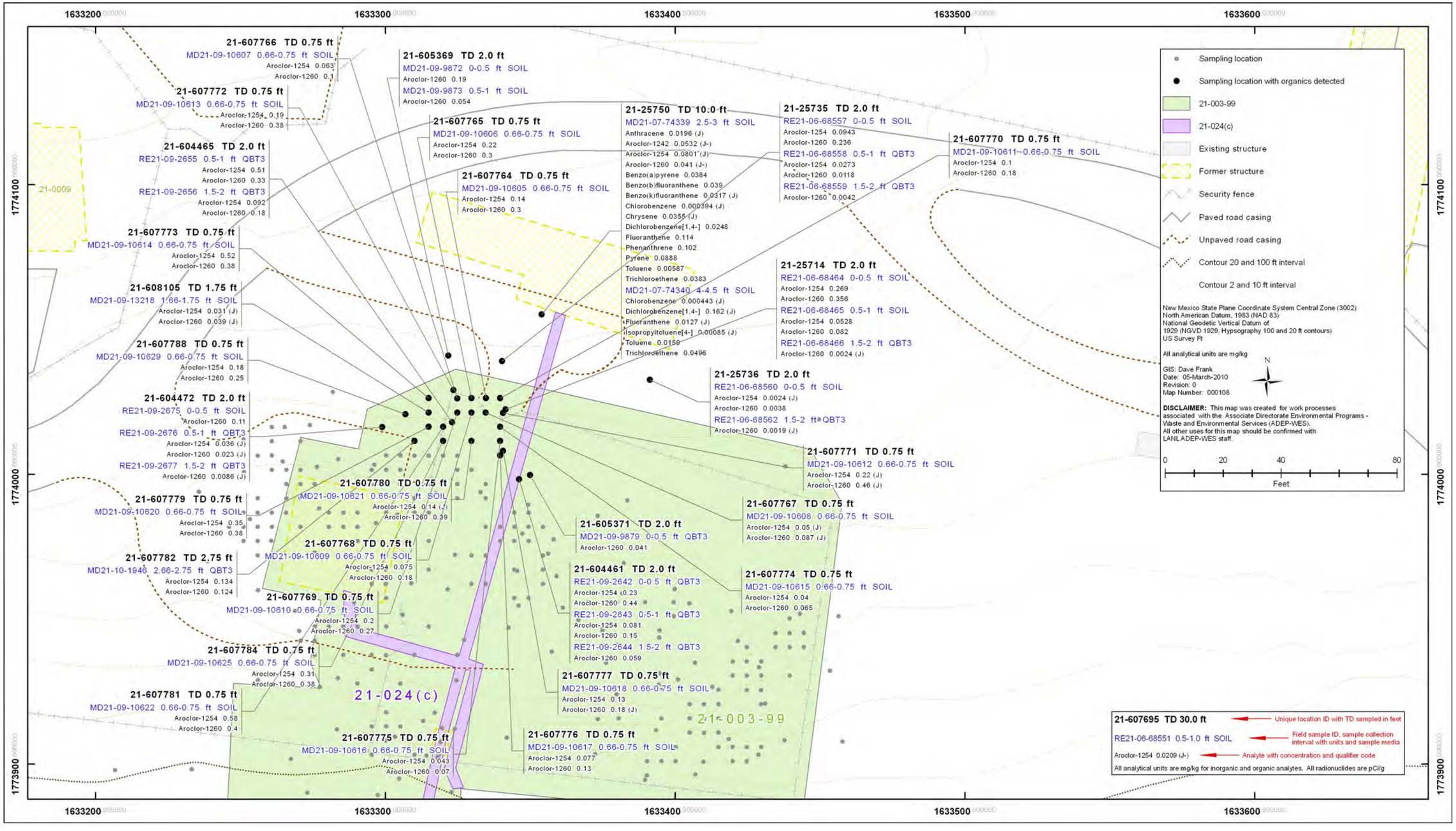

Figure 6.2-11 Organic chemicals detected at Consolidated Unit 21-003-99 and SWMU 21-024(c), Area 10

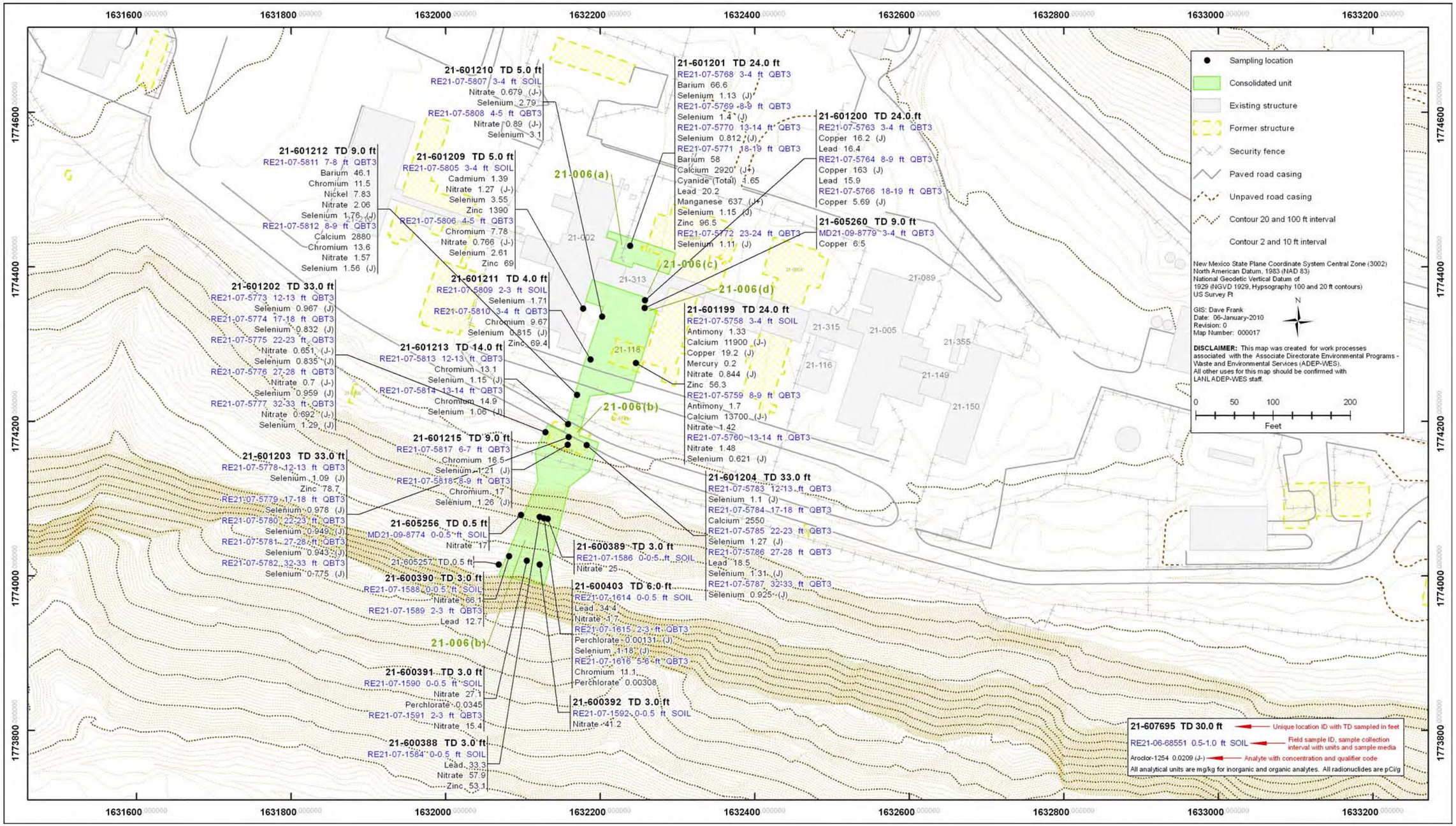

Figure 6.3-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-006(c)-99

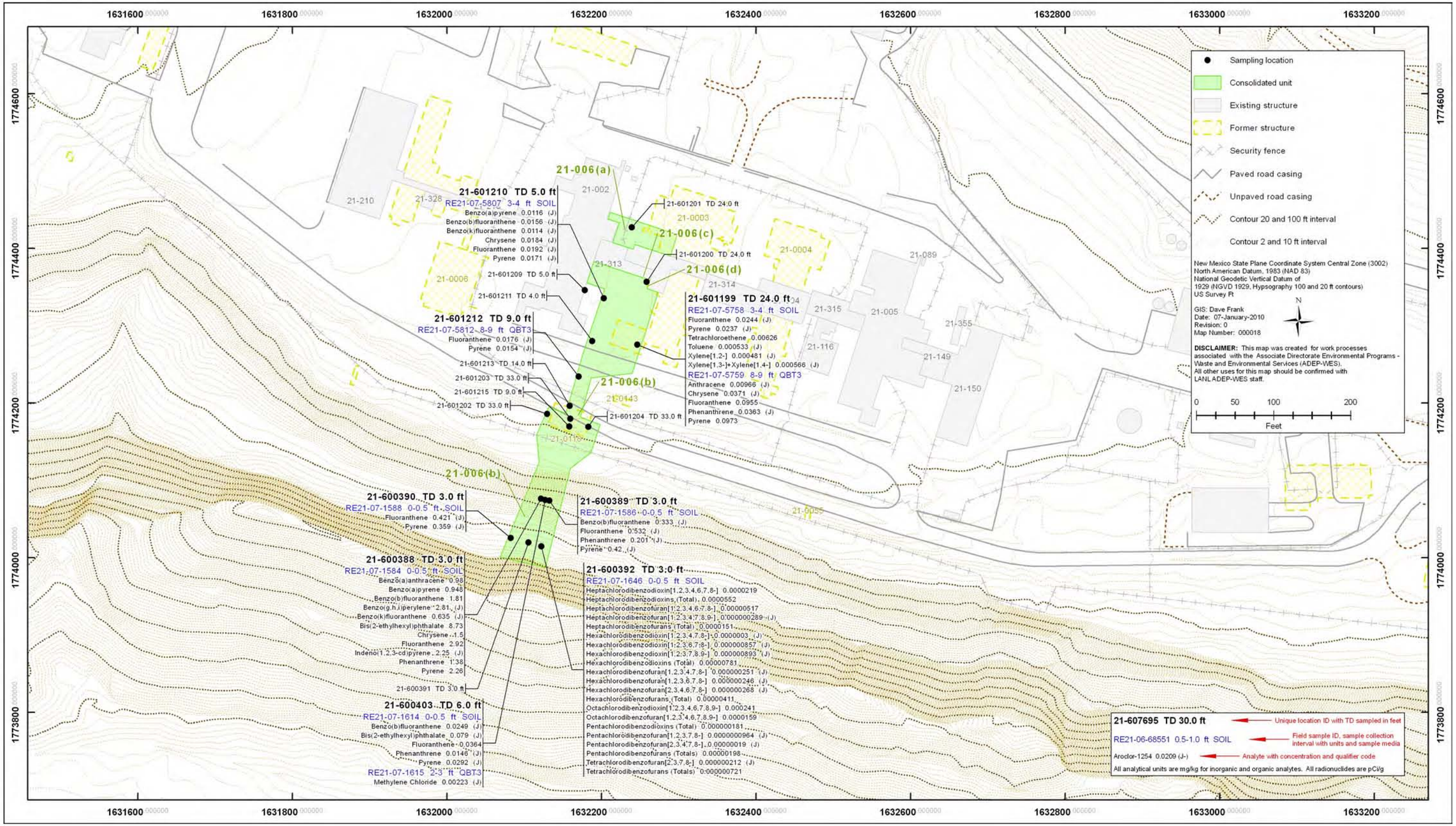

Figure 6.3-2 Organic chemicals detected at Consolidated Unit 21-006(c)-99

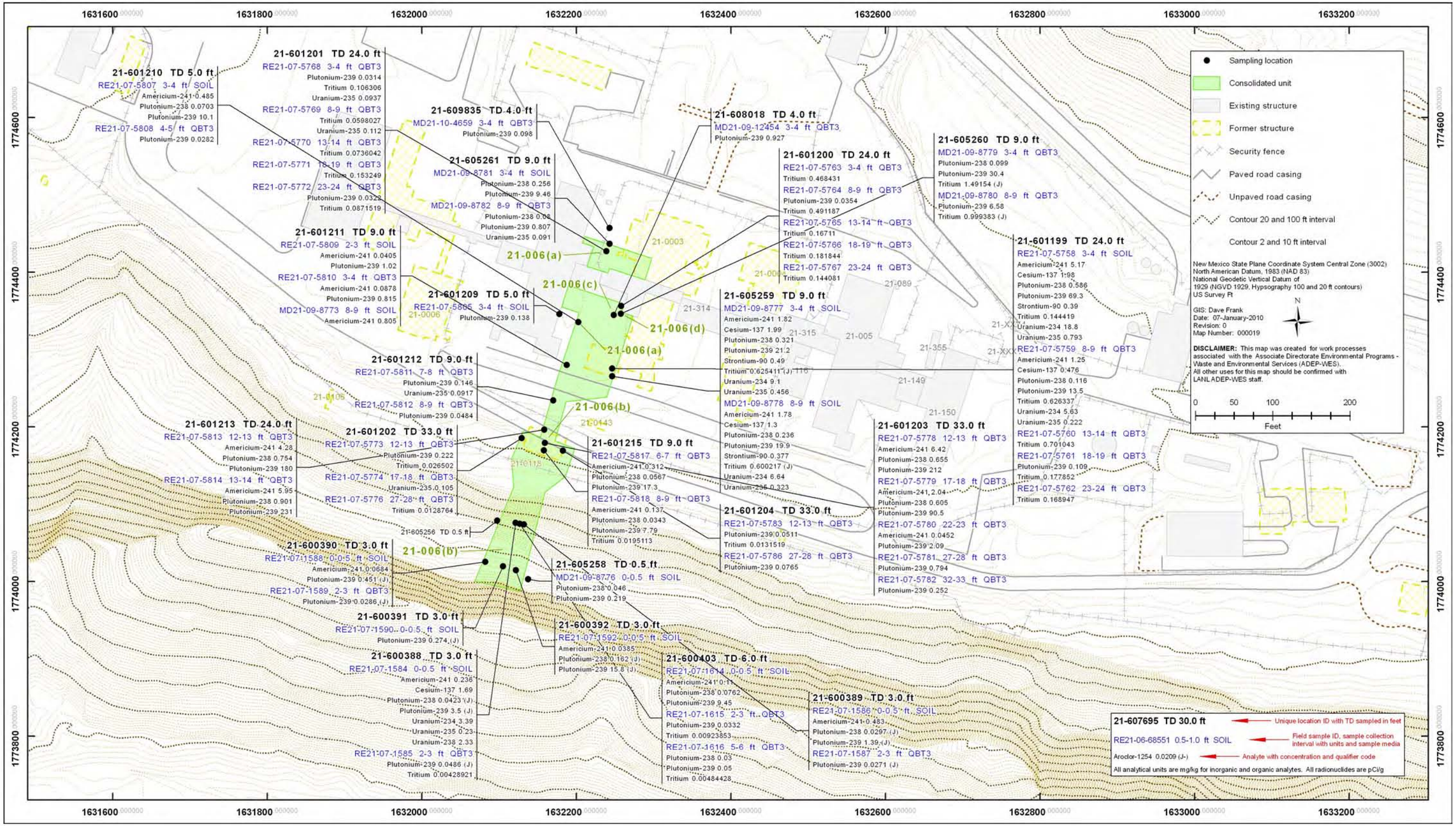

Figure 6.3-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-006(c)-99

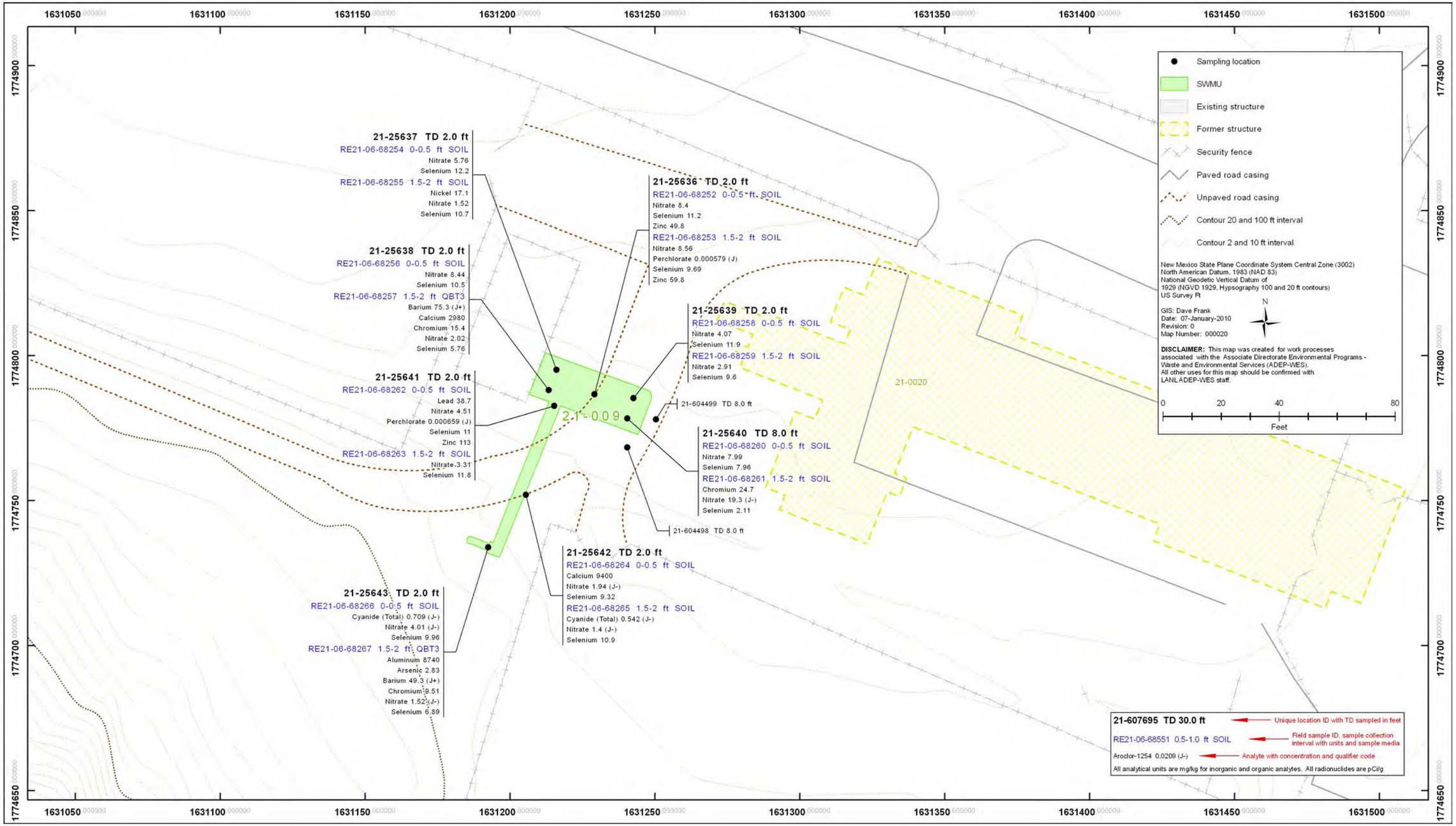

Figure 6.4-1 Inorganic chemicals detected or detected above BVs at SWMU 21-009

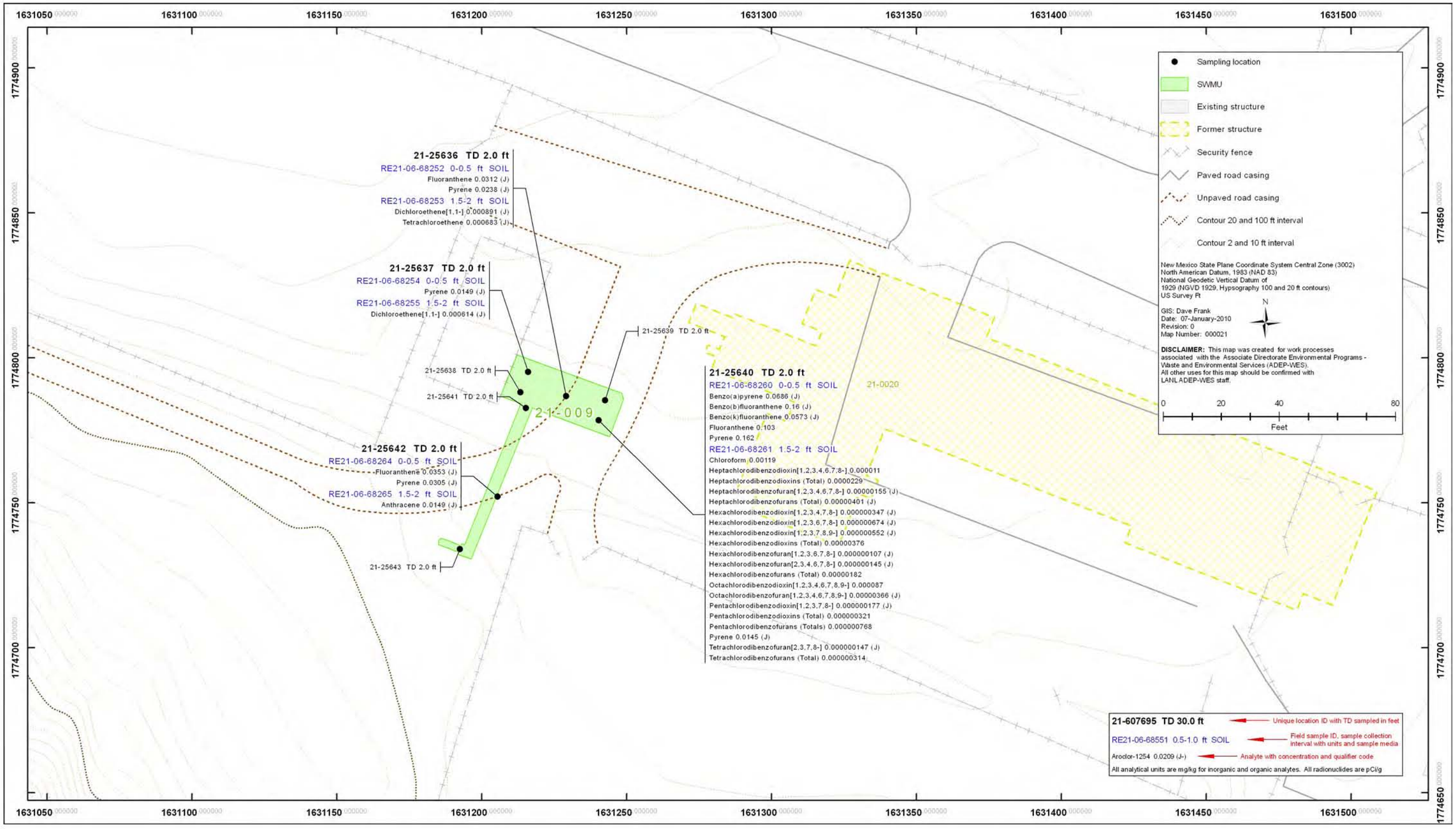

Figure 6.4-2 Organic chemicals detected at SWMU 21-009

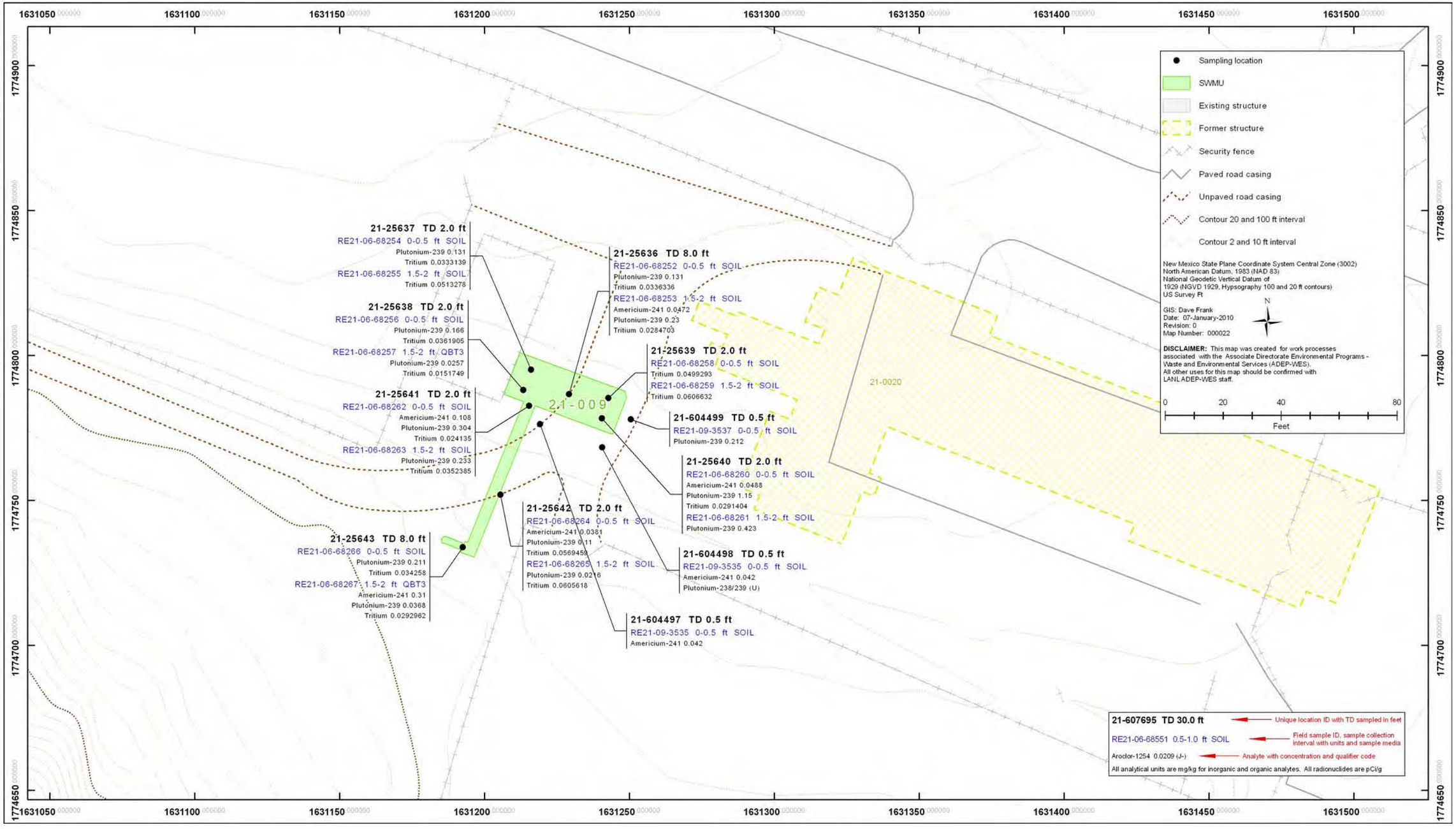

Figure 6.4-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-009

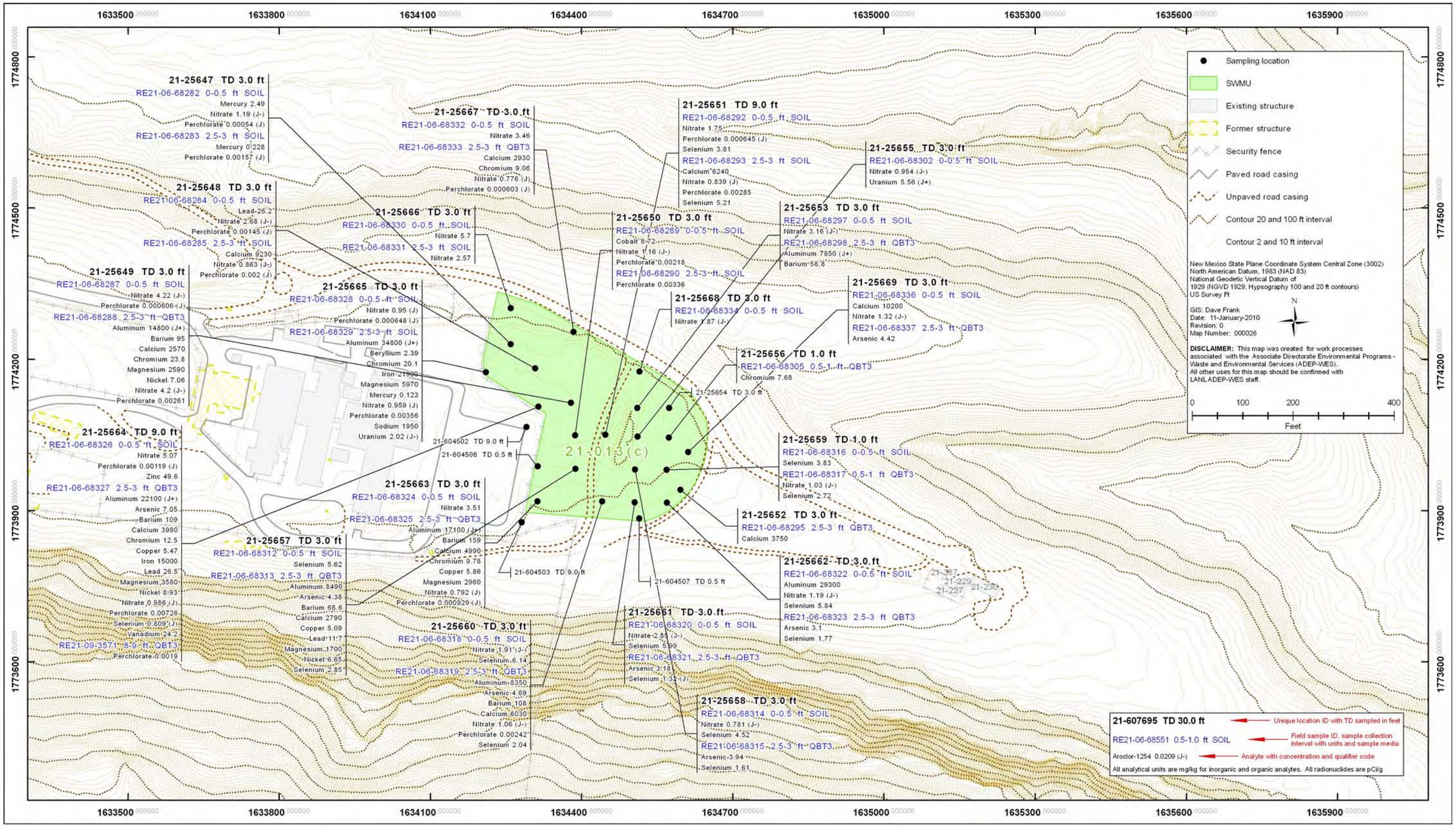

Figure 6.6-1 Inorganic chemicals detected or detected above BVs at SWMU 21-013(c)

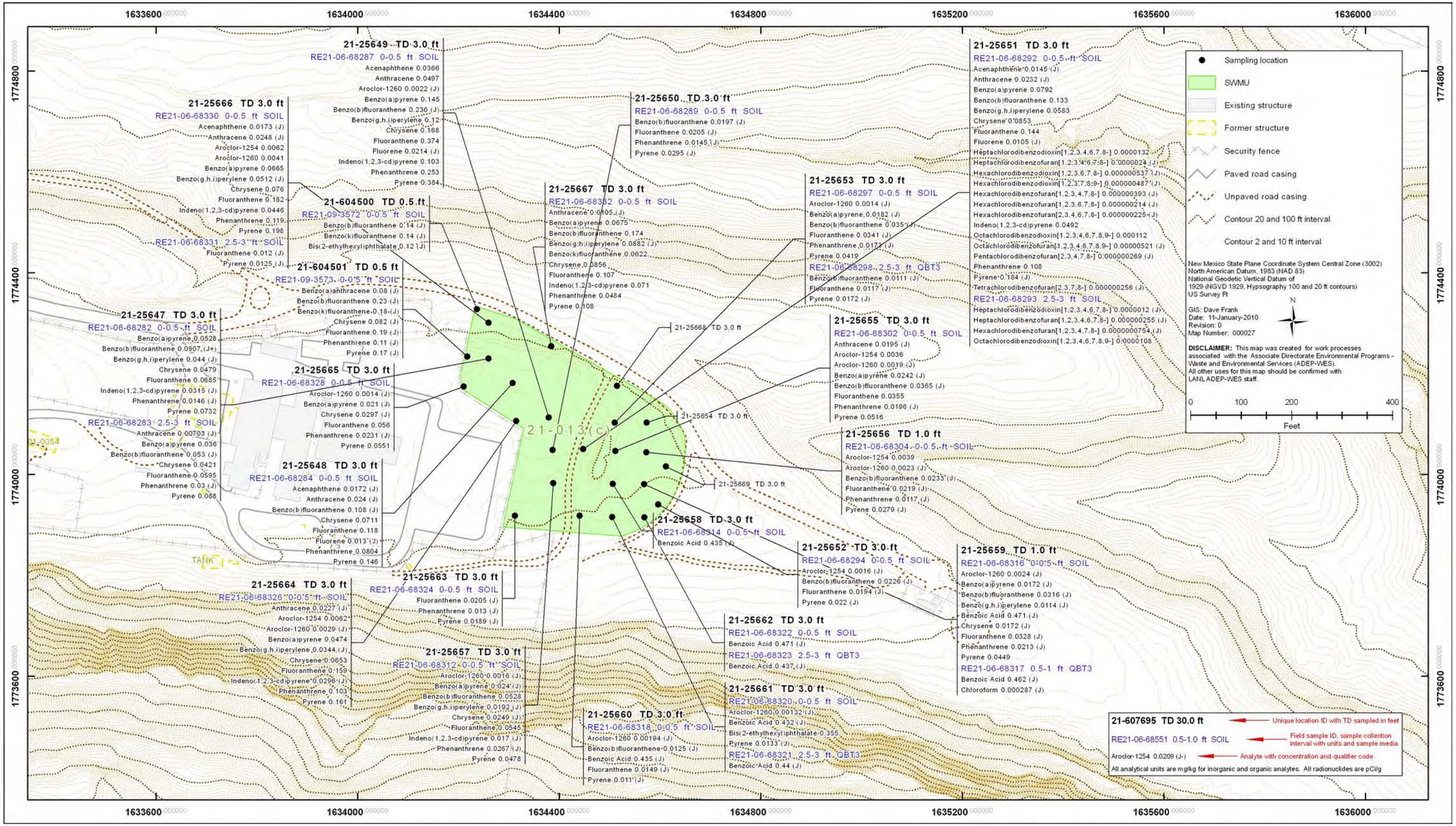

Figure 6.6-2 Organic chemicals detected at SWMU 21-013(c)

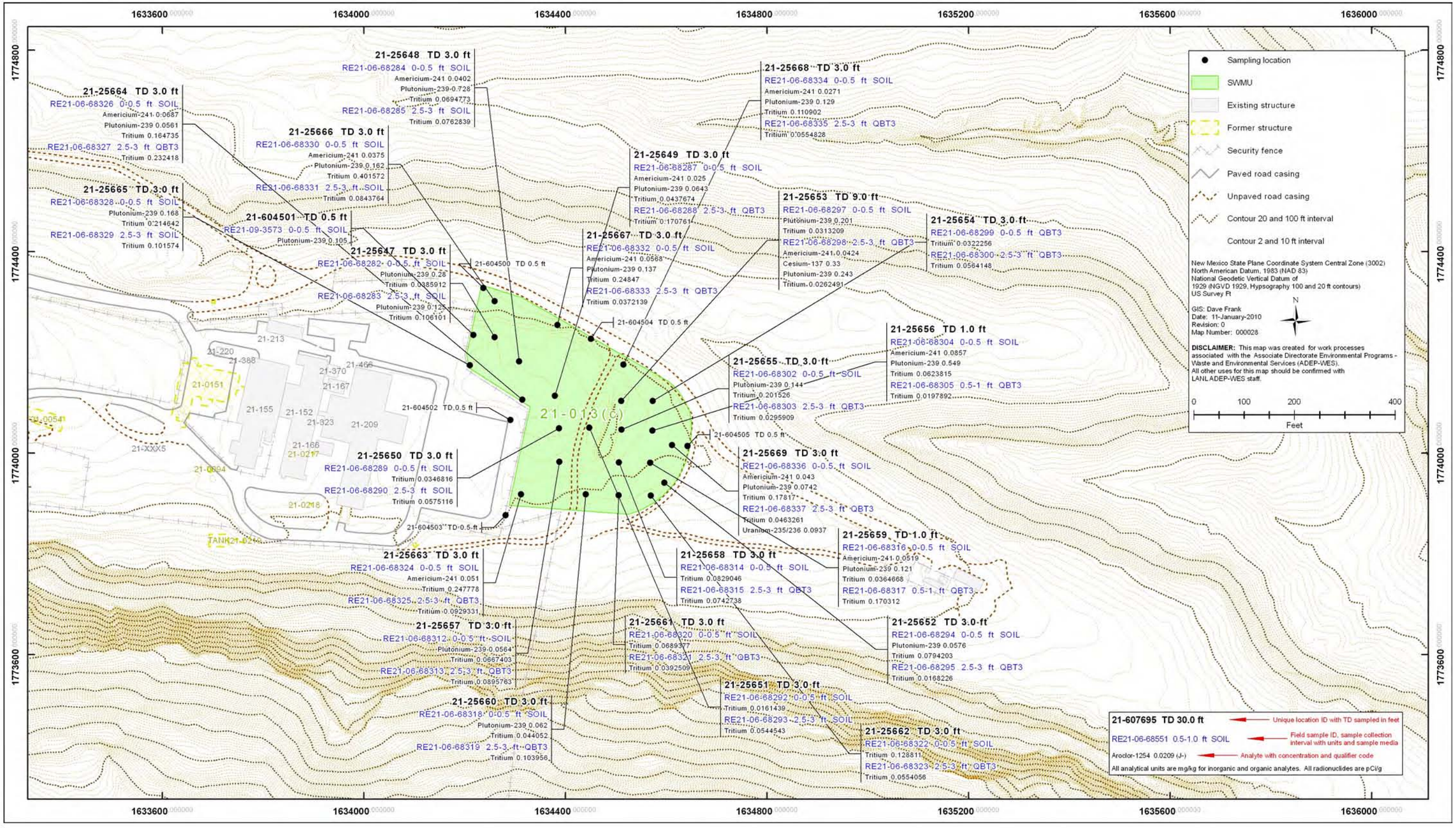

Figure 6.6-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-013(c)

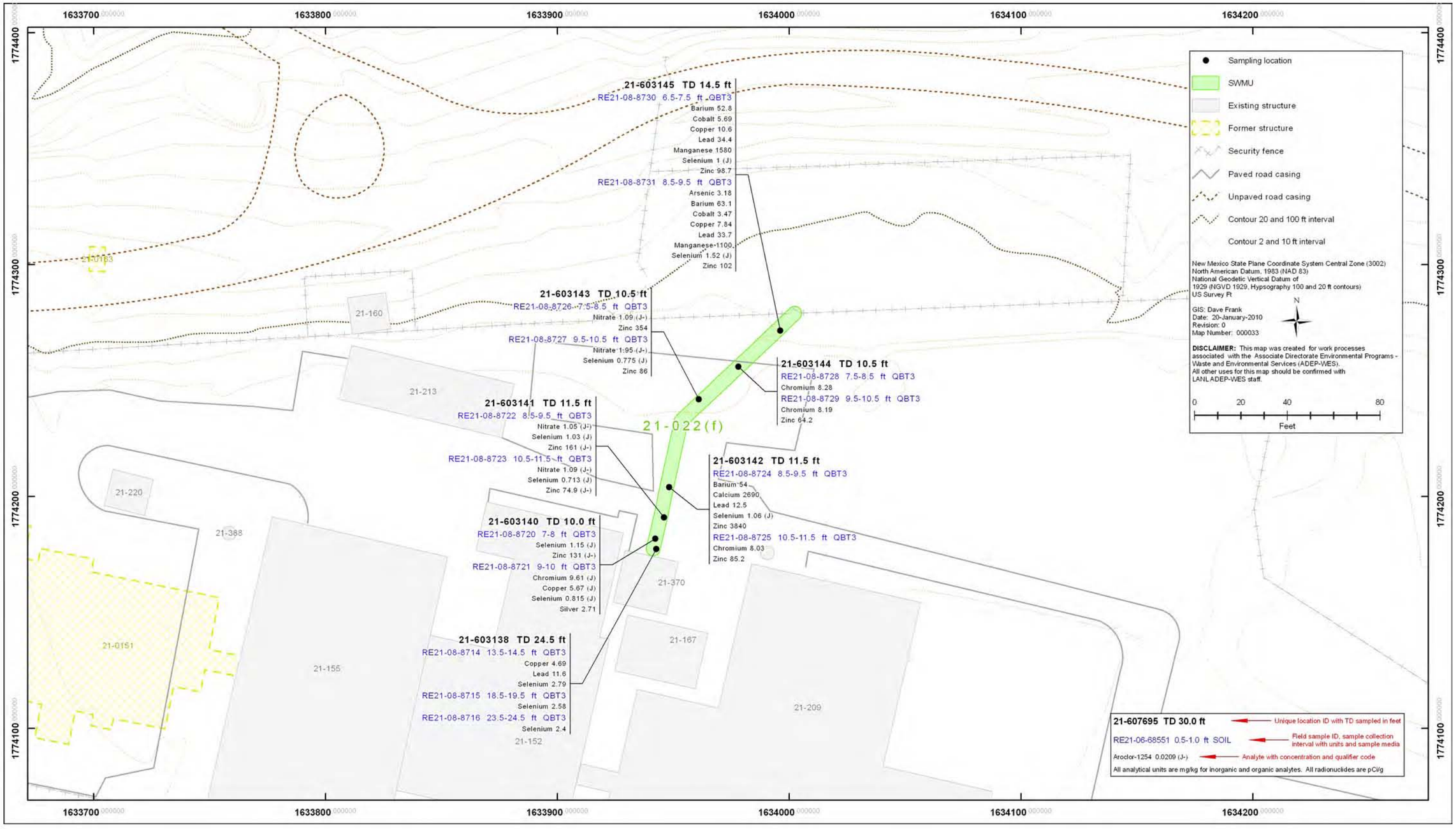

Figure 6.7-1 Inorganic chemicals detected or detected above BVs at SWMU 21-022(f)

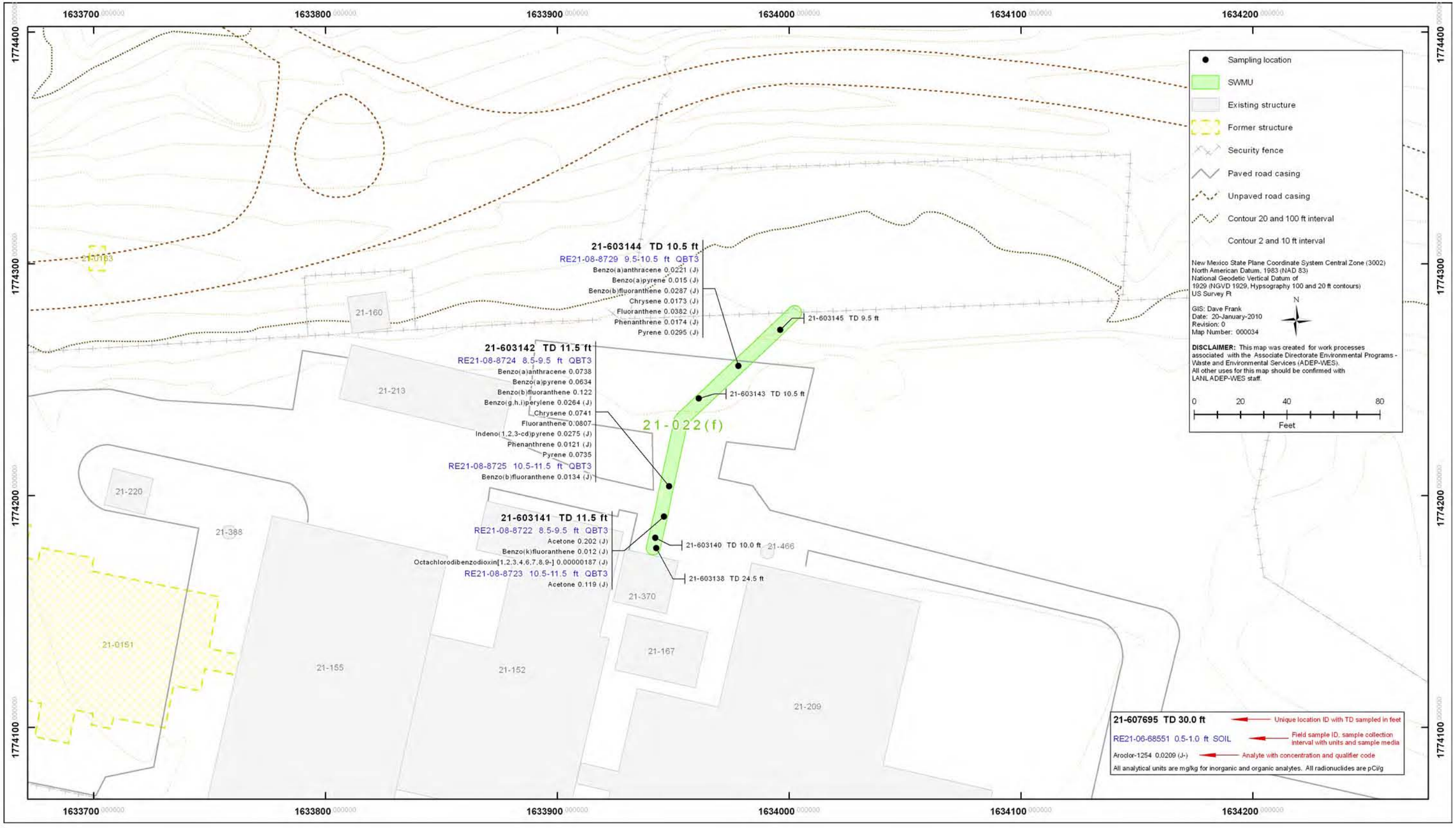

Figure 6.7-2 Organic chemicals detected at SWMU 21-022(f)

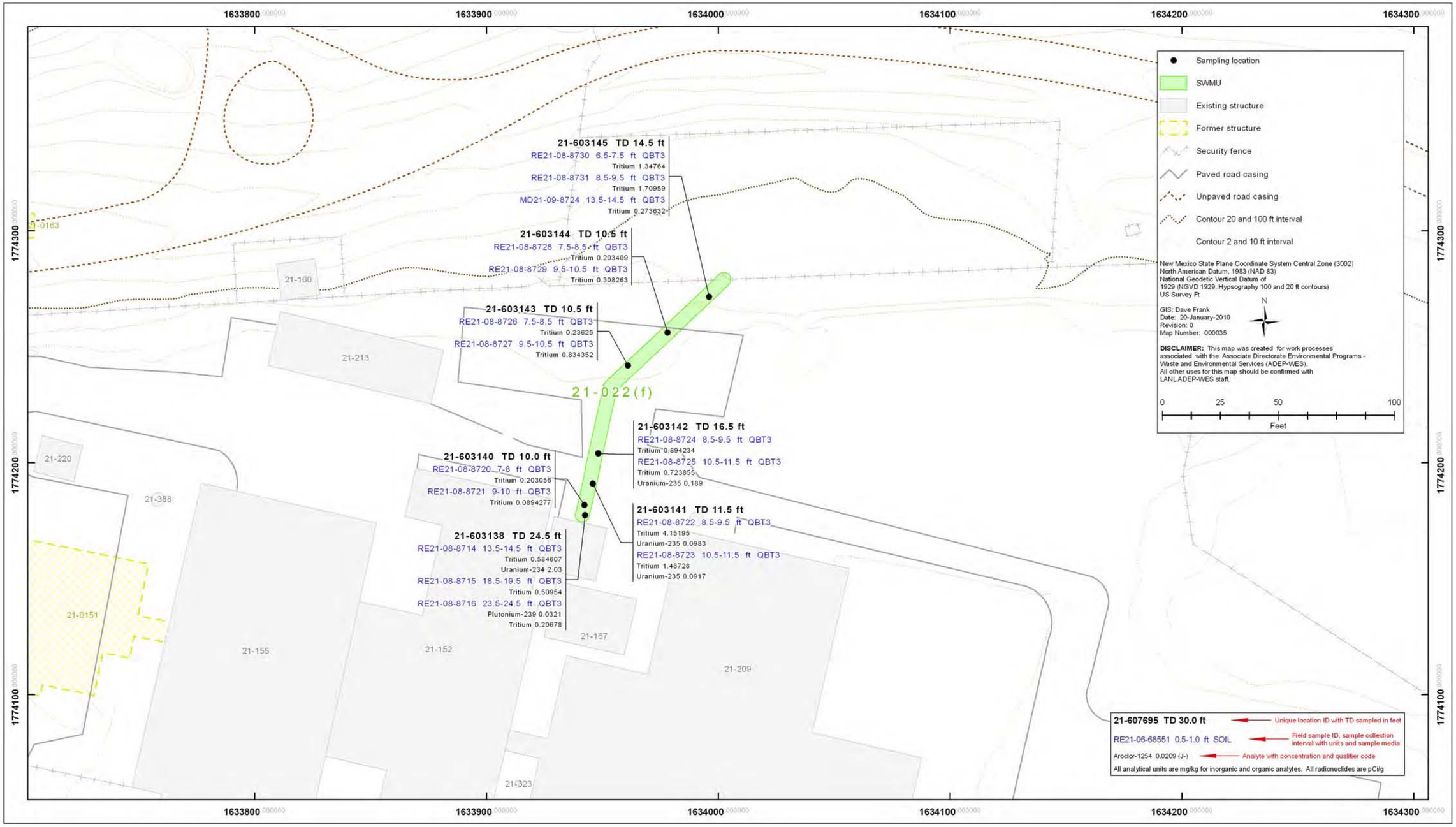

Figure 6.7-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-022(f)

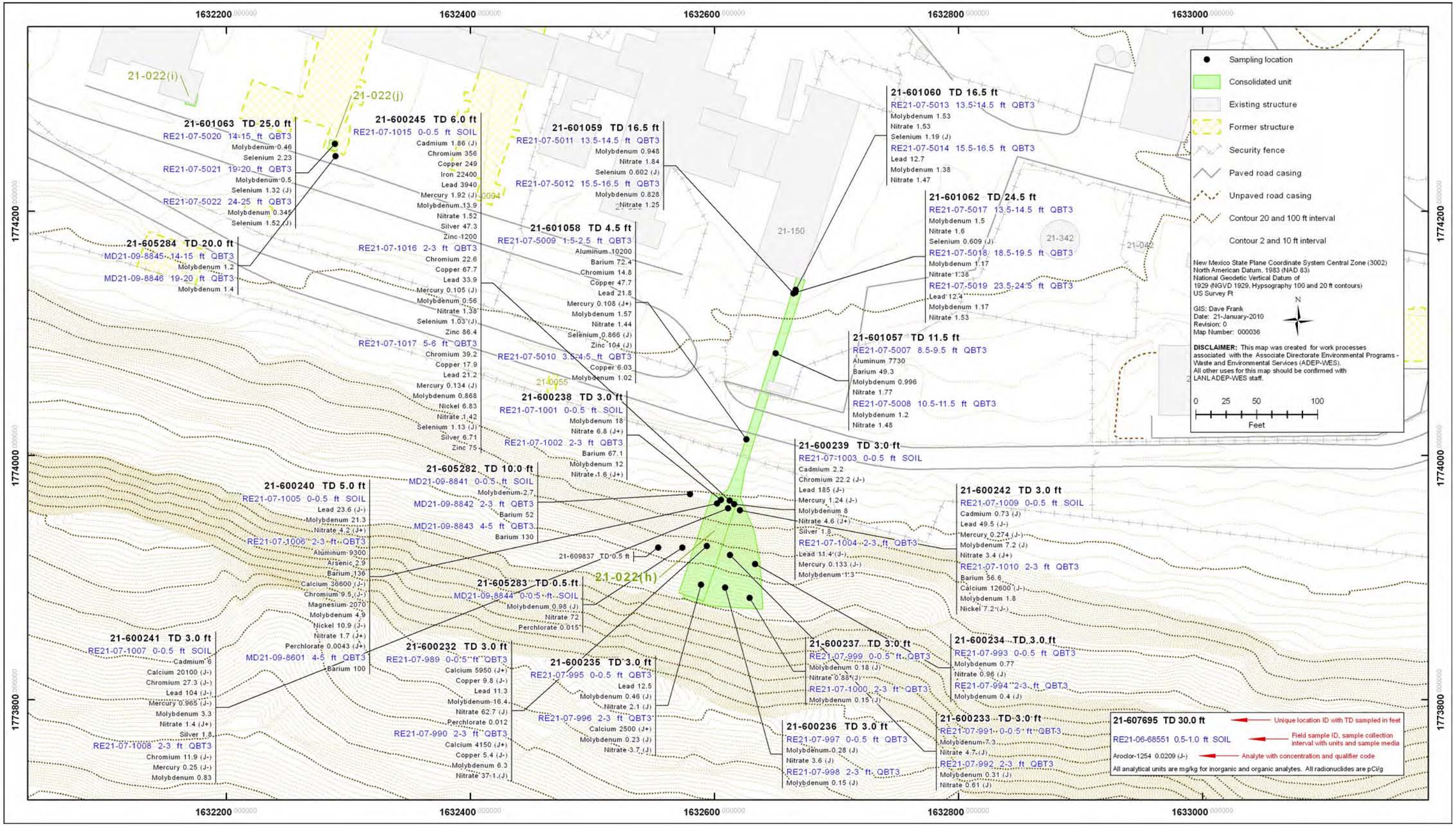

Figure 6.8-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-022(h)-99

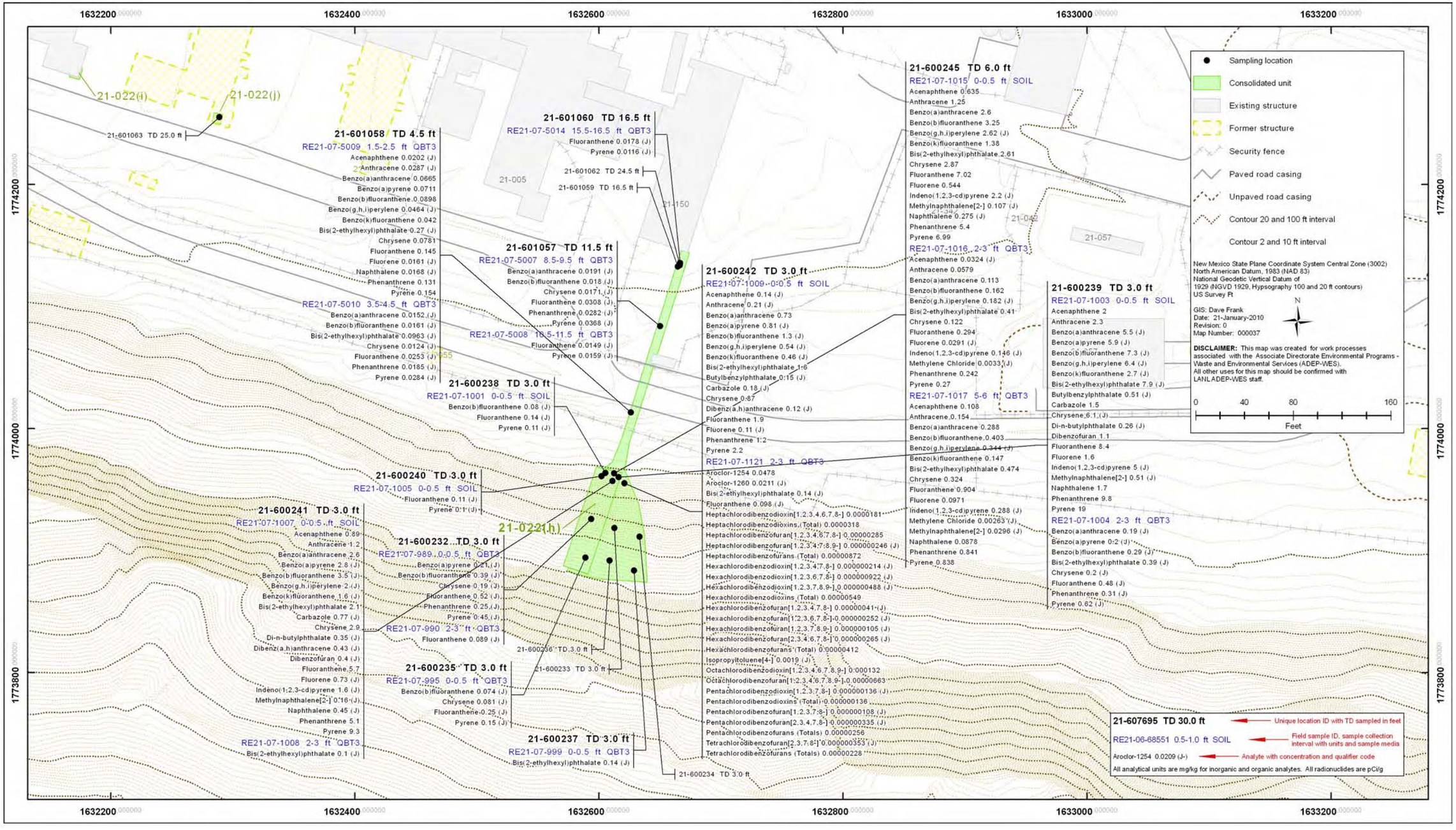

Figure 6.8-2 Organic chemicals detected at Consolidated Unit 21-022(h)-99

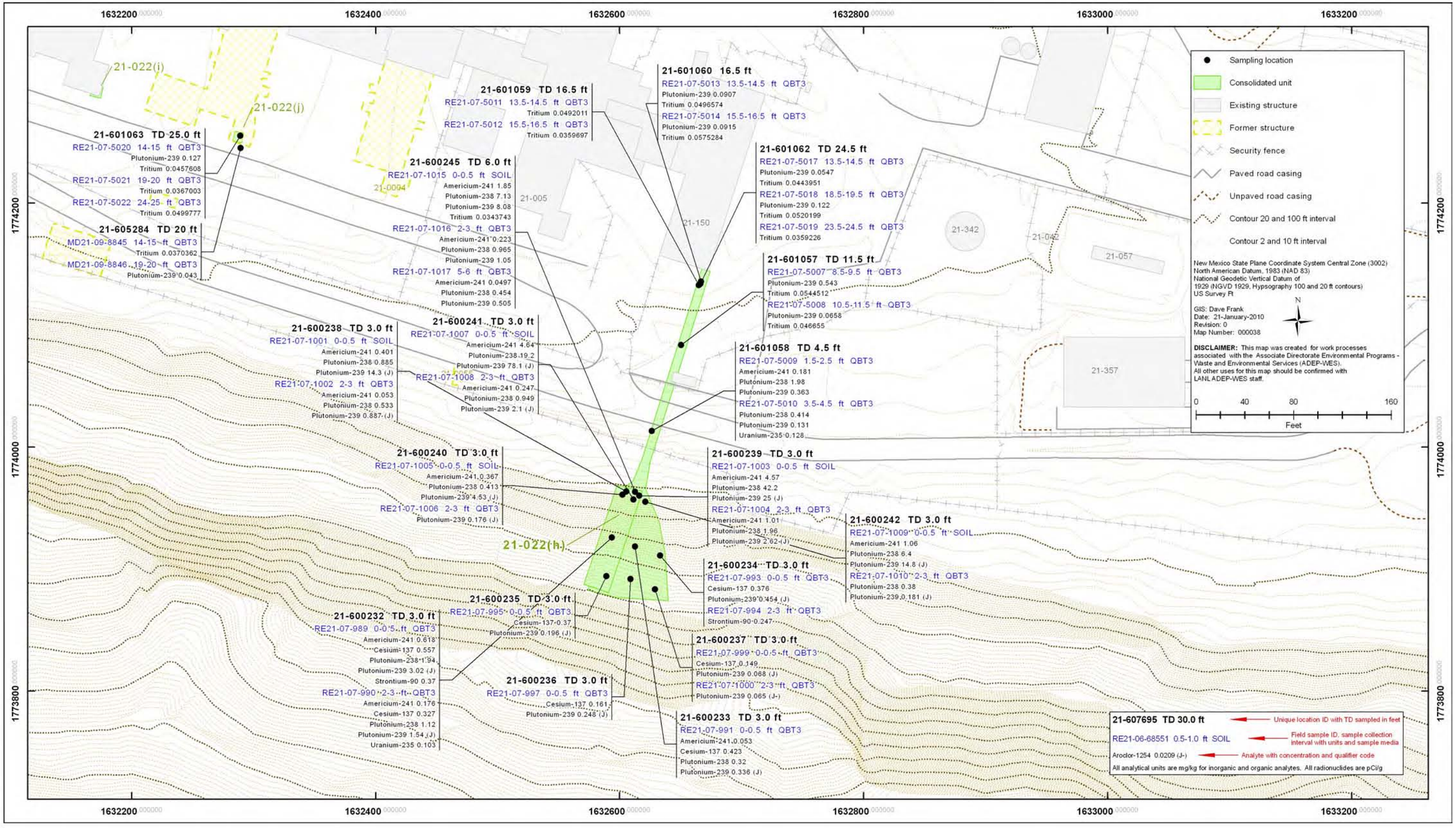

Figure 6.8-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-022(h)-99

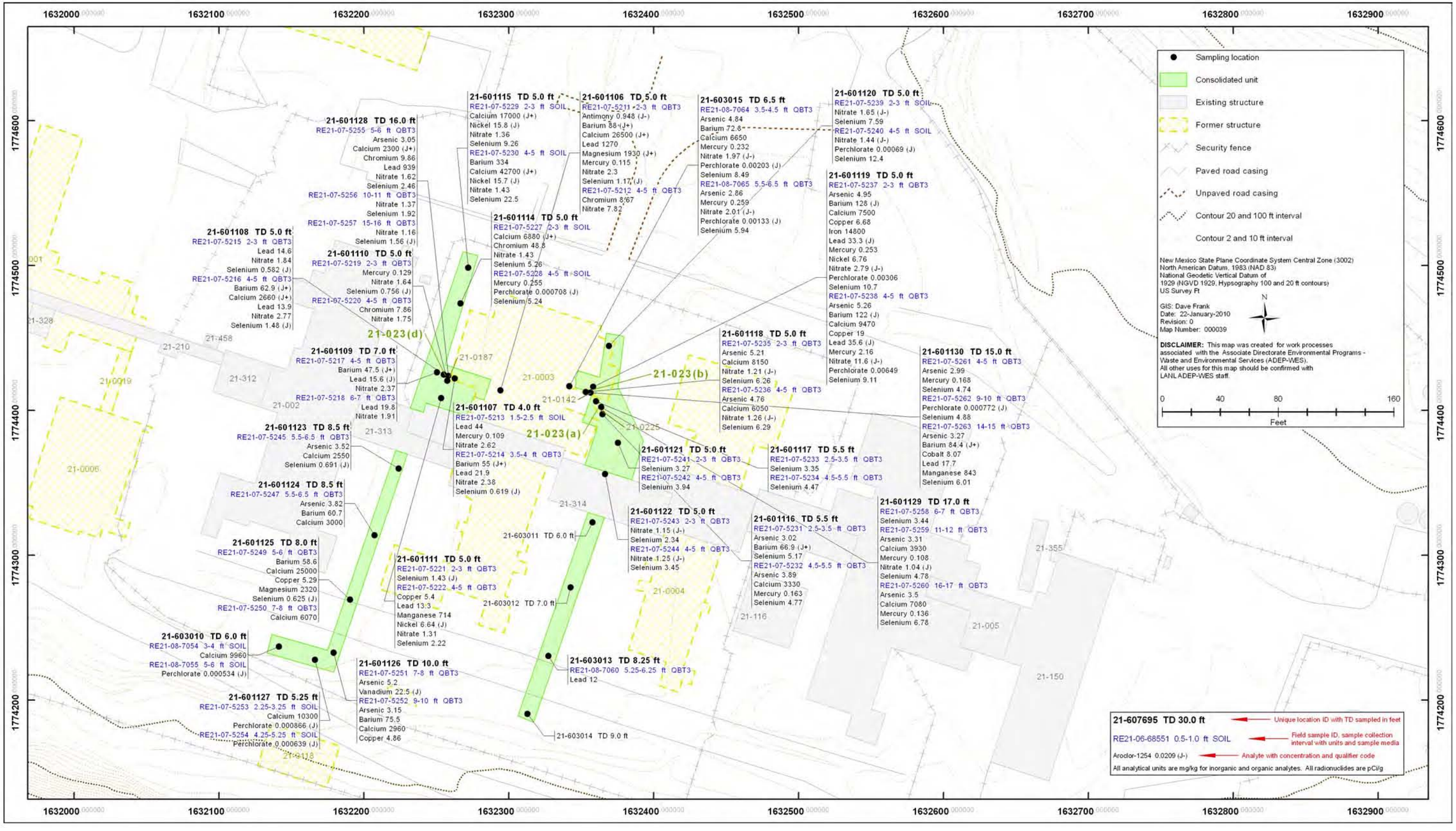

Figure 6.9-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-023(a)-99

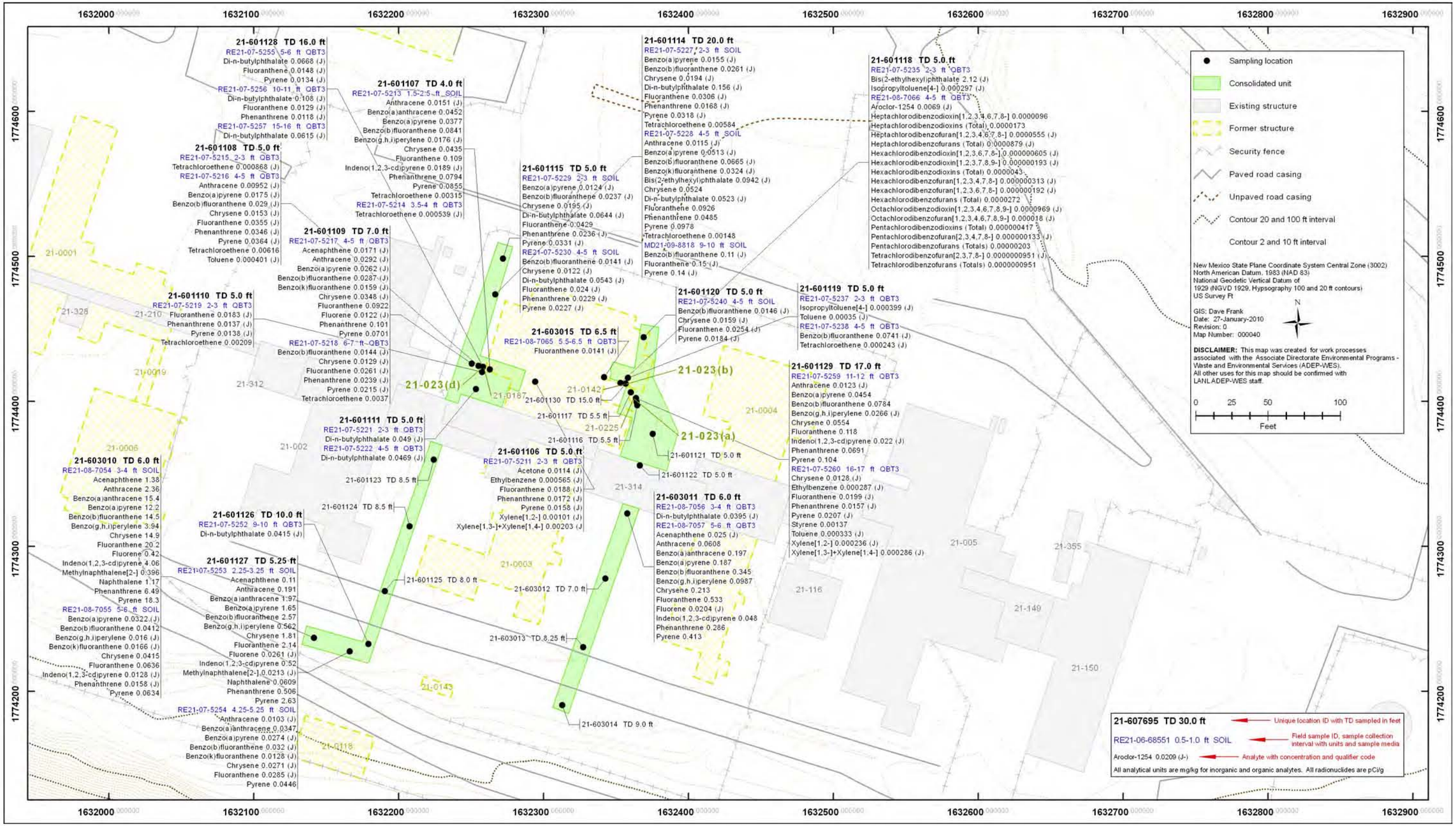

Figure 6.9-2 Organic chemicals detected at Consolidated Unit 21-023(a)-99

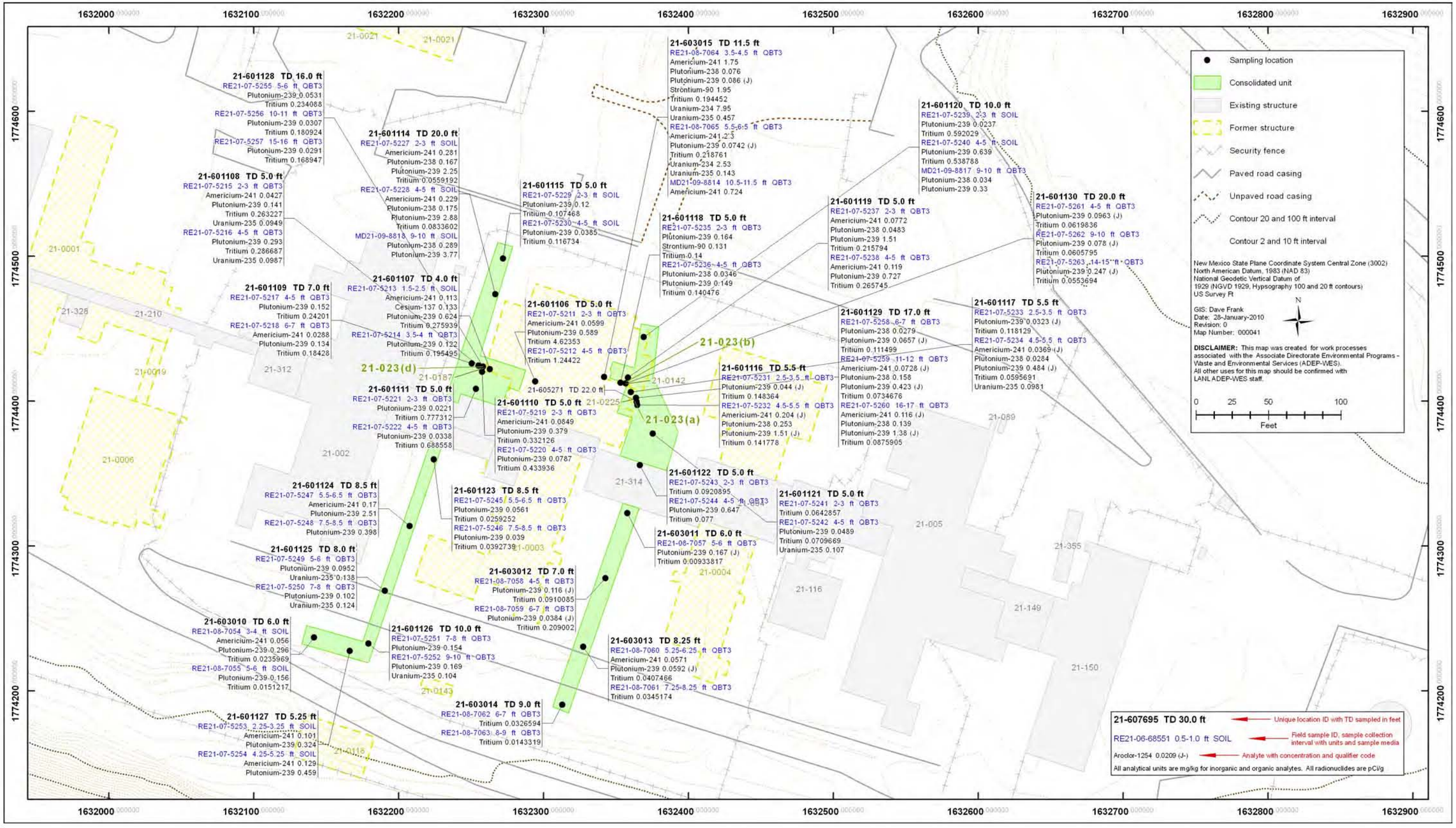

Figure 6.9-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-023(a)-99

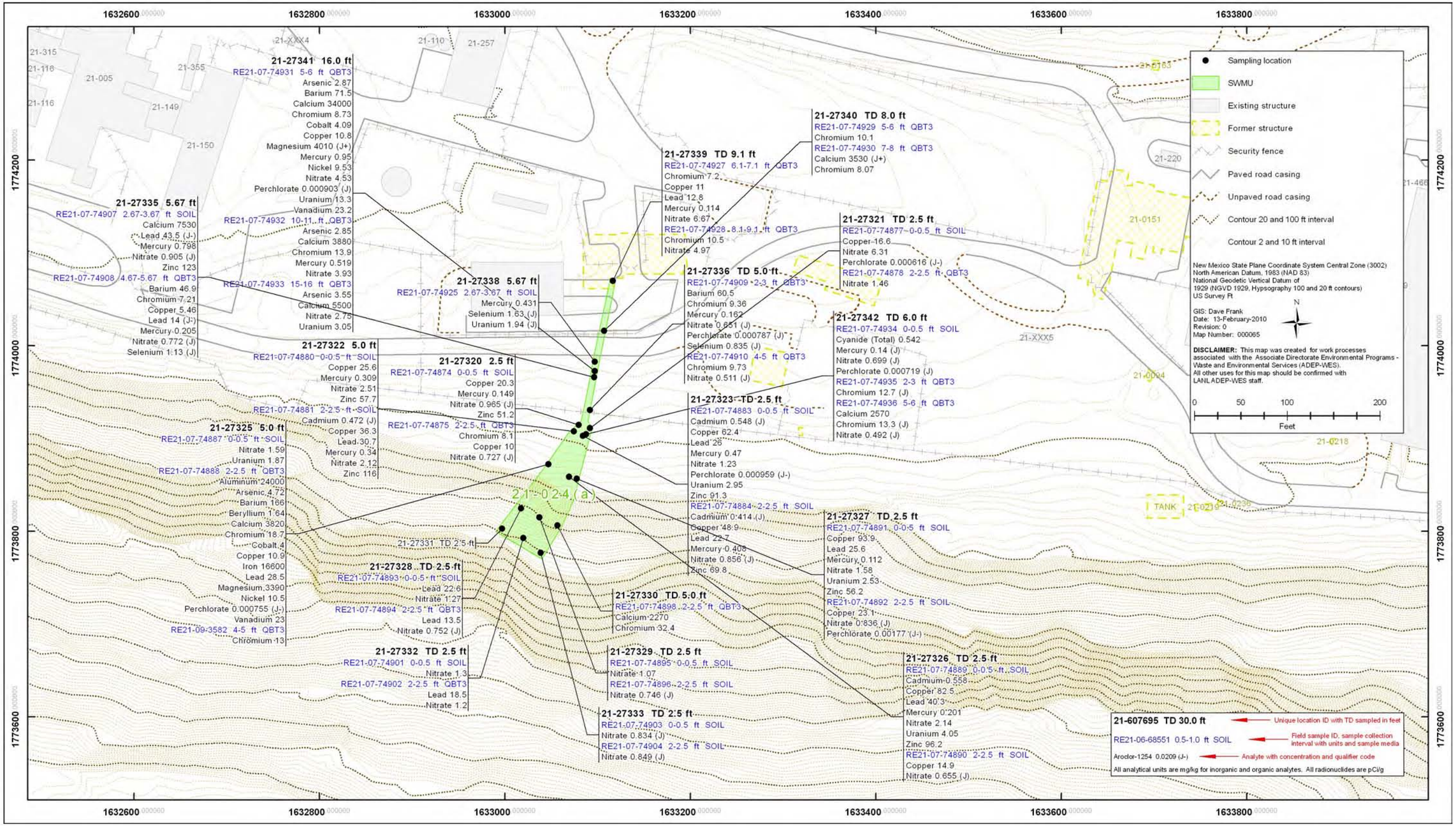

Figure 6.10-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(a)

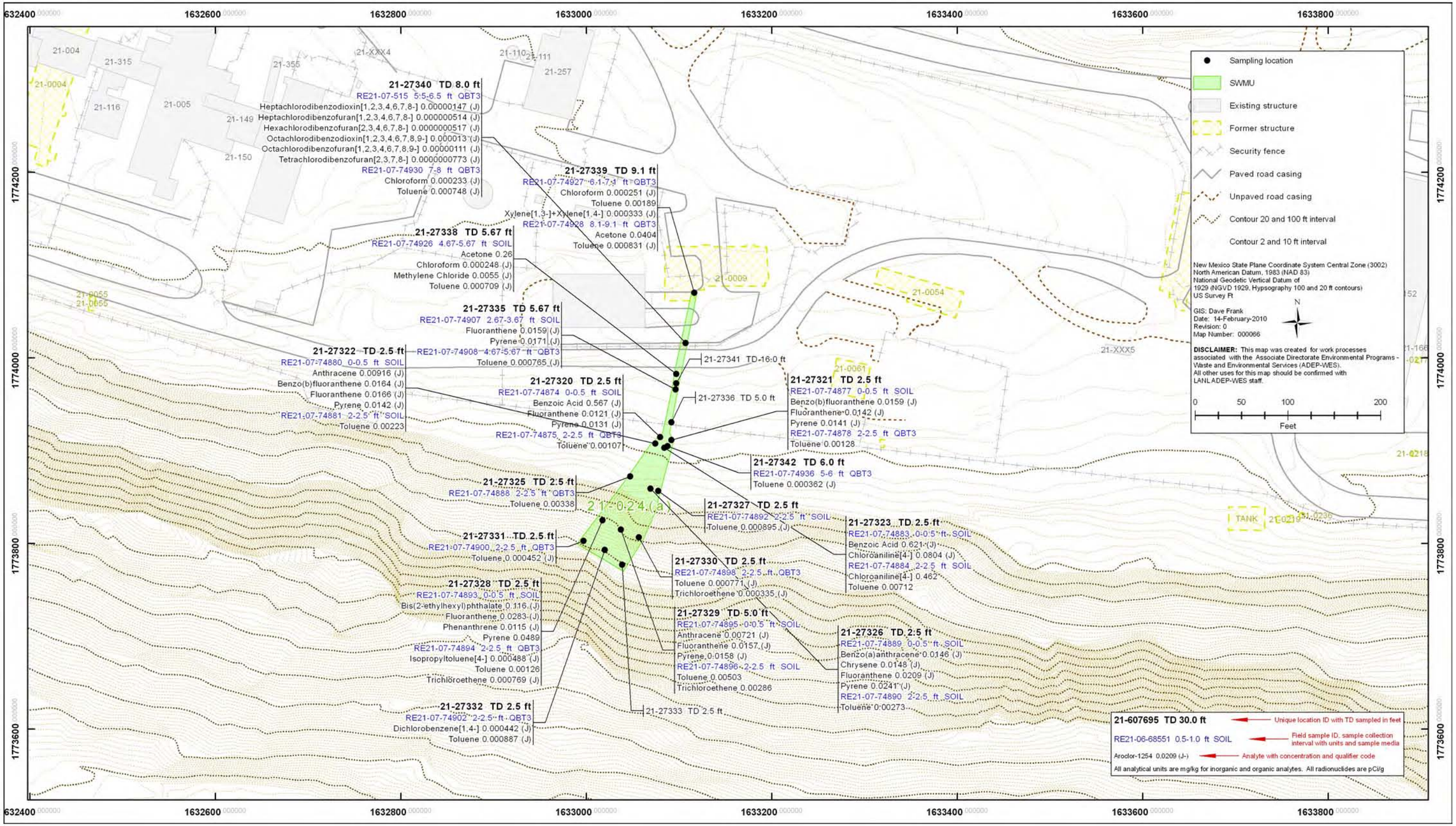

Figure 6.10-2 Organic chemicals detected at SWMU 21-024(a)

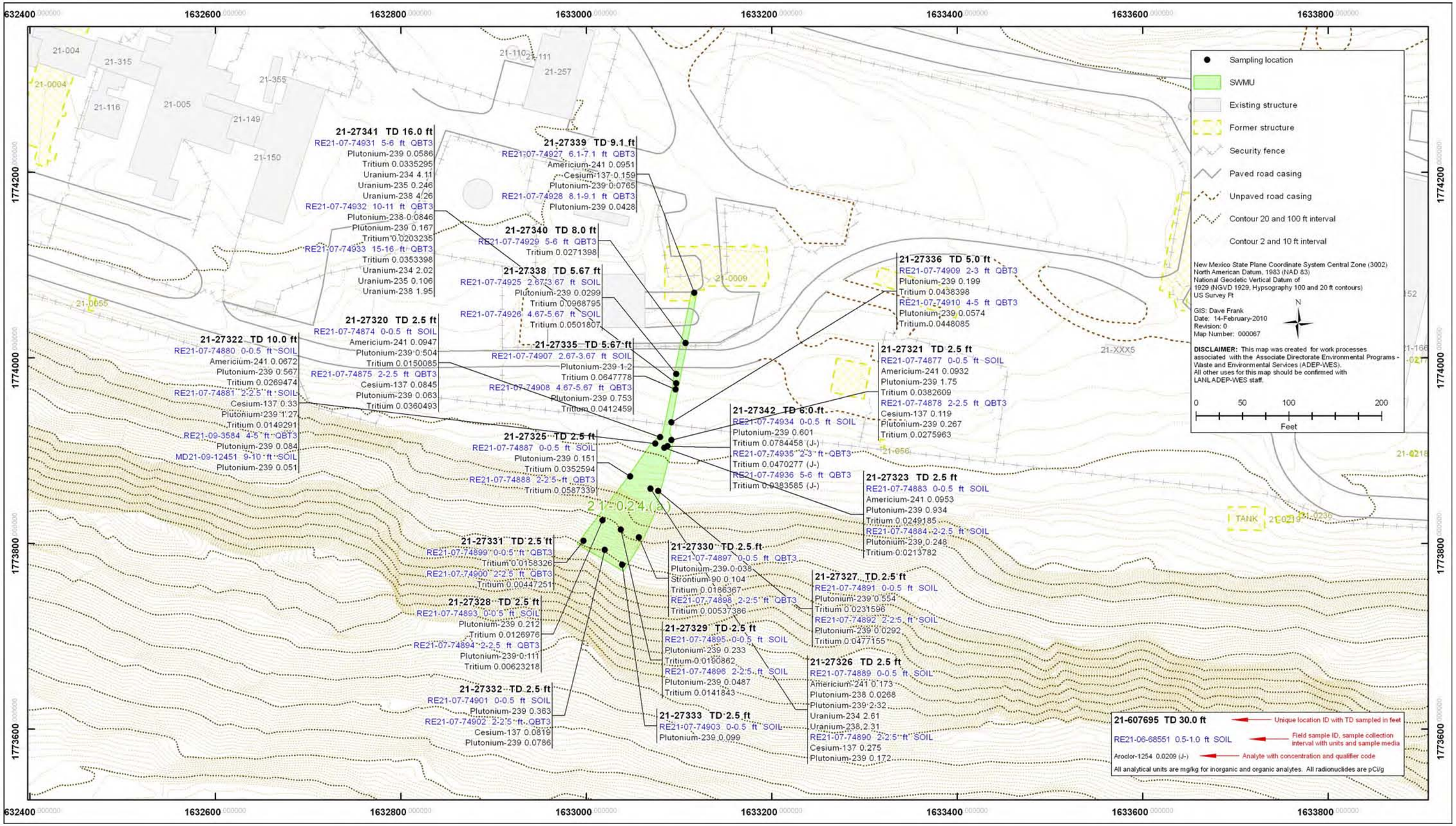

Figure 6.10-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(a)

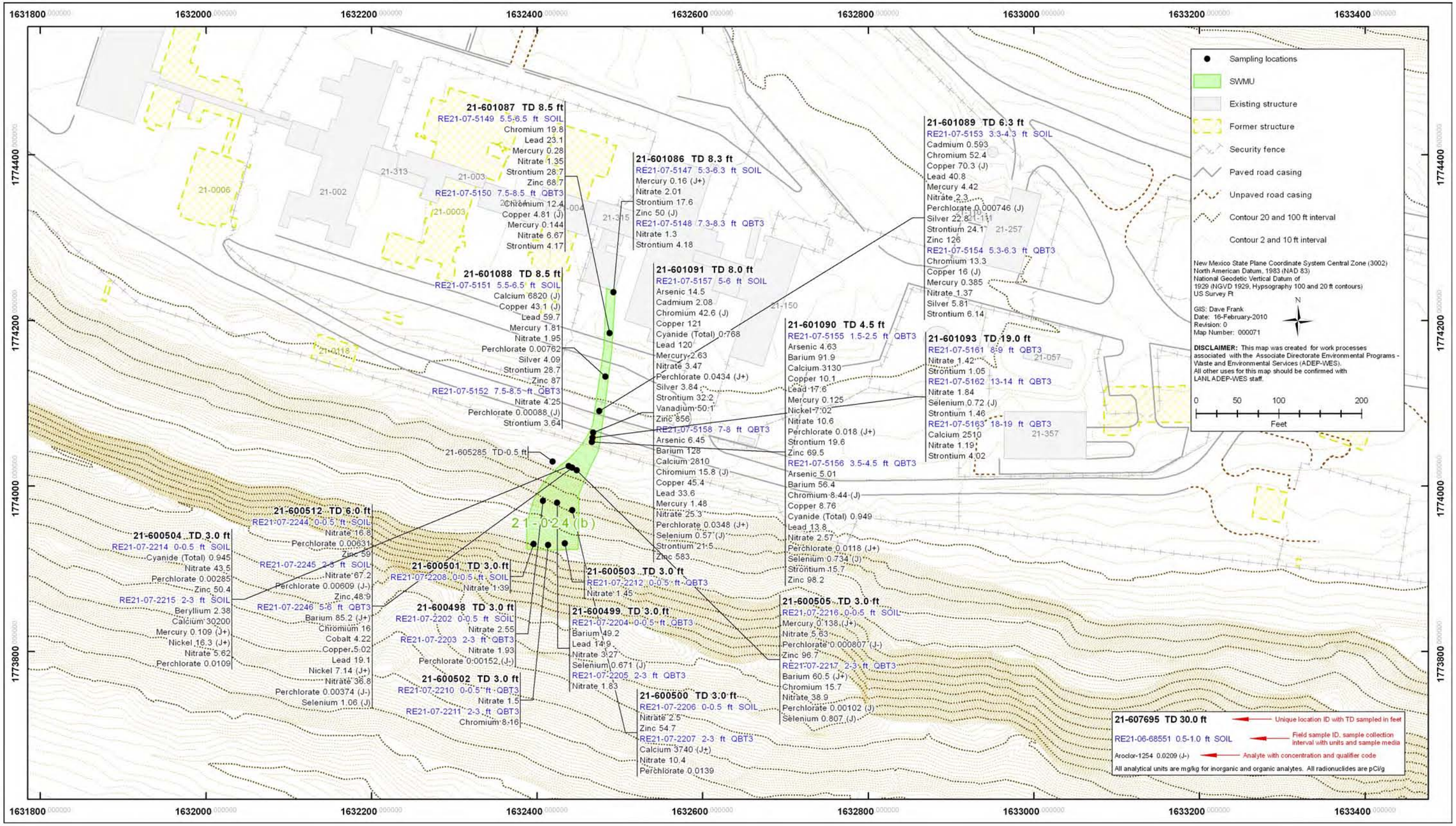

Figure 6.11-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(b)

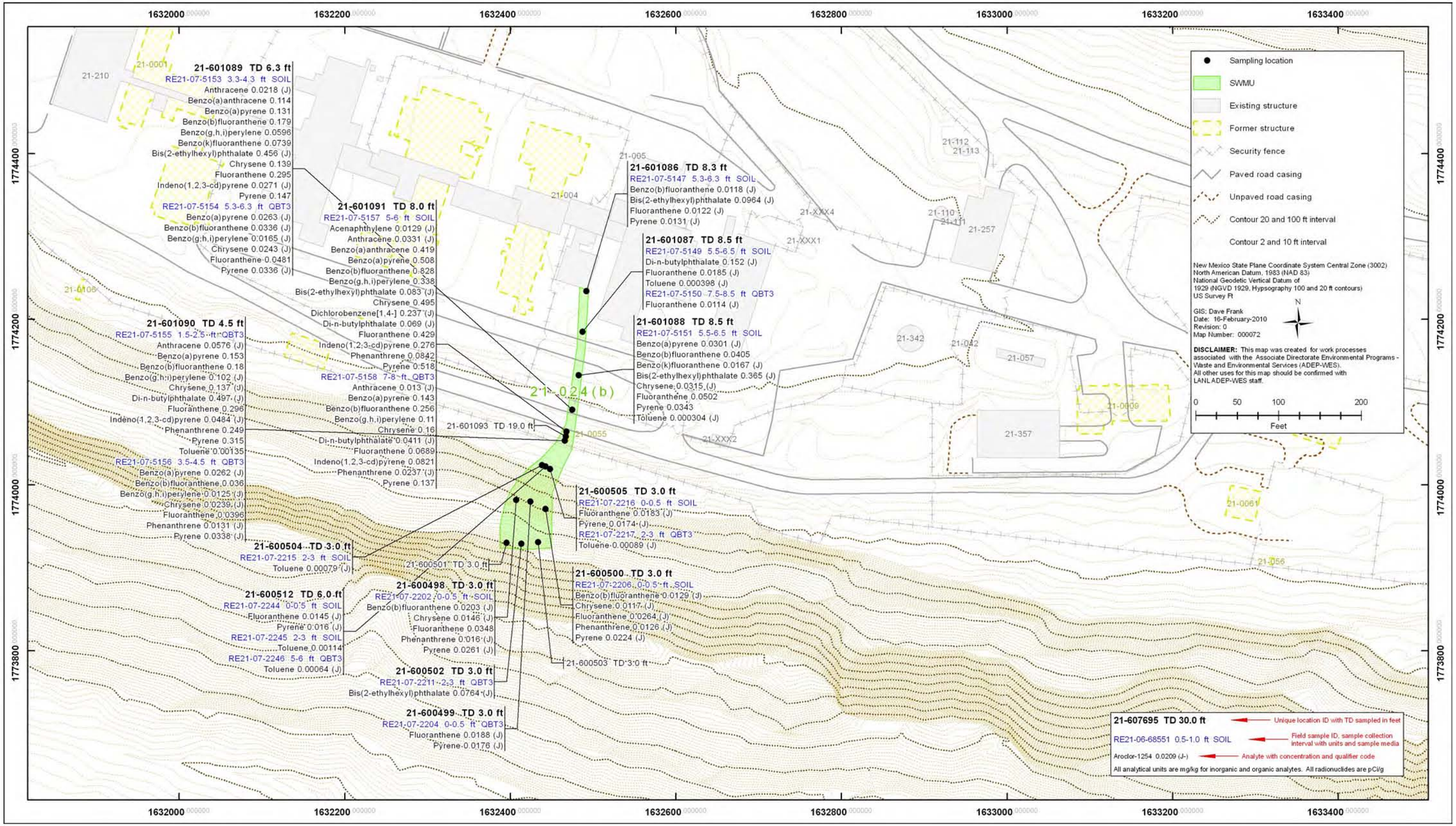

Figure 6.11-2 Organic chemicals detected at SWMU 21-024(b)

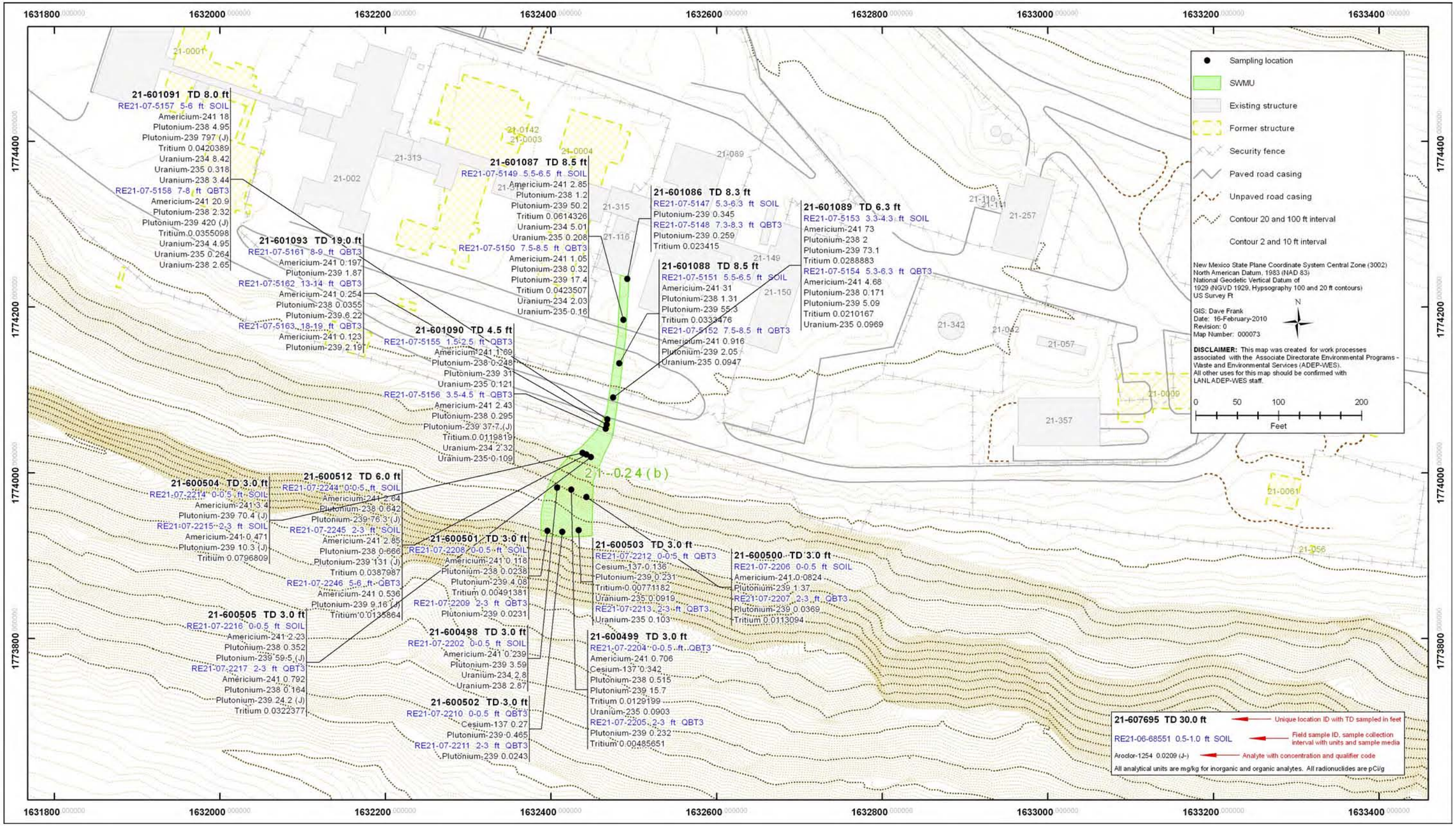

Figure 6.11-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(b)

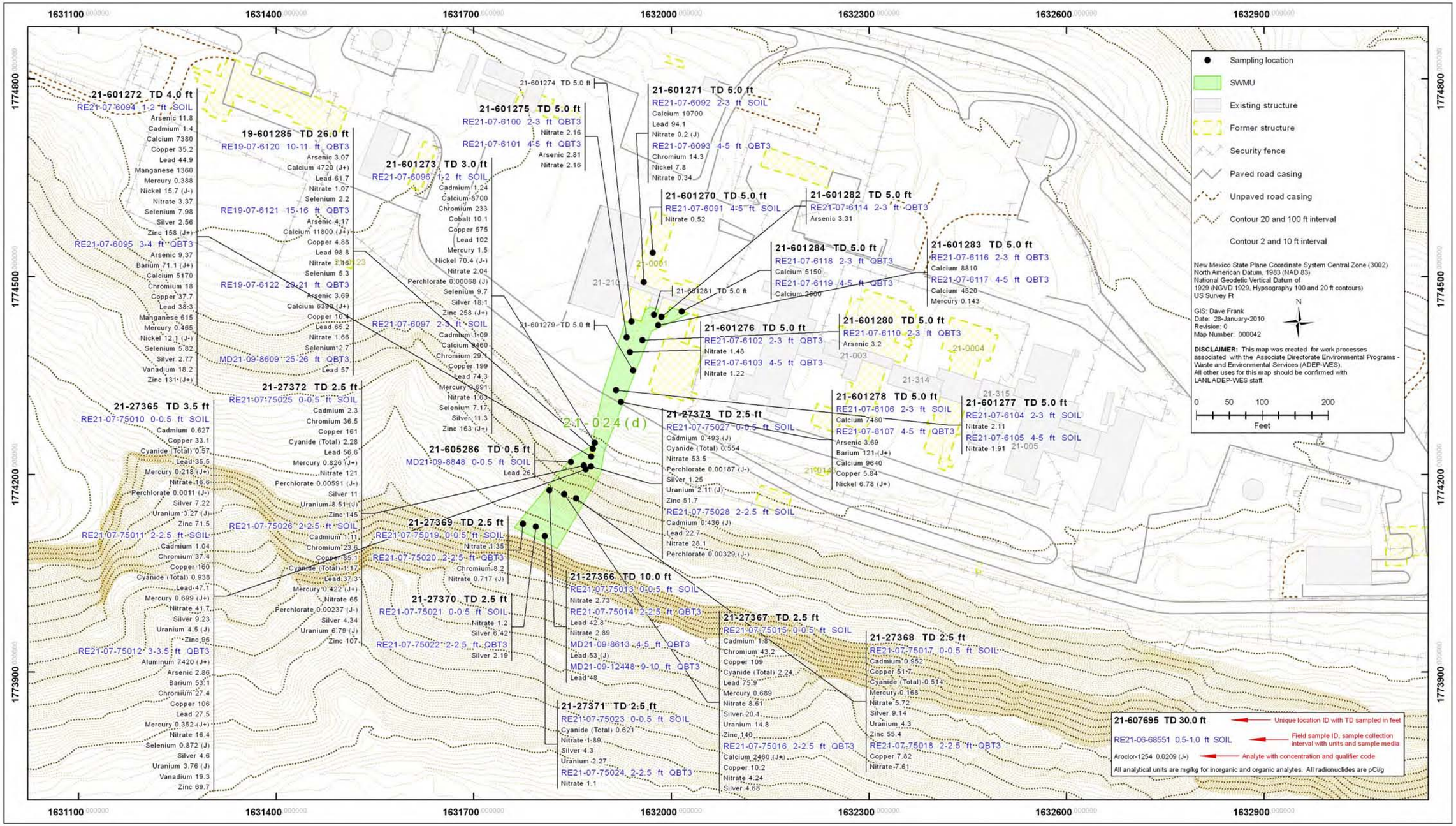

Figure 6.12-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(d)

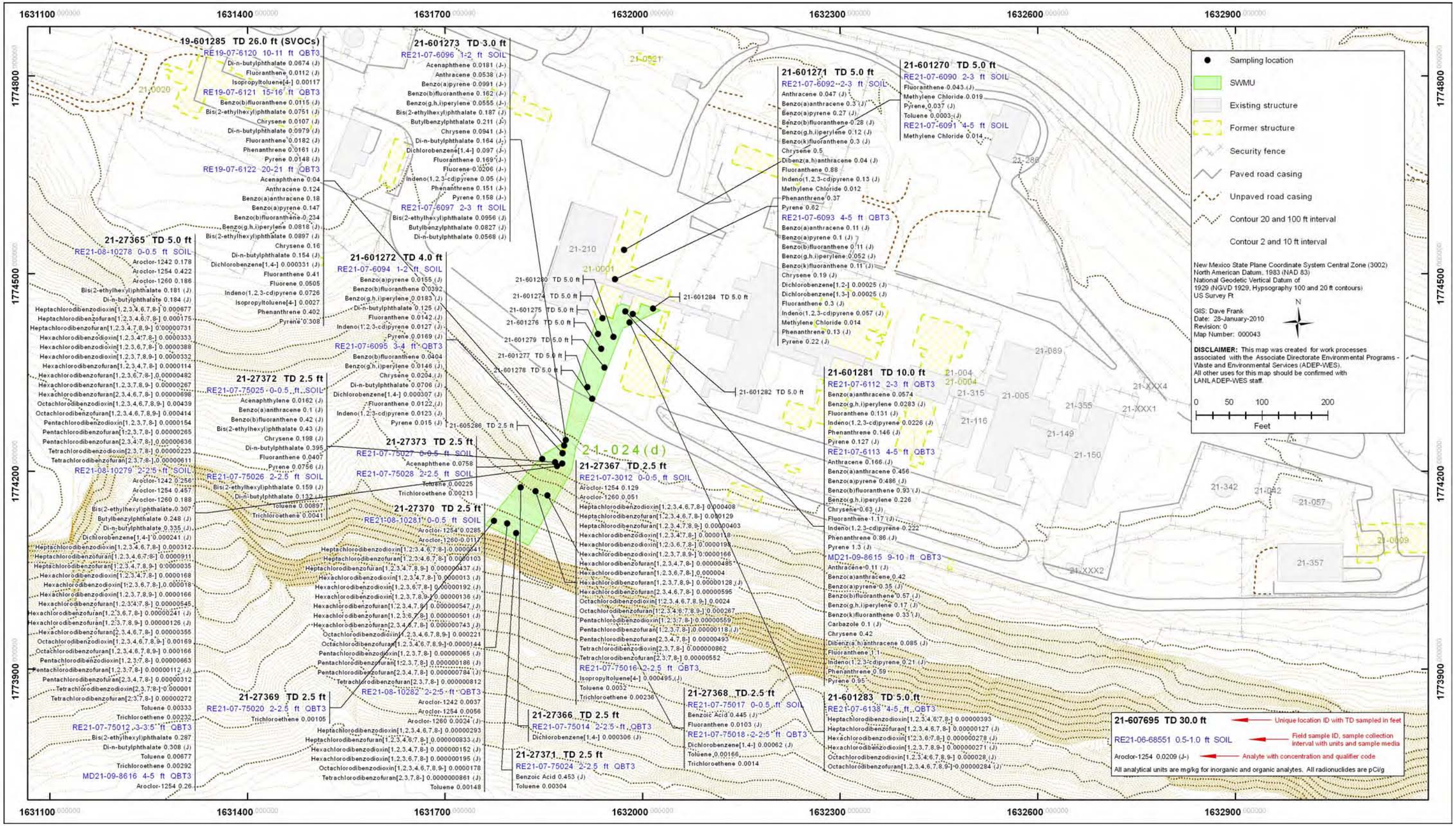

Figure 6.12-2 Organic chemicals detected at SWMU 21-024(d)

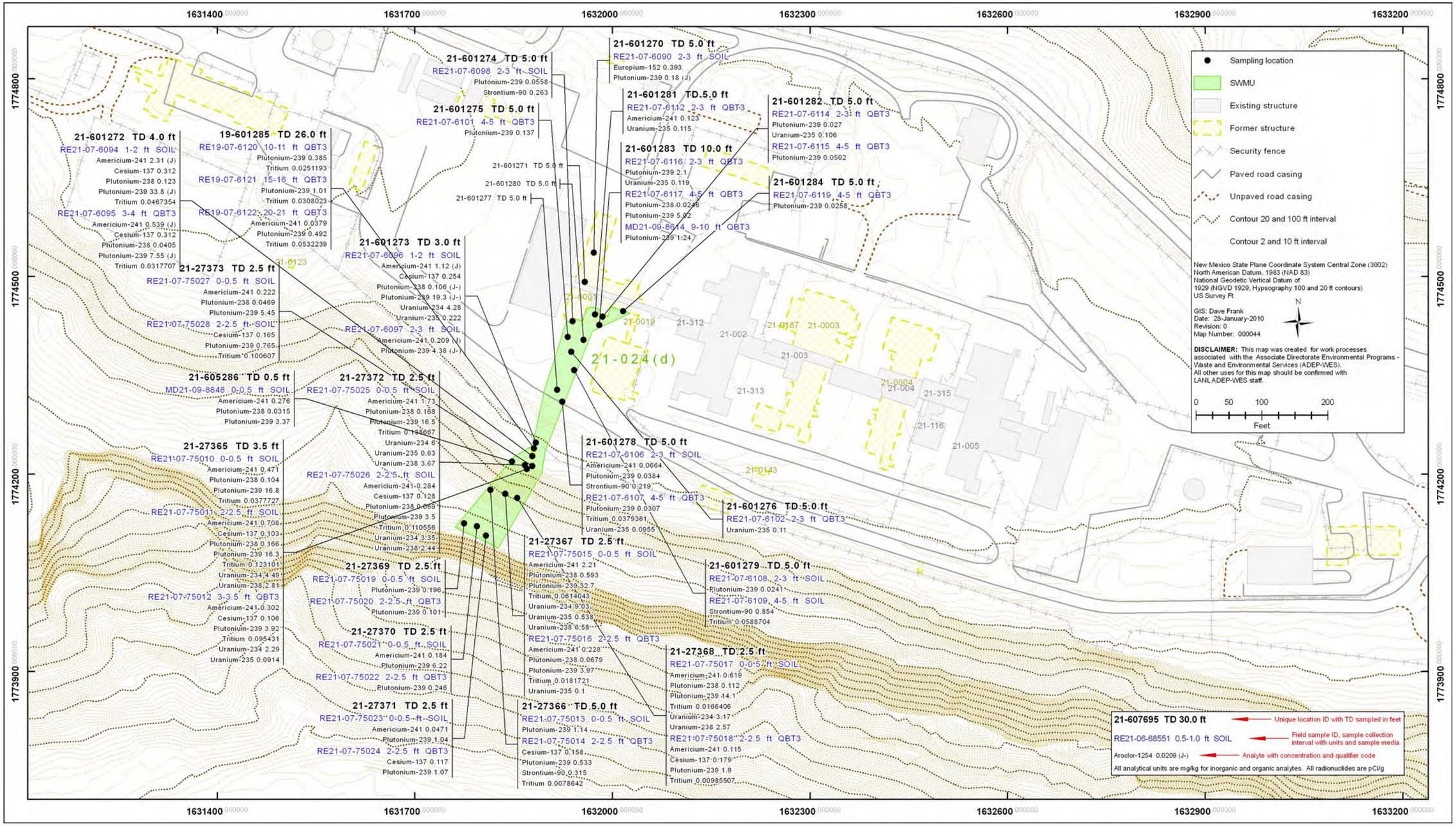

Figure 6.12-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(d)

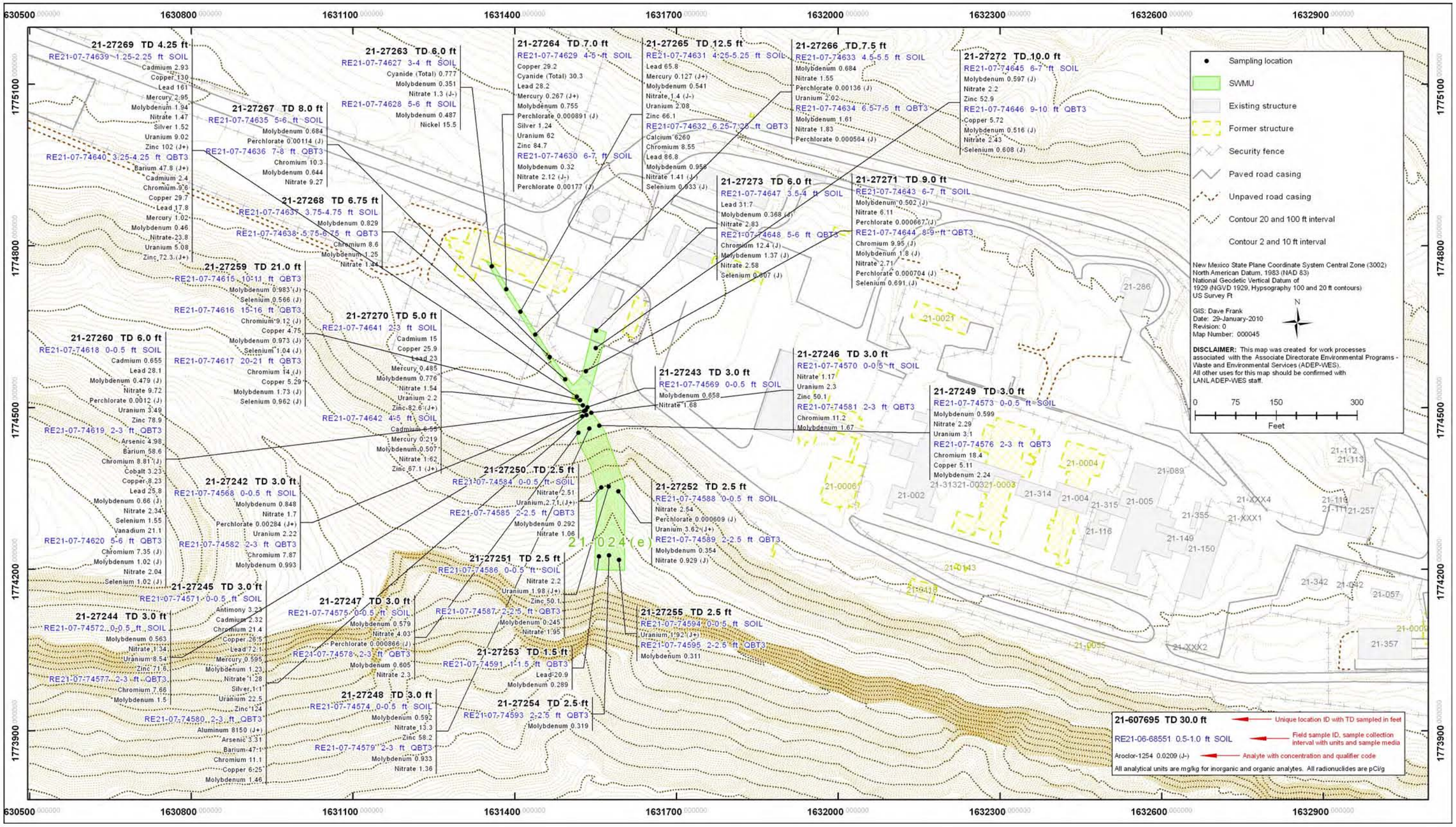

Figure 6.13-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(e)

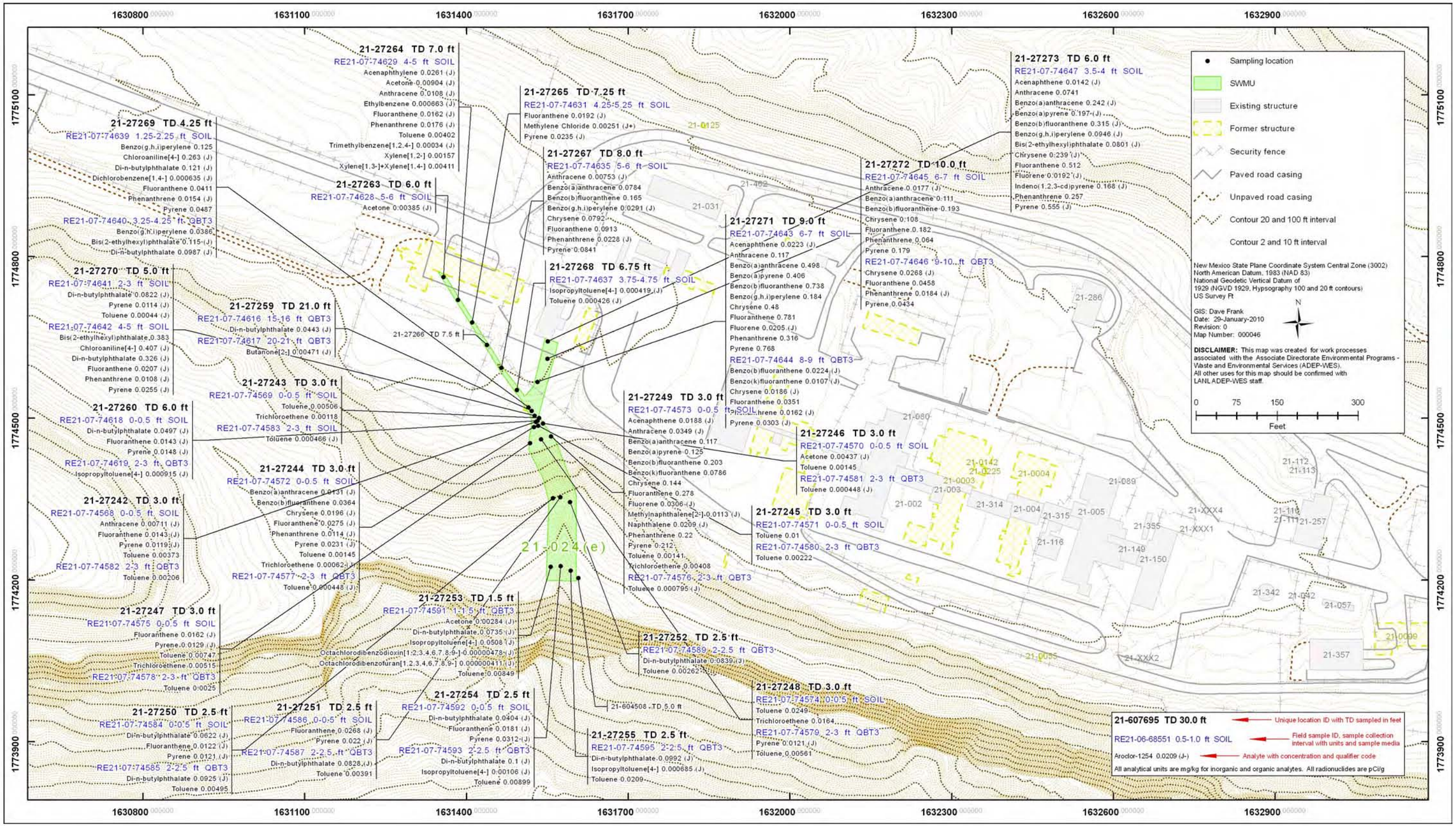

Figure 6.13-2 Organic chemicals detected at SWMU 21-024(e)

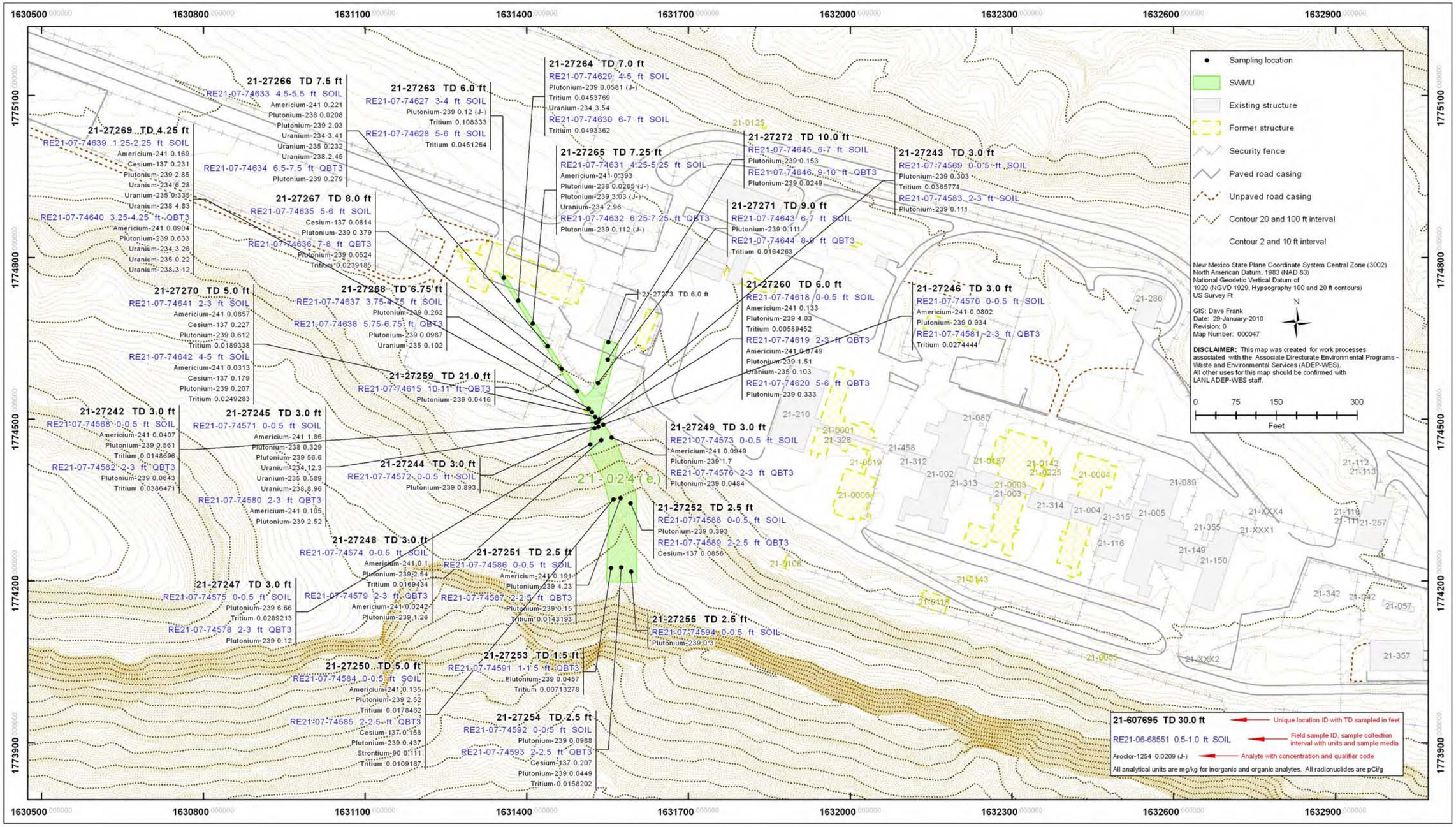

Figure 6.13-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(e)

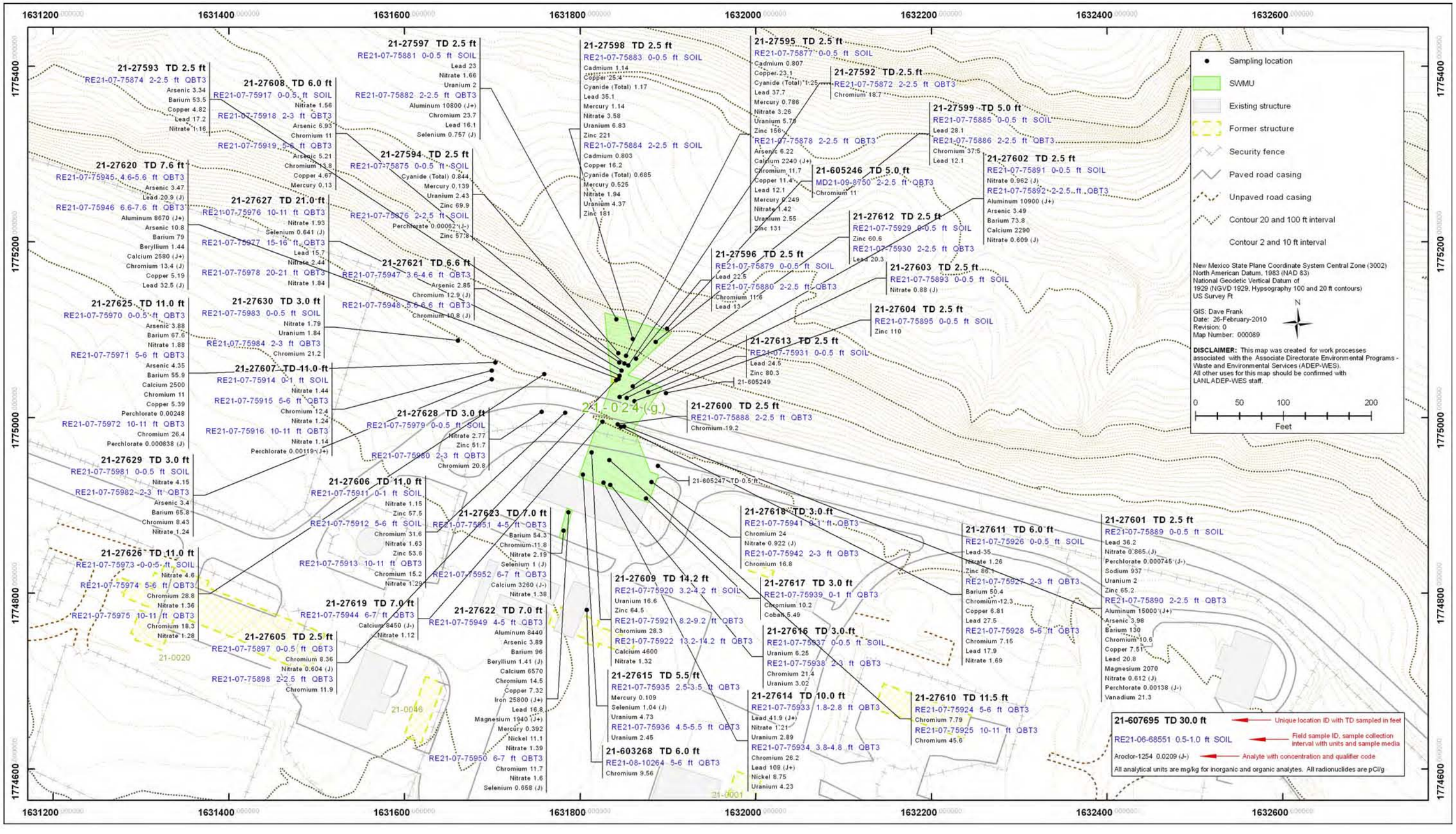

Figure 6.14-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(g)

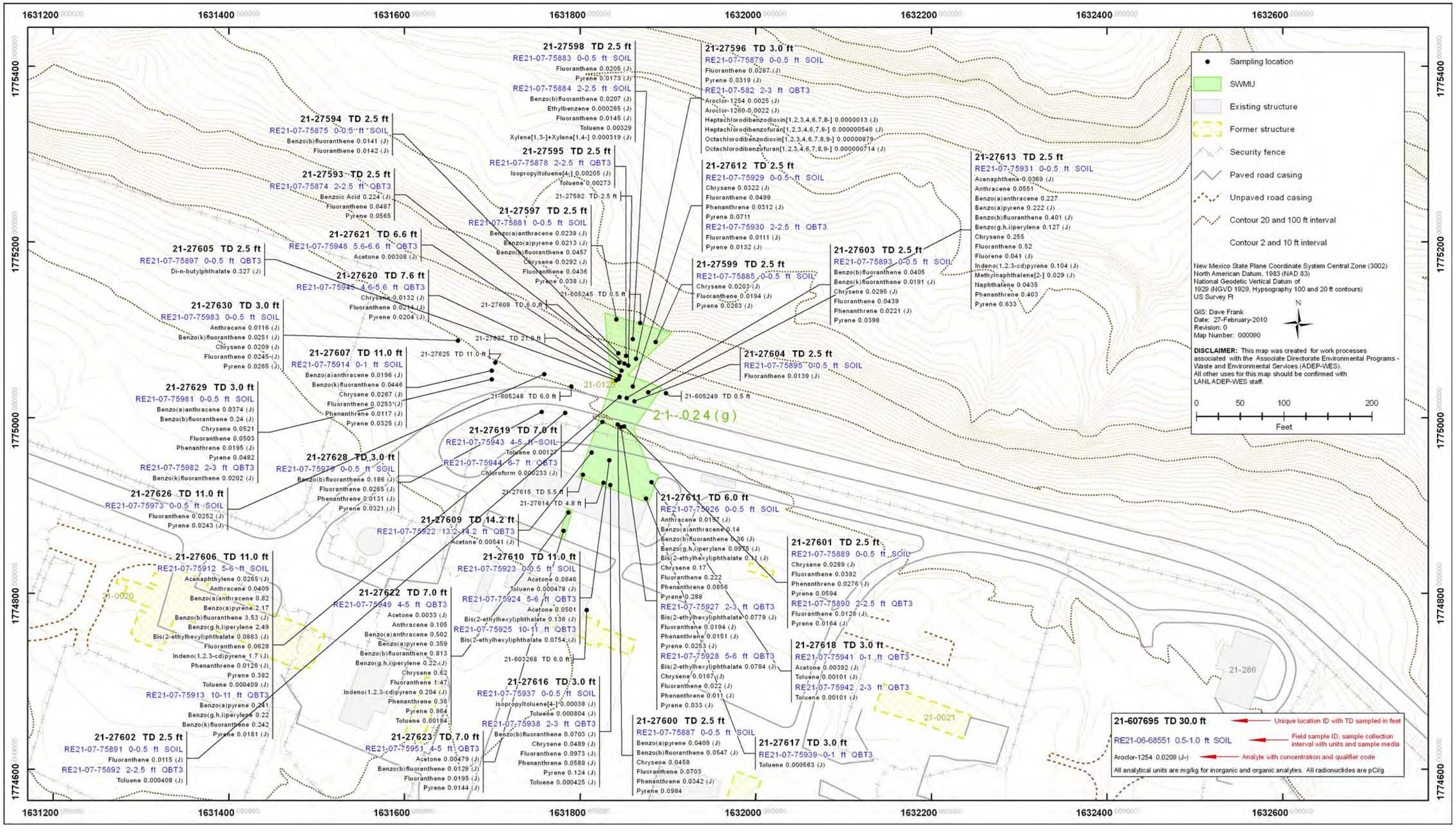

Figure 6.14-2 Organic chemicals detected at SWMU 21-024(g)

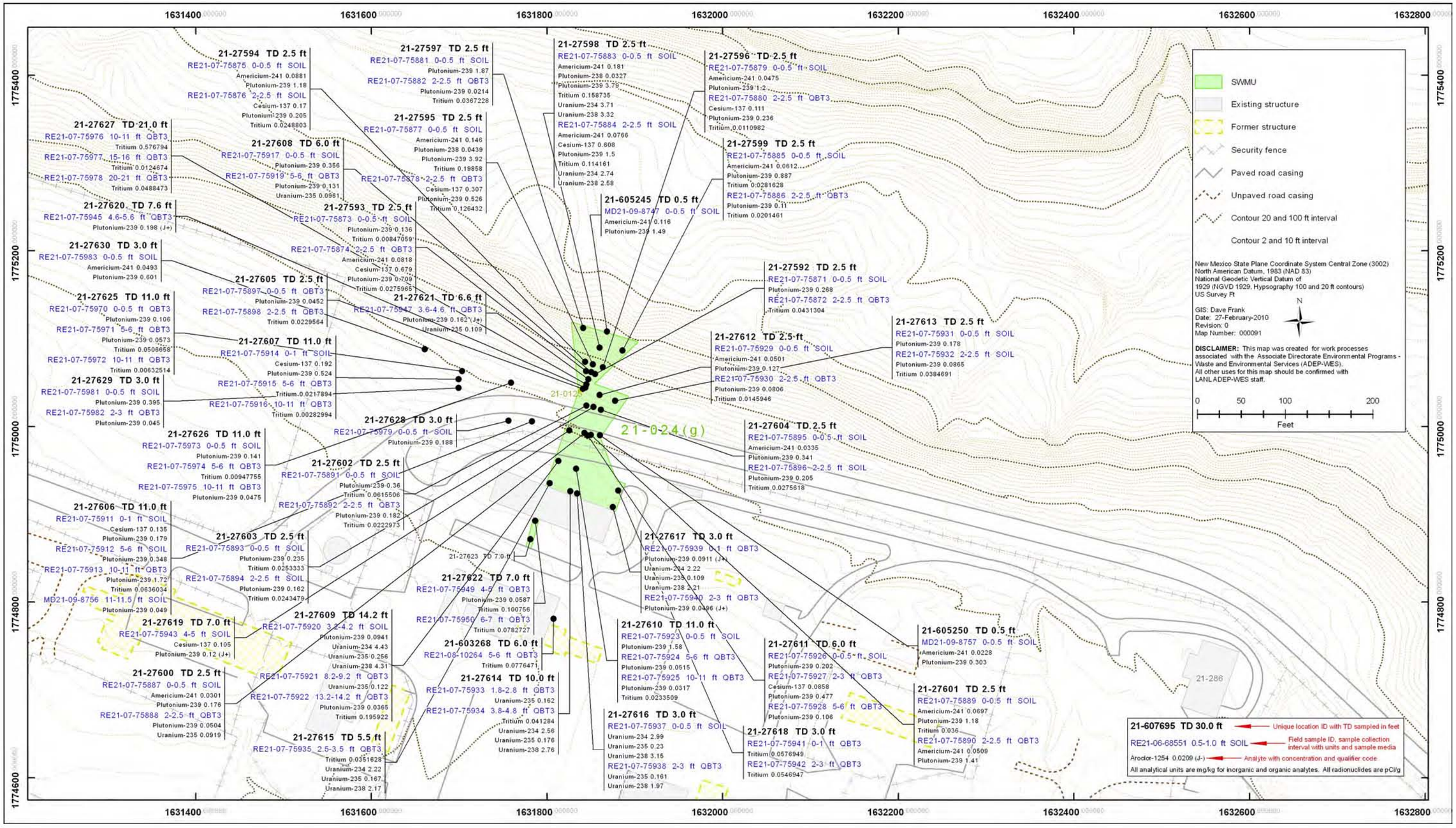

Figure 6.14-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(g)

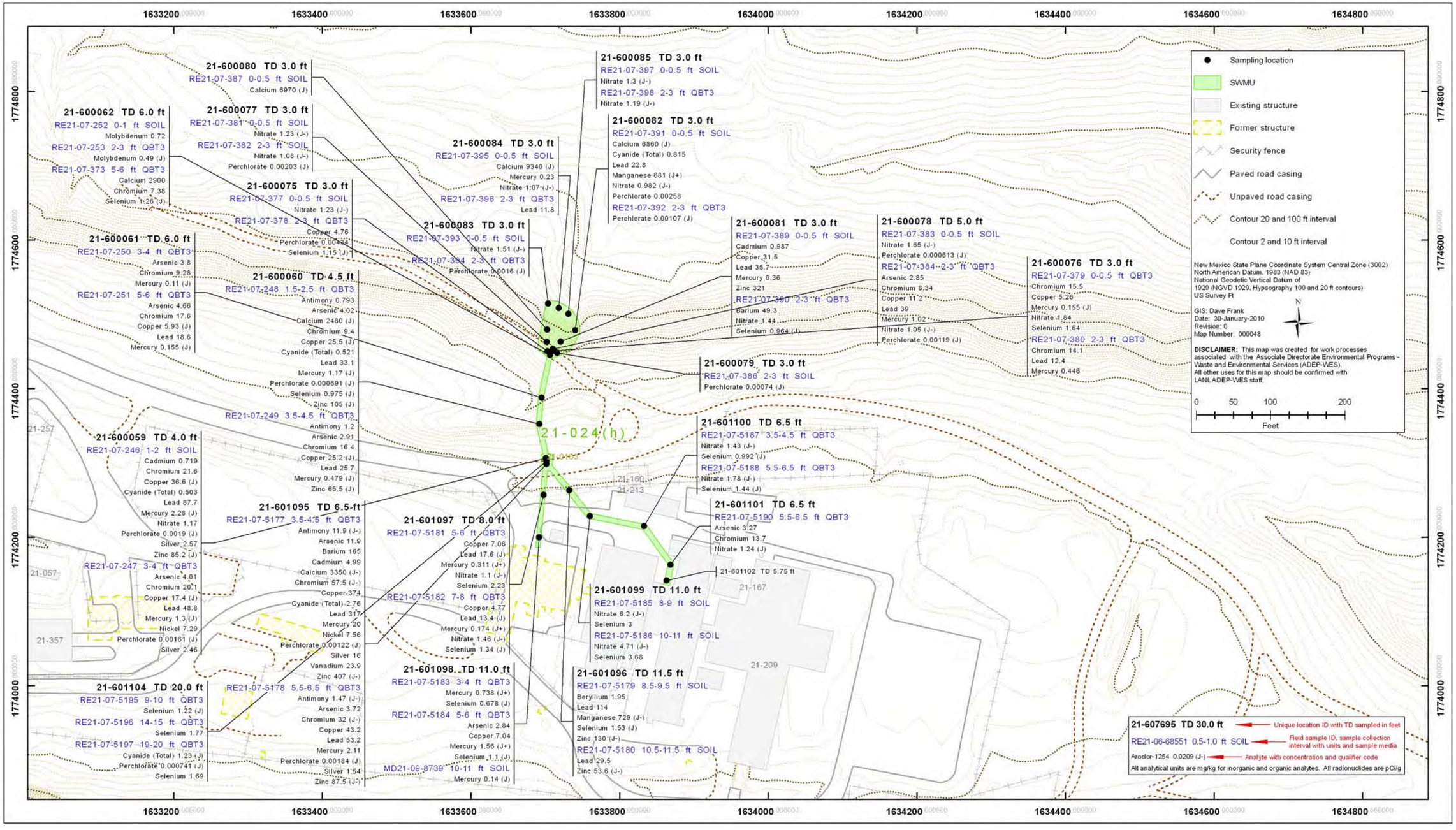

Figure 6.15-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(h)

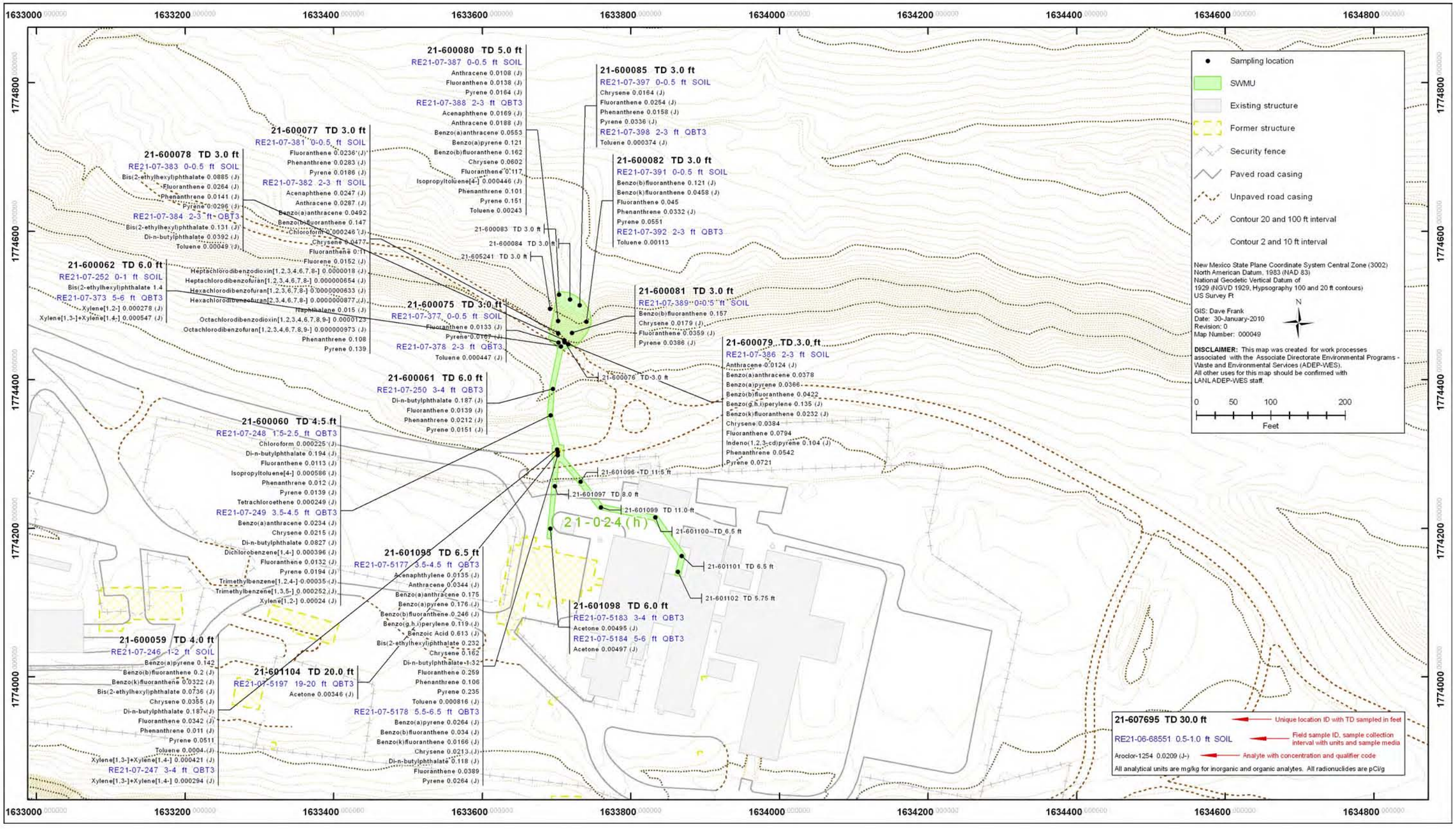

Figure 6.15-2 Organic chemicals detected at SWMU 21-024(h)

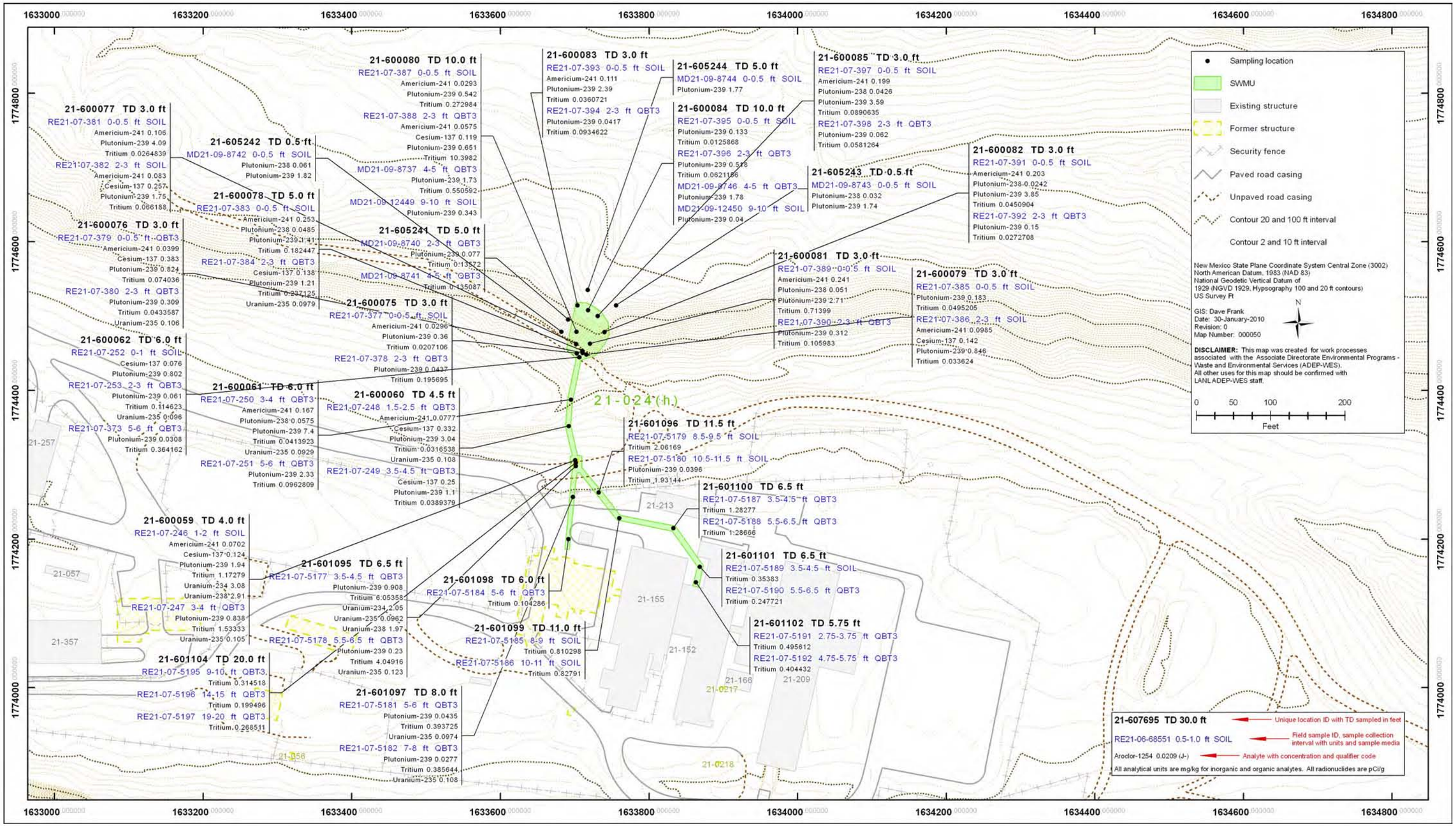

Figure 6.15-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(h)

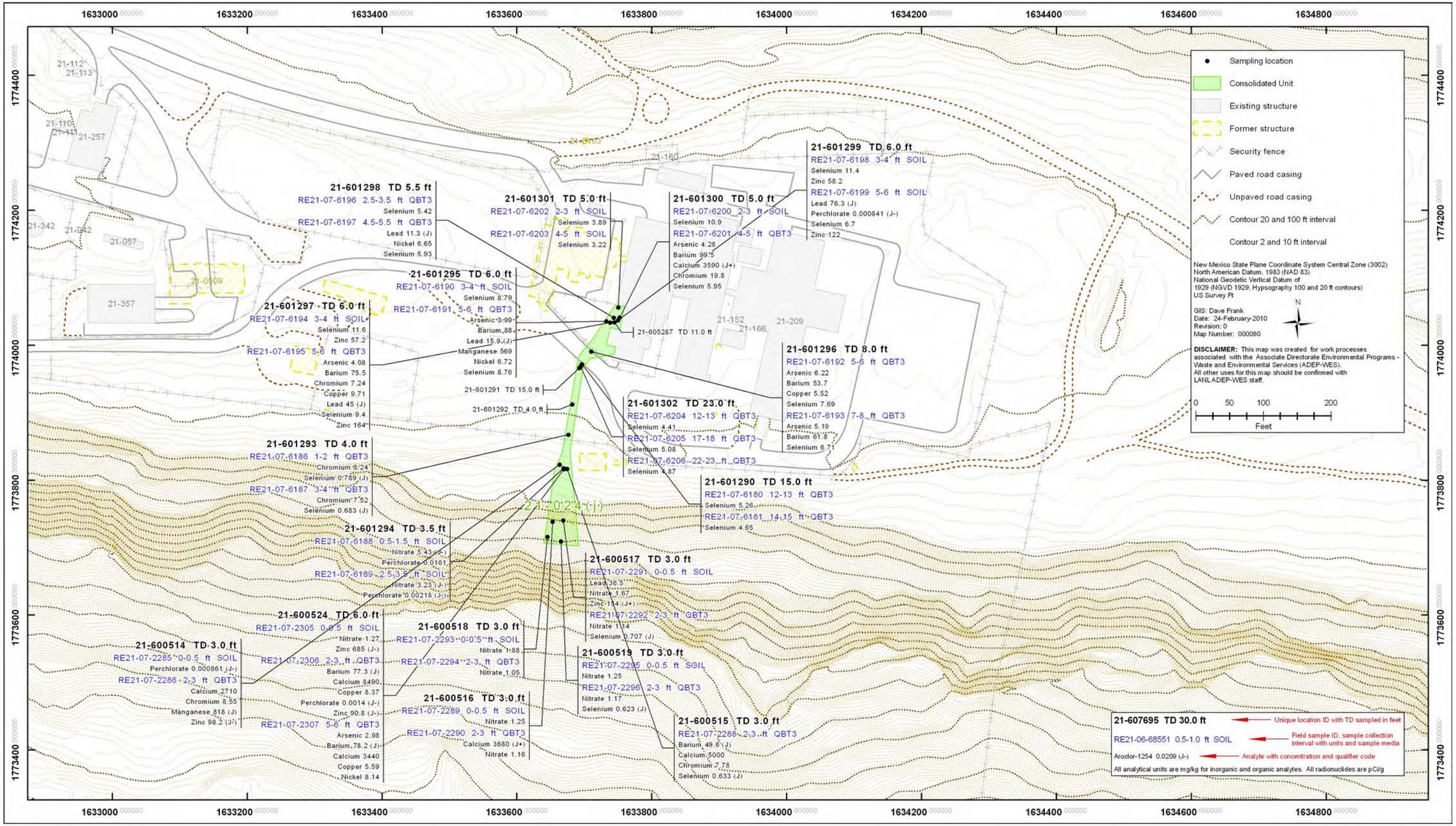

Figure 6.17-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(j)

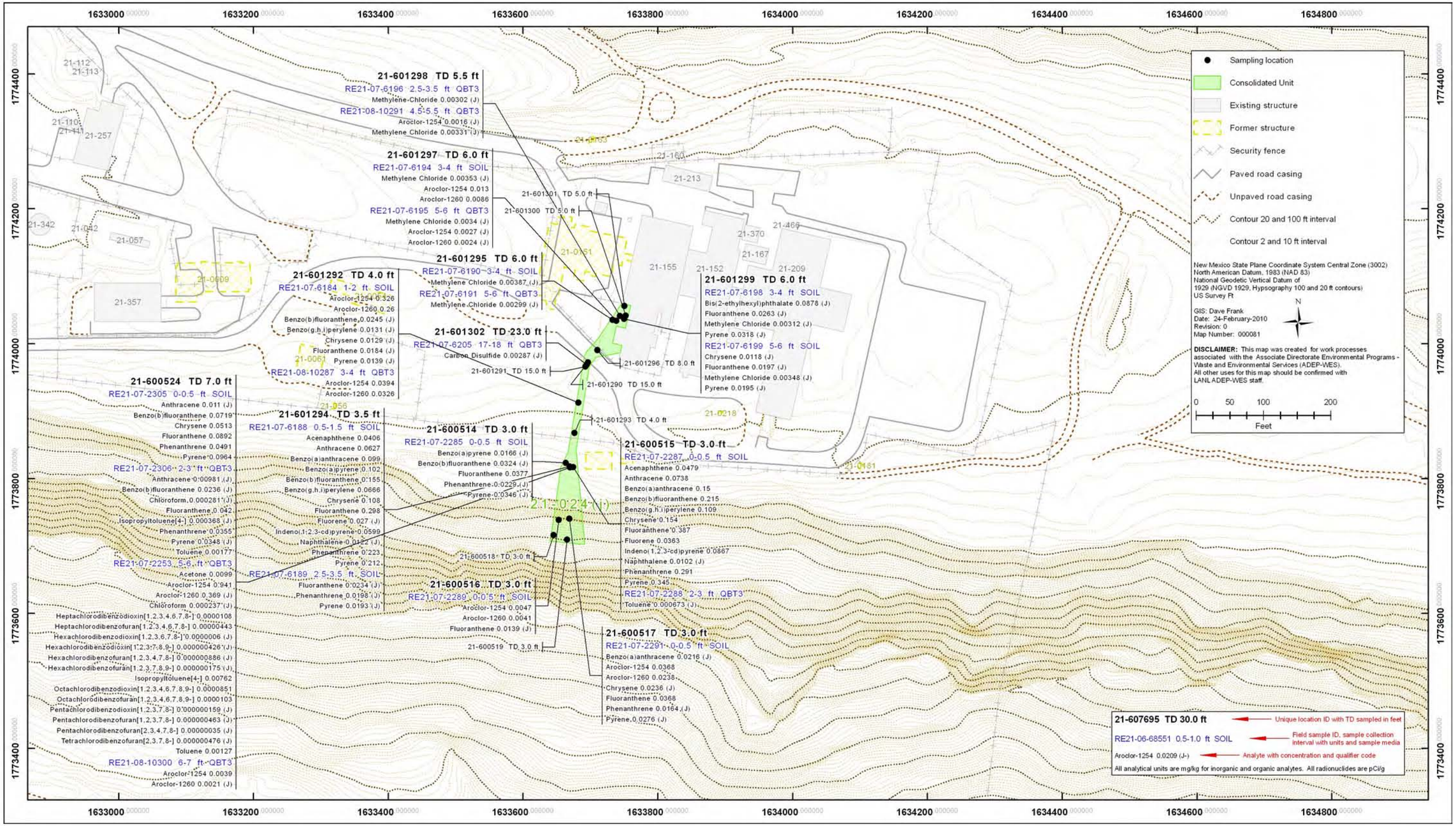

Figure 6.17-2 Organic chemicals detected at SWMU 21-024(j)

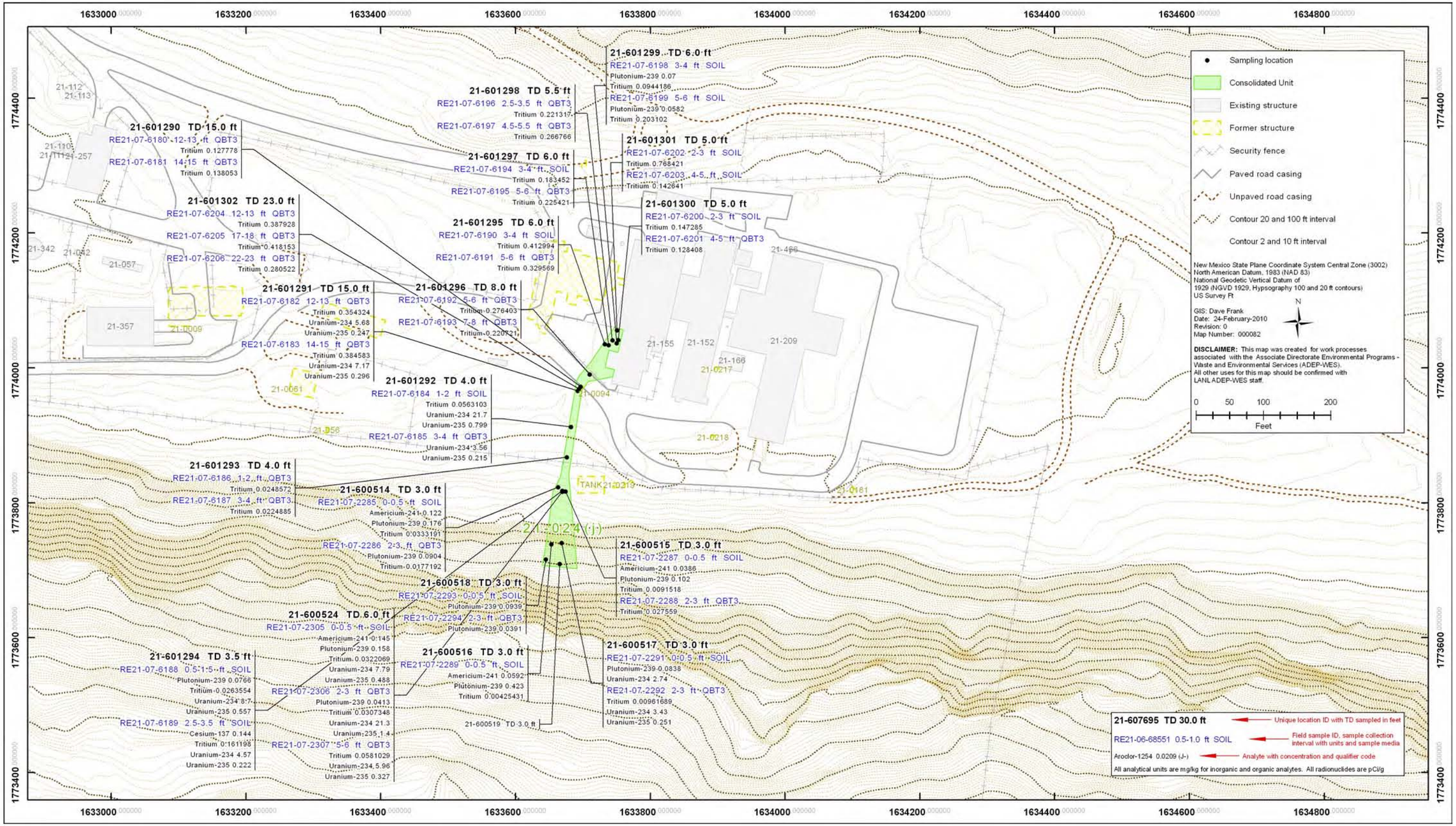

Figure 6.17-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(j)

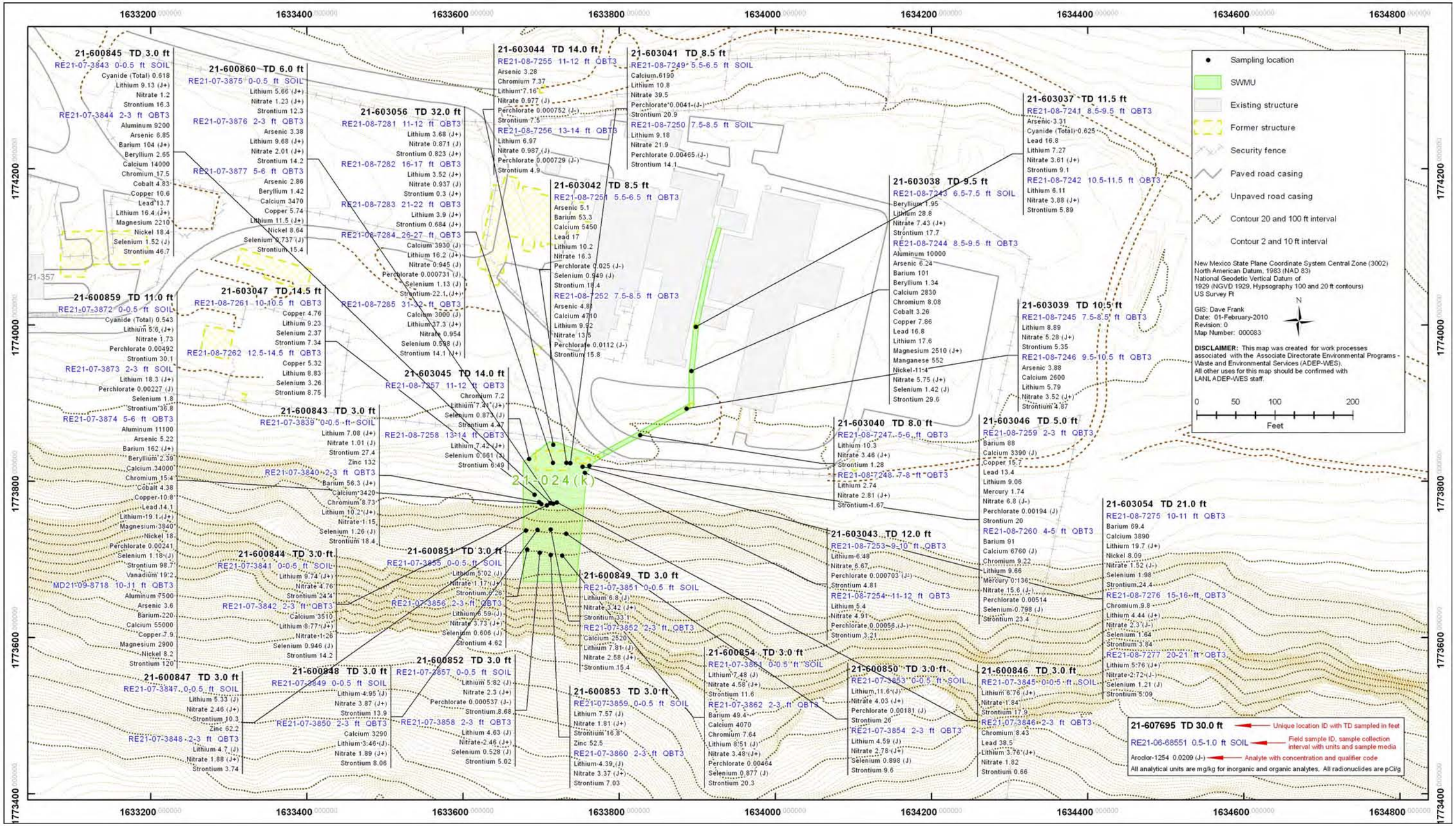

Figure 6.18-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(k)

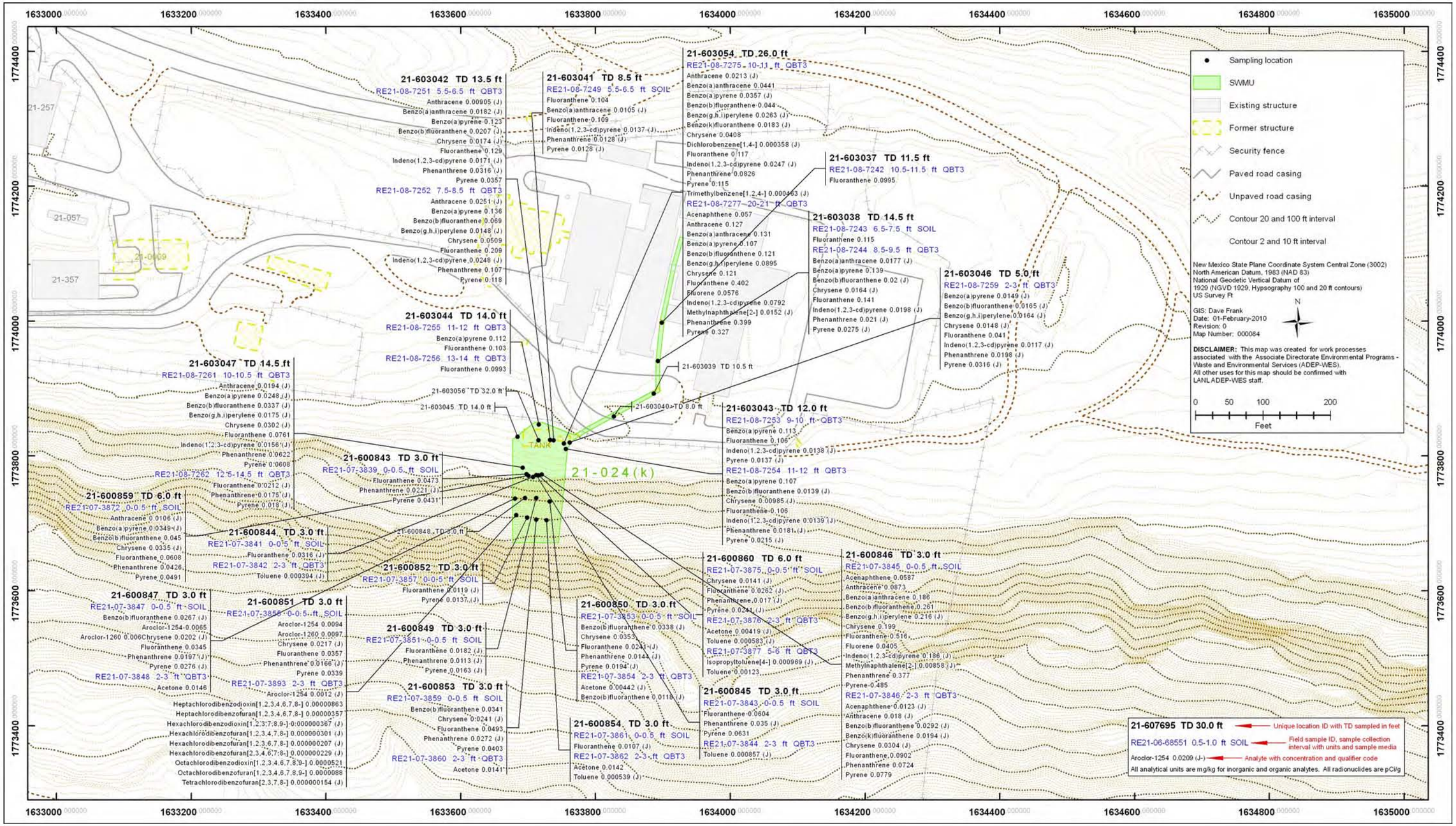

Figure 6.18-2 Organic chemicals detected at SWMU 21-024(k)

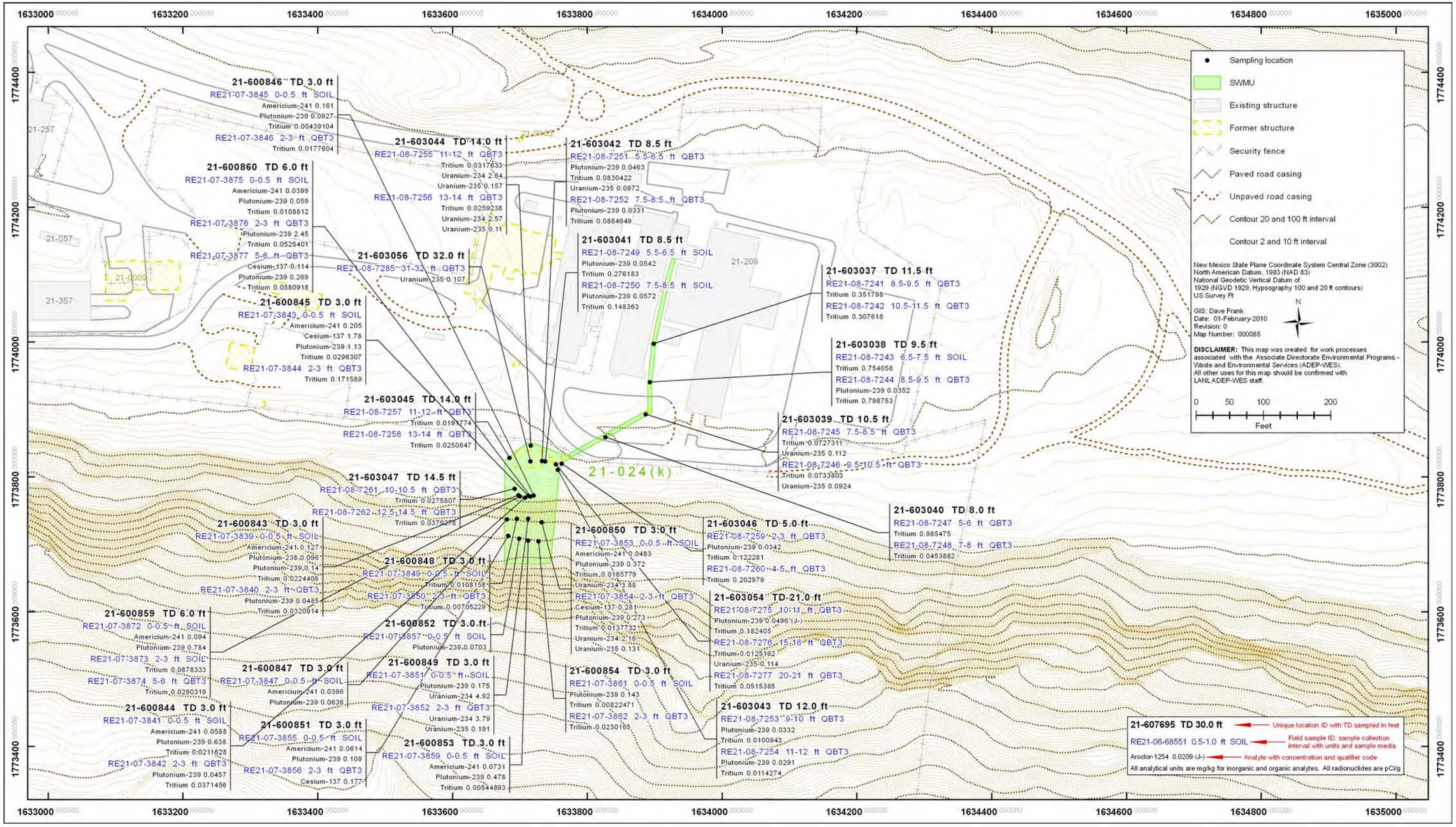

Figure 6.18-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(k)

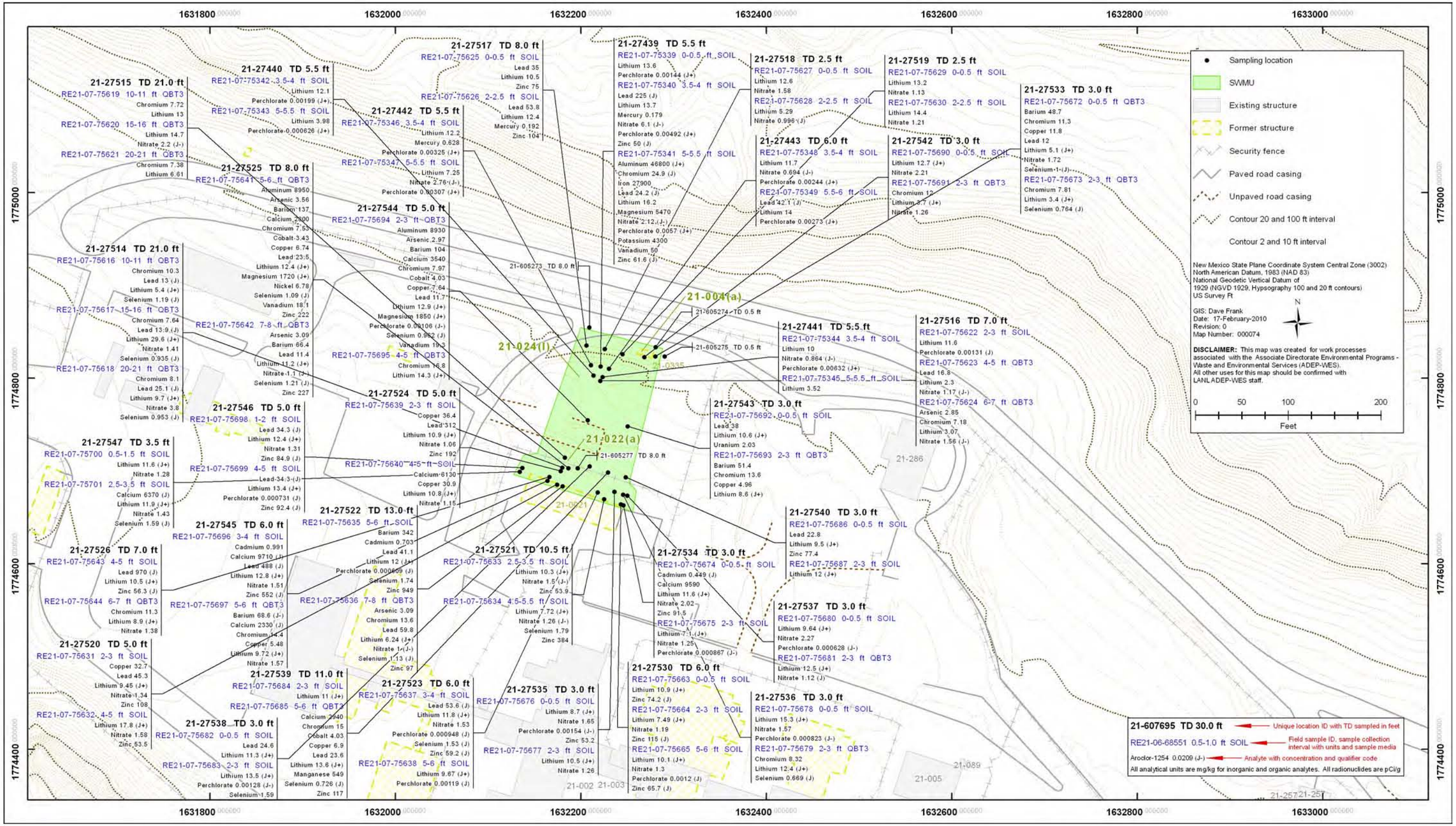

Figure 6.19-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-024(l)-99

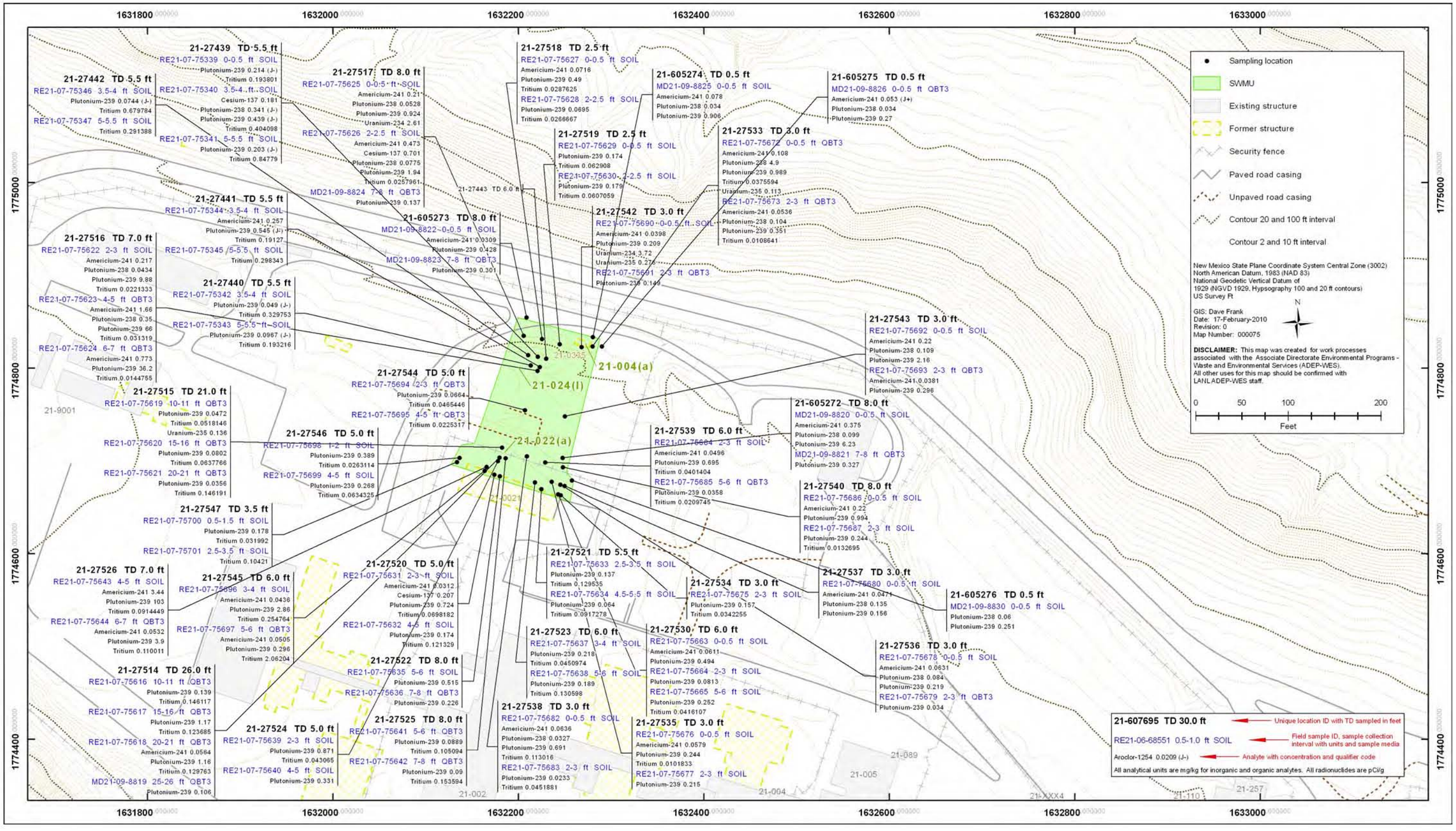

Figure 6.19-2 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-024(l)-99

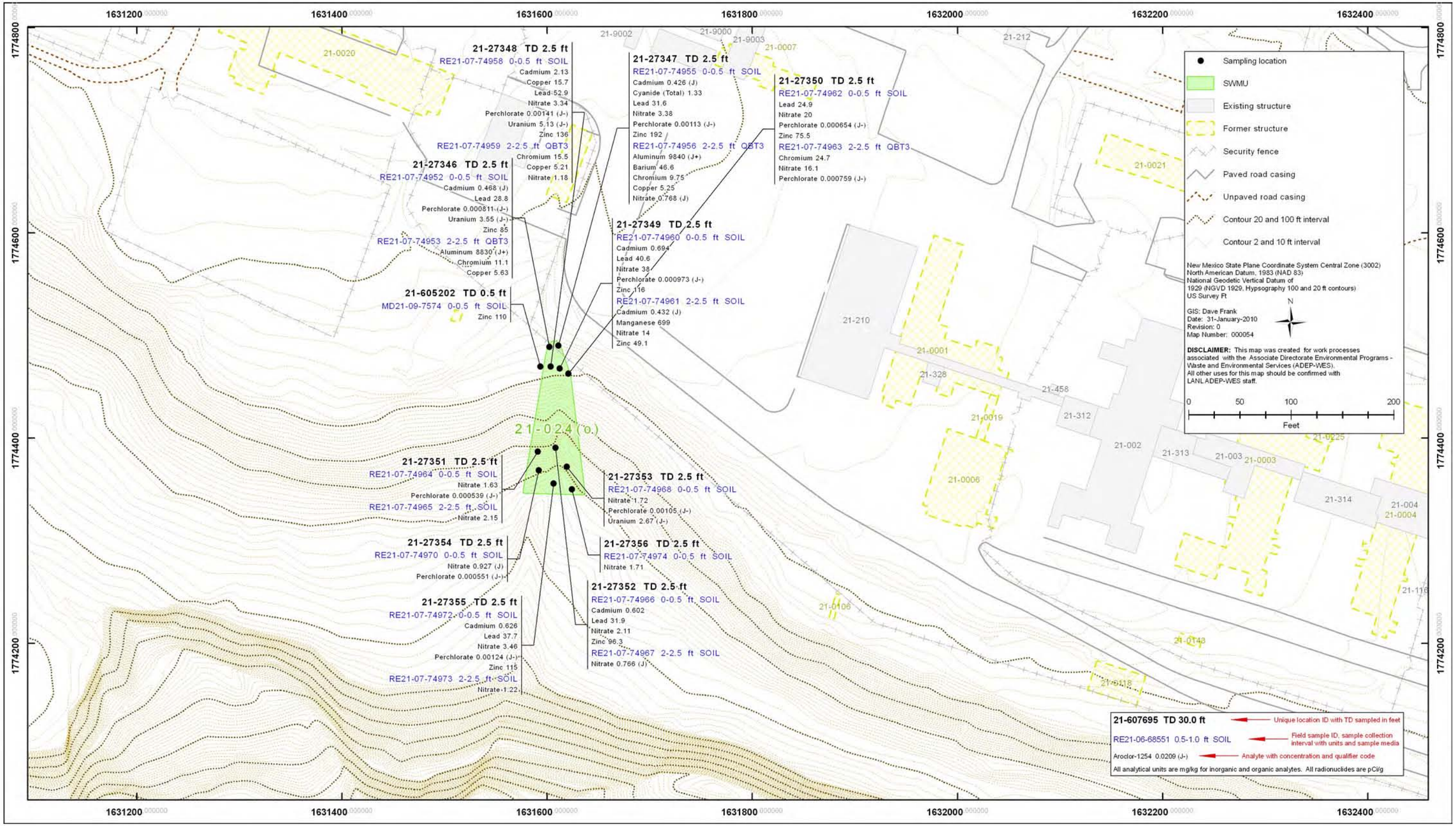

Figure 6.21-1 Inorganic chemicals detected or detected above BVs at SWMU 21-024(o)

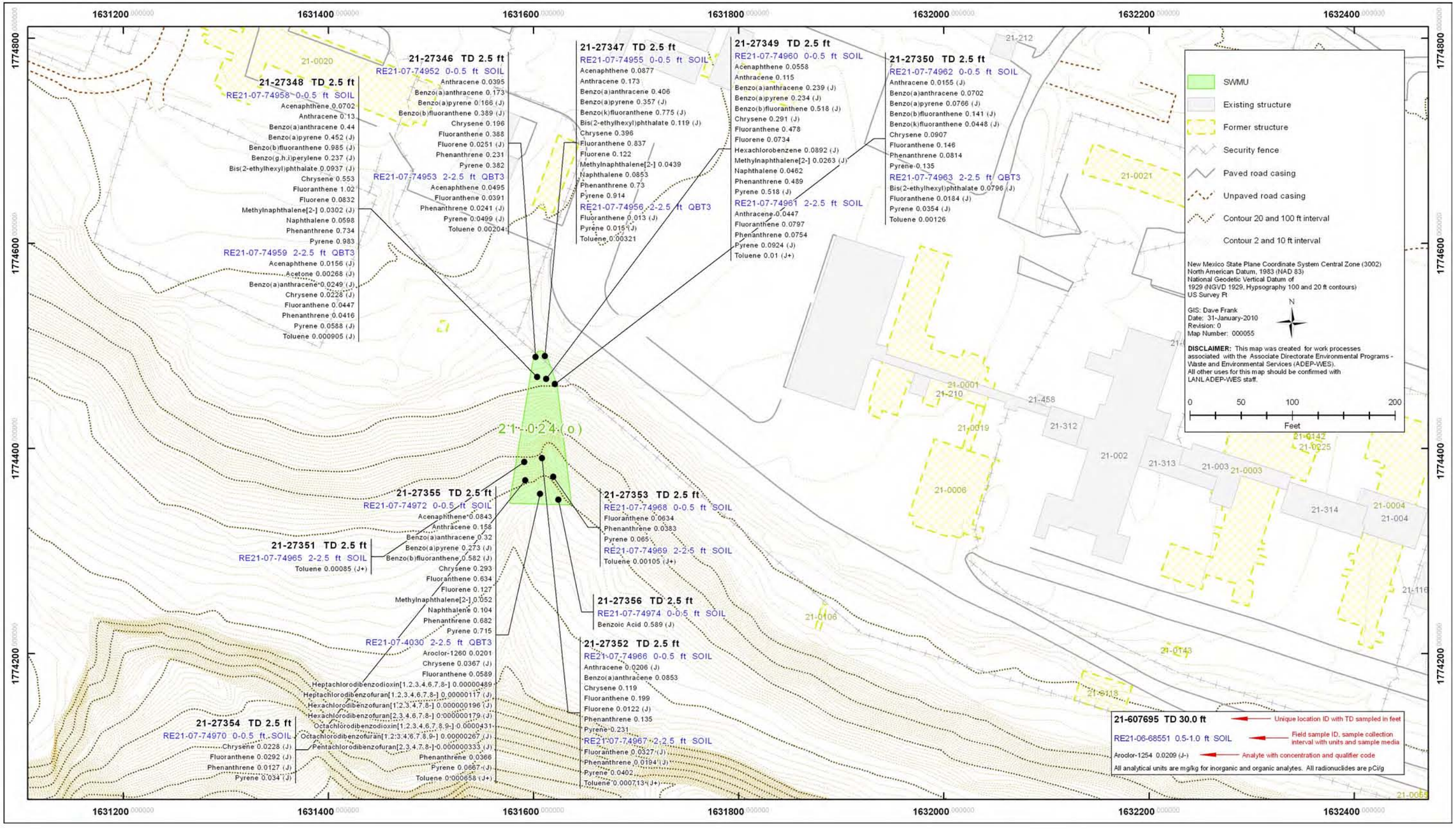

Figure 6.21-2 Organic chemicals detected at SWMU 21-024(o)

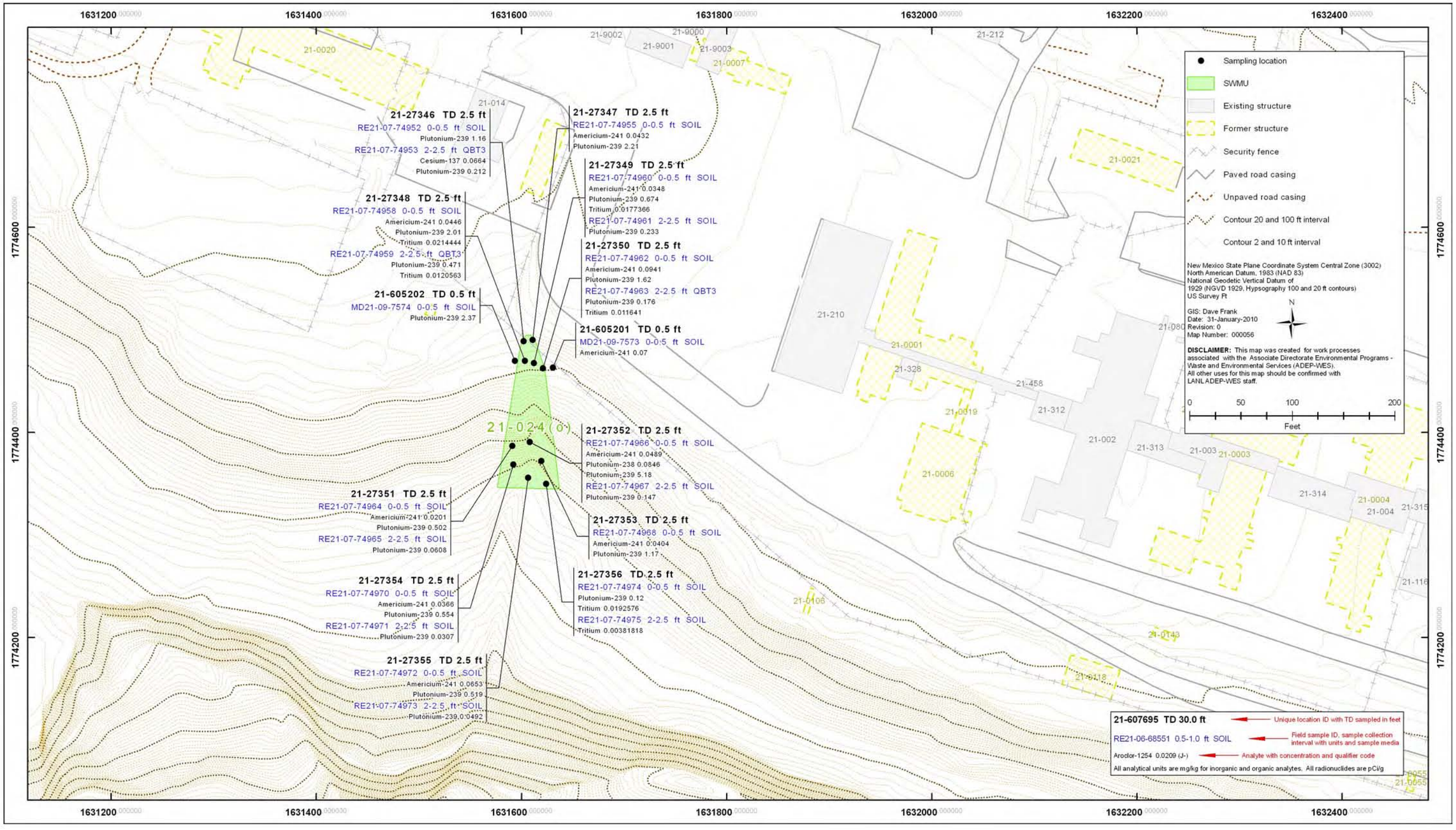

Figure 6.21-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-024(o)

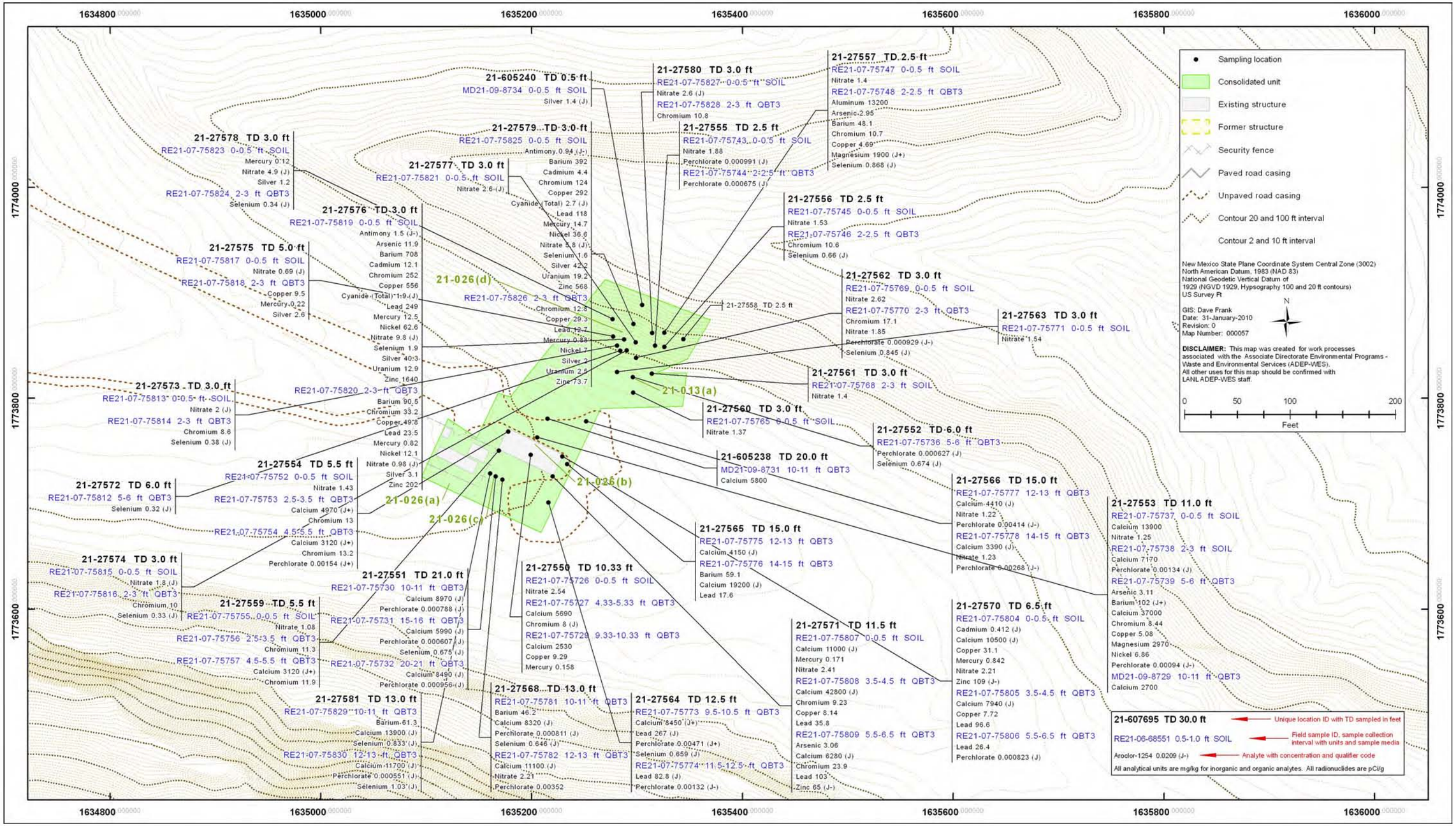

Figure 6.22-1 Inorganic chemicals detected or detected above BVs at Consolidated Unit 21-026(a)-99

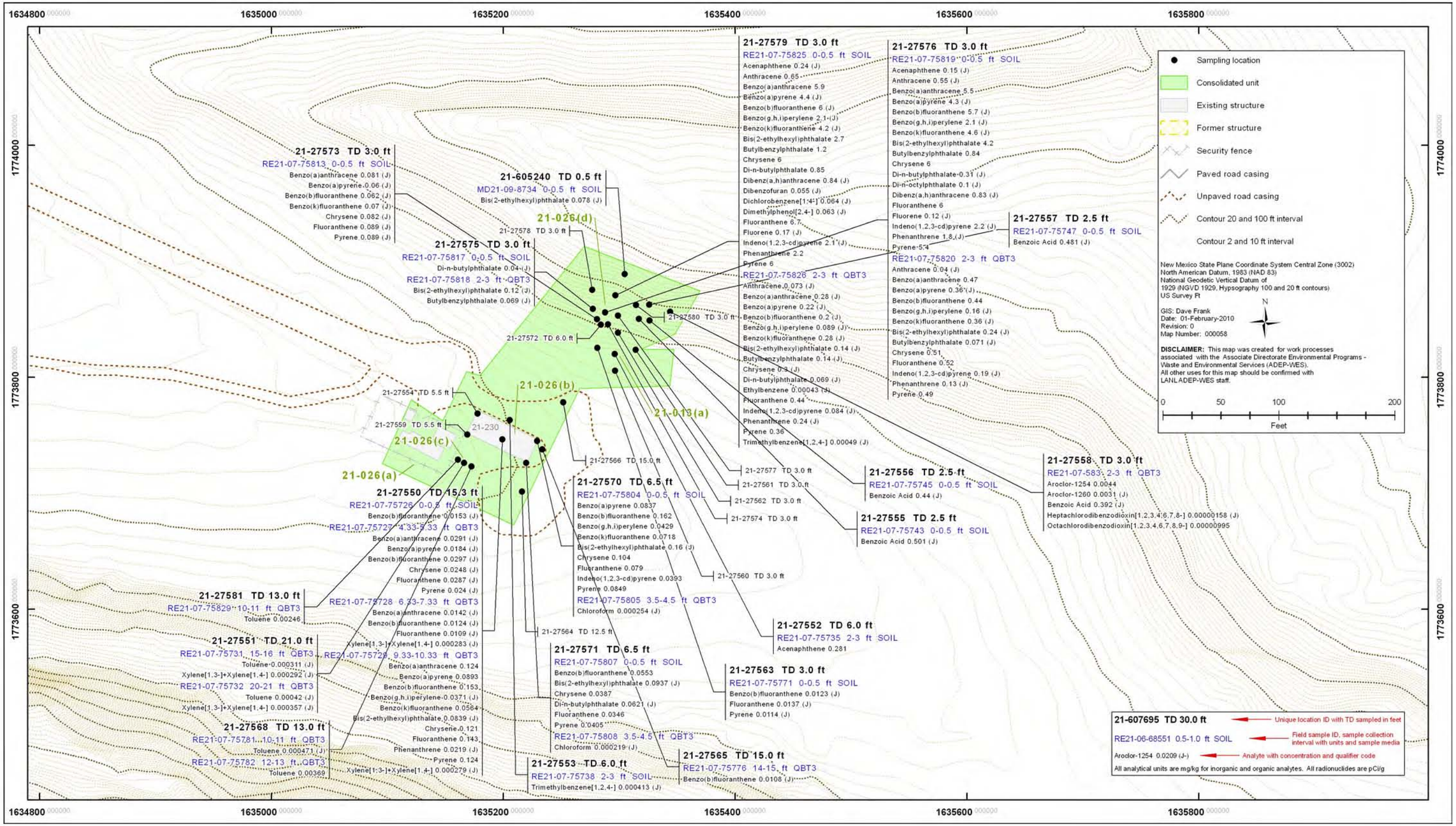

Figure 6.22-2 Organic chemicals detected at Consolidated Unit 21-026(a)-99

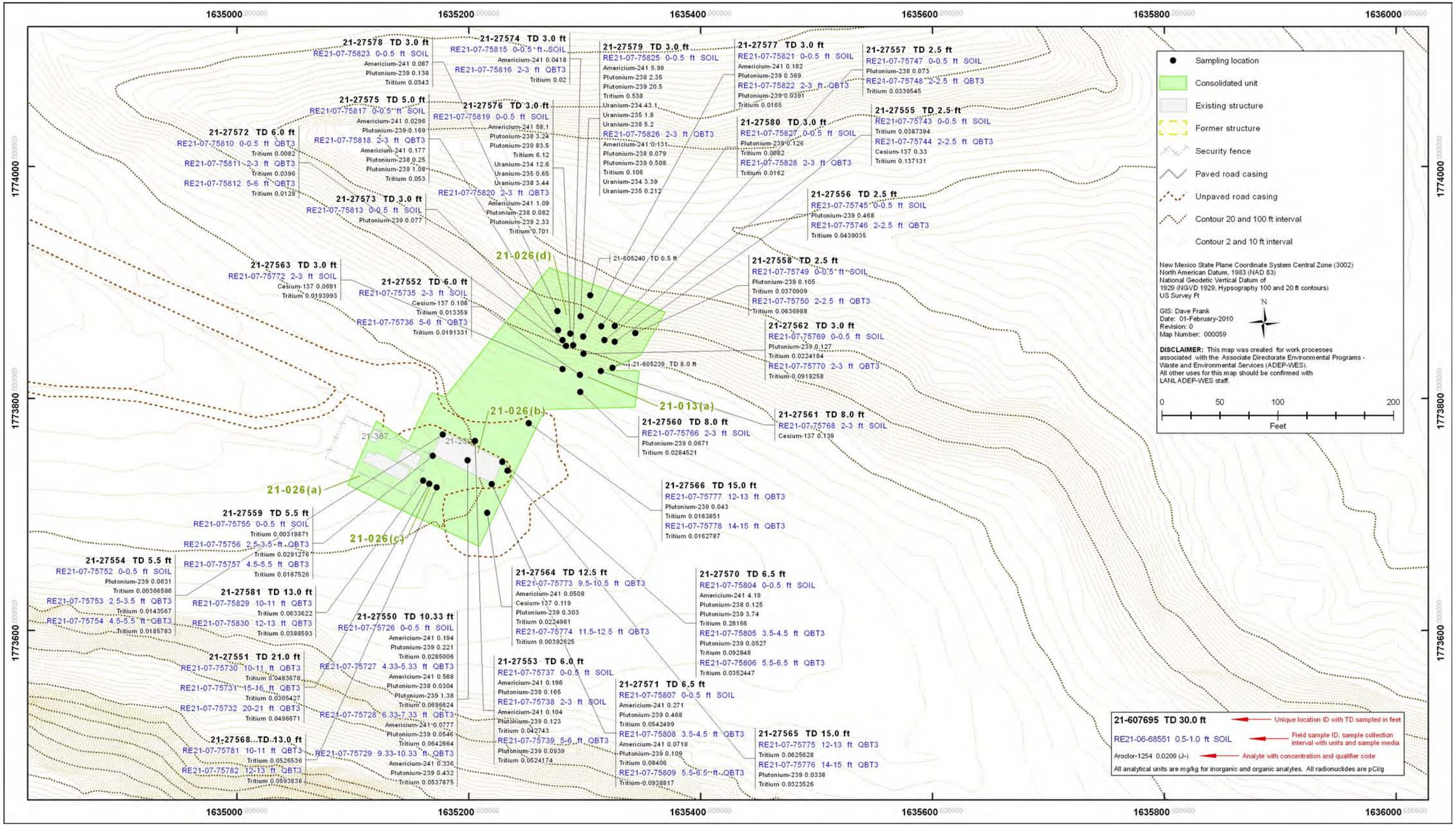

Figure 6.22-3 Radionuclides detected or detected above BVs/FVs at Consolidated Unit 21-026(a)-99

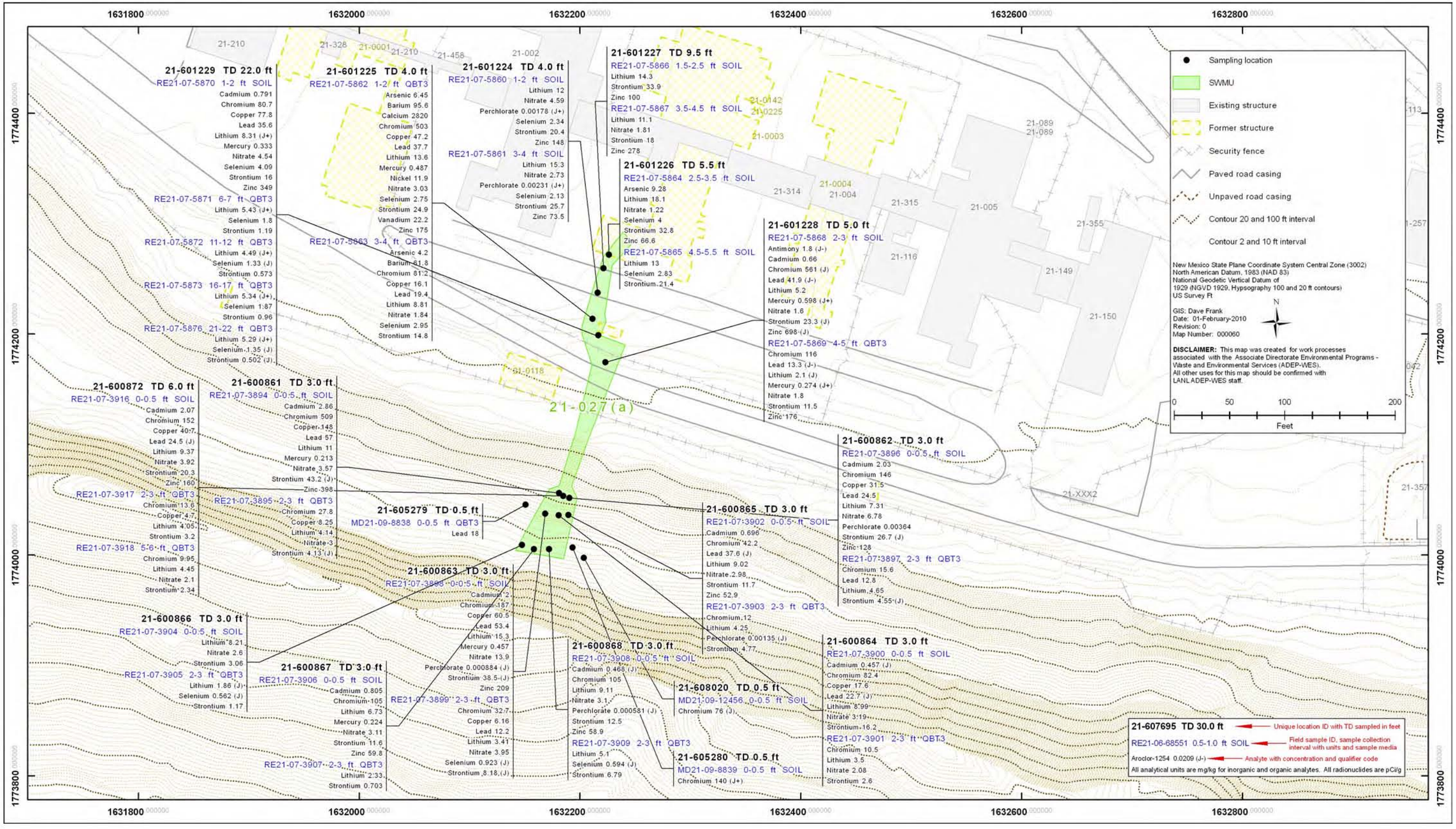

Figure 6.23-1 Inorganic chemicals detected or detected above BVs at SWMU 21-027(a)

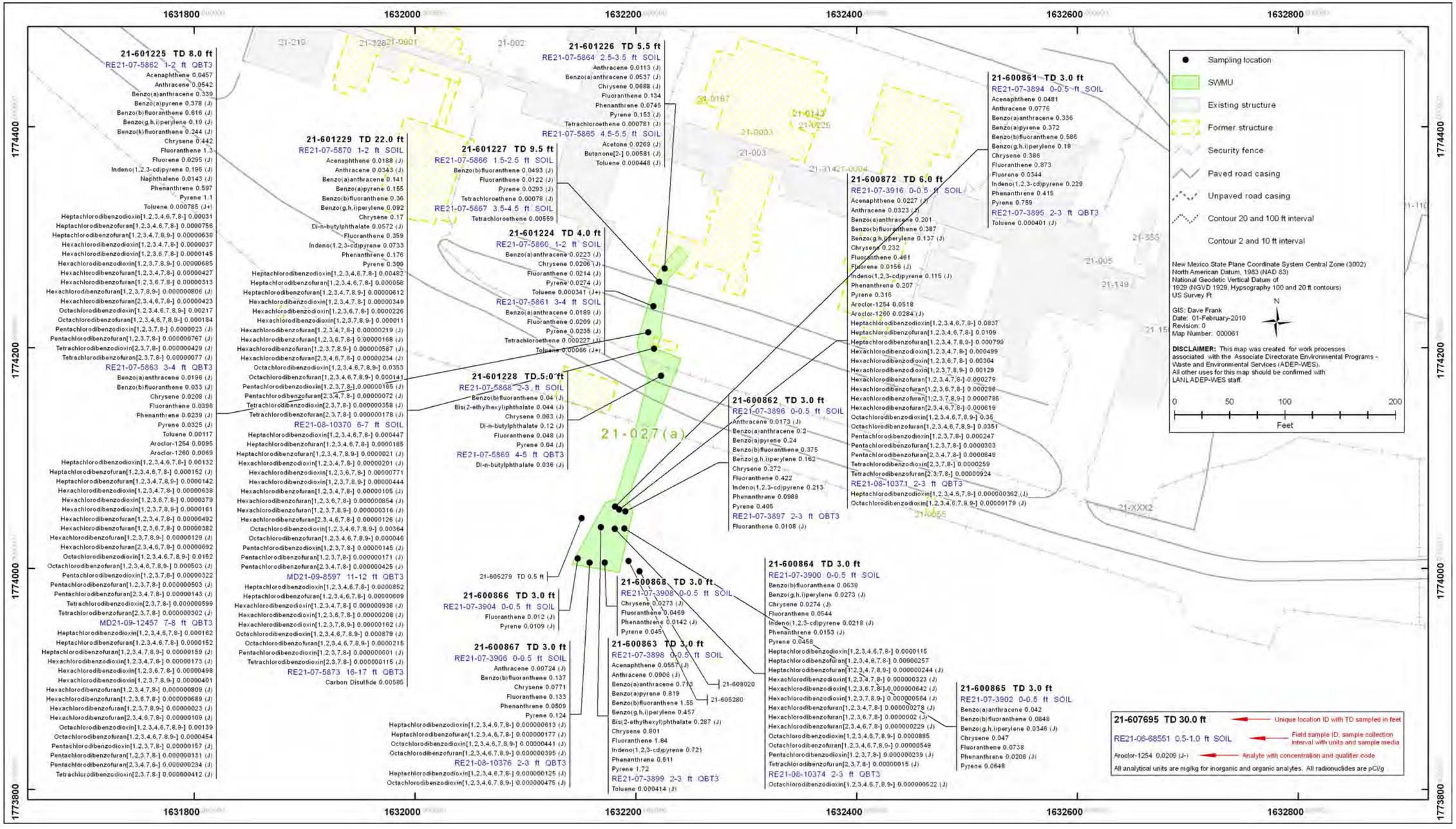

Figure 6.23-2 Organic chemicals detected at SWMU 21-027(a)

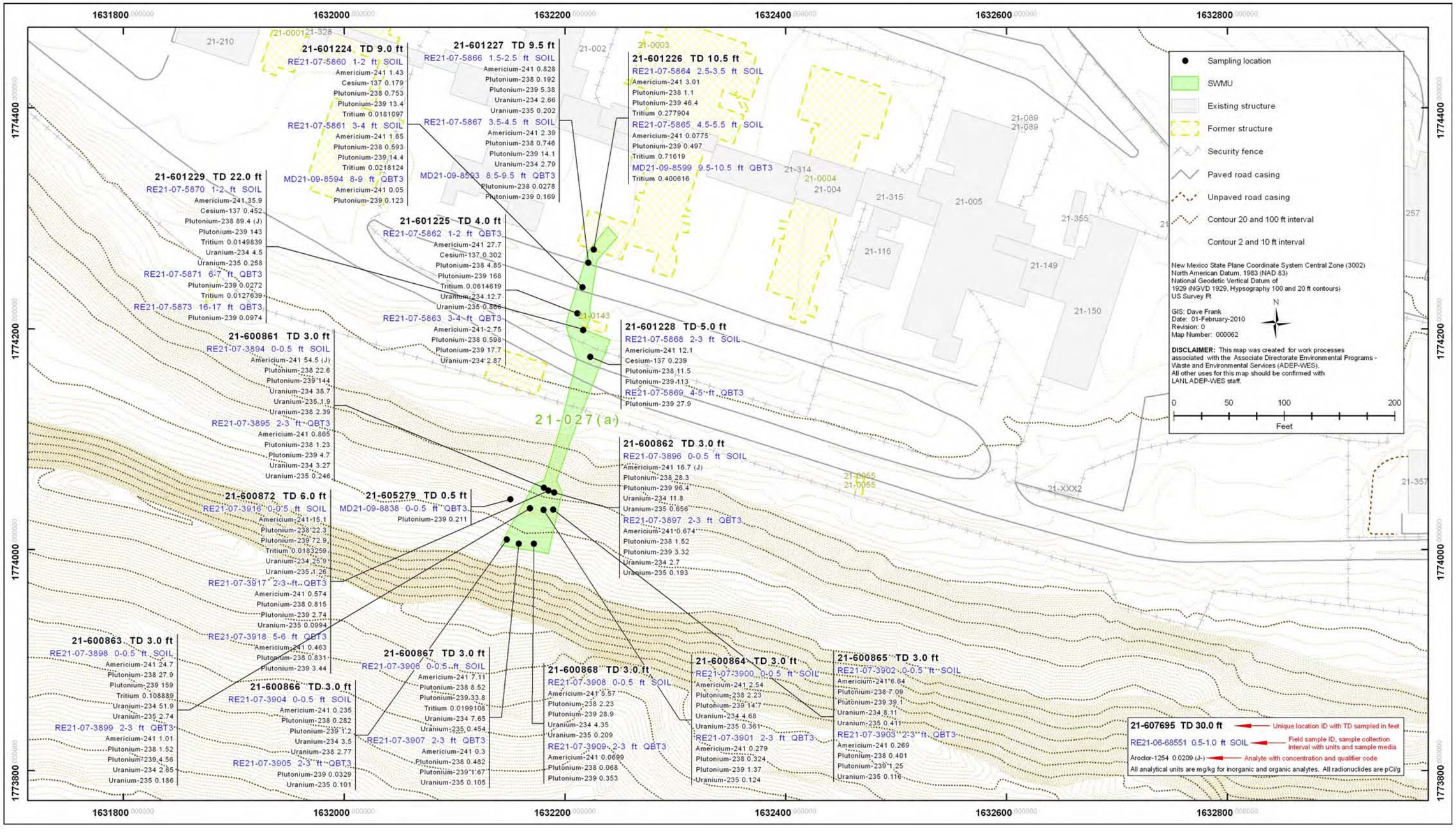

Figure 6.23-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-027(a)

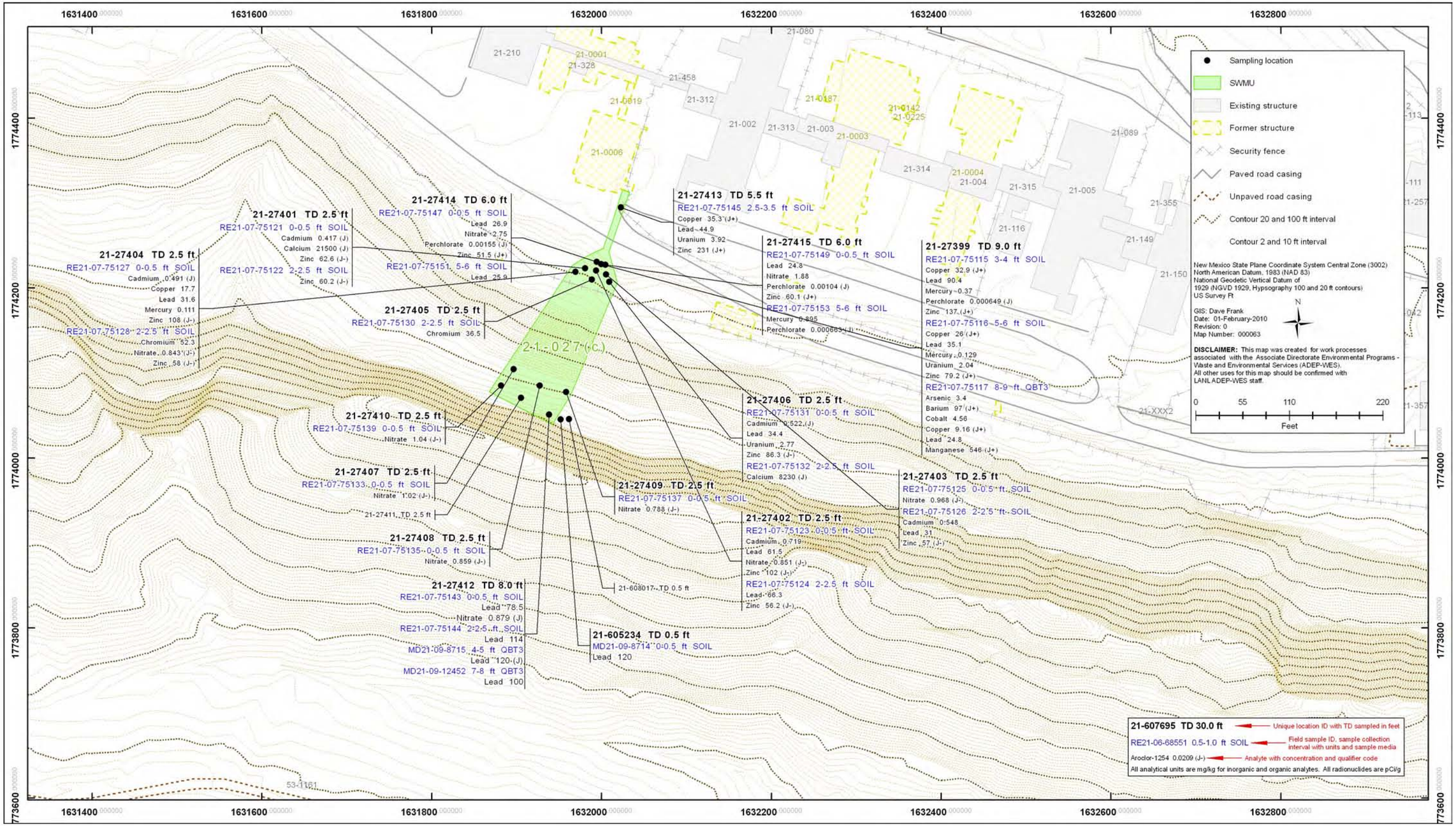

Figure 6.24-1 Inorganic chemicals detected or detected above BVs at SWMU 21-027(c)

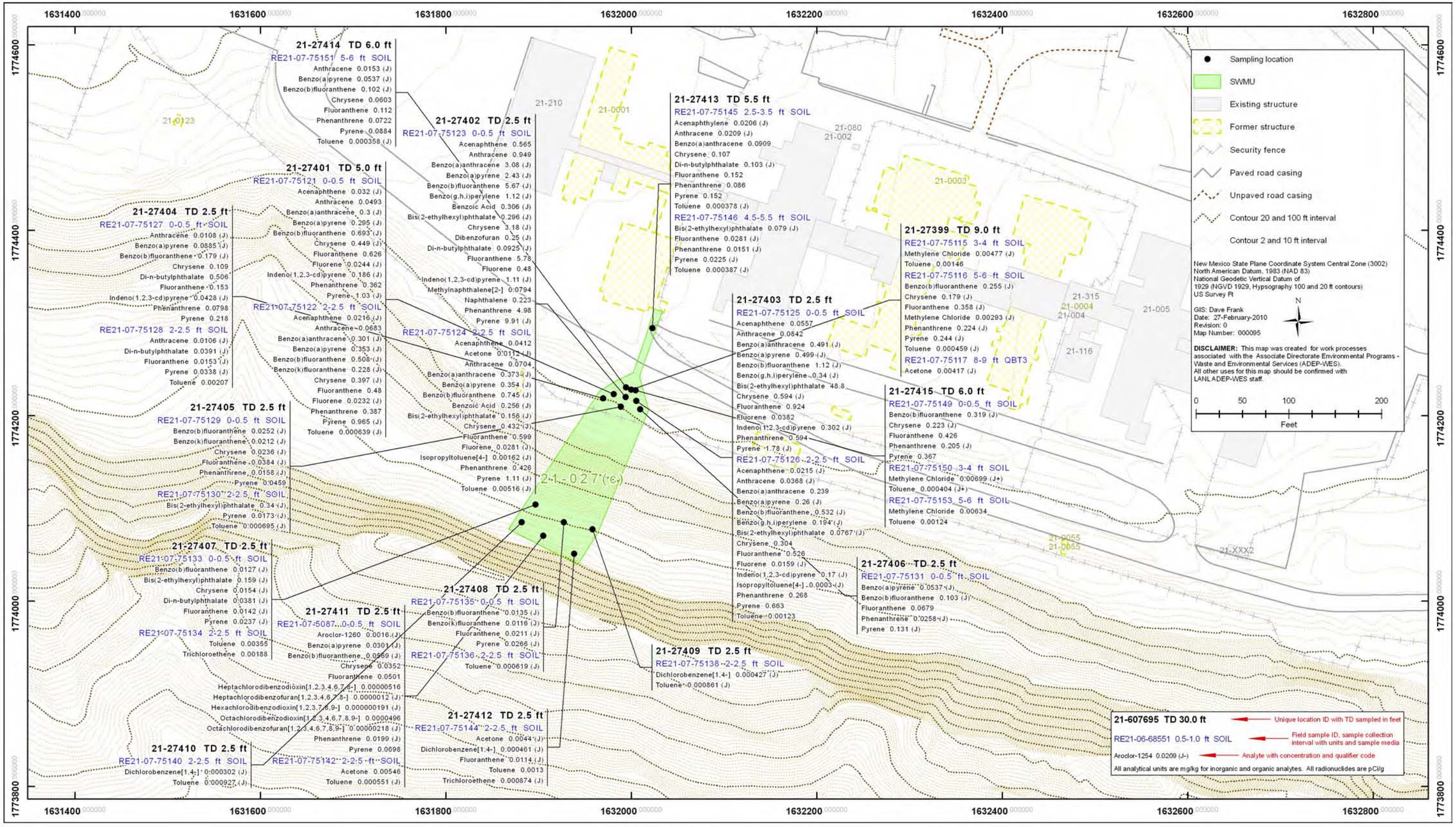

Figure 6.24-2 Organic chemicals detected at SWMU 21-027(c)

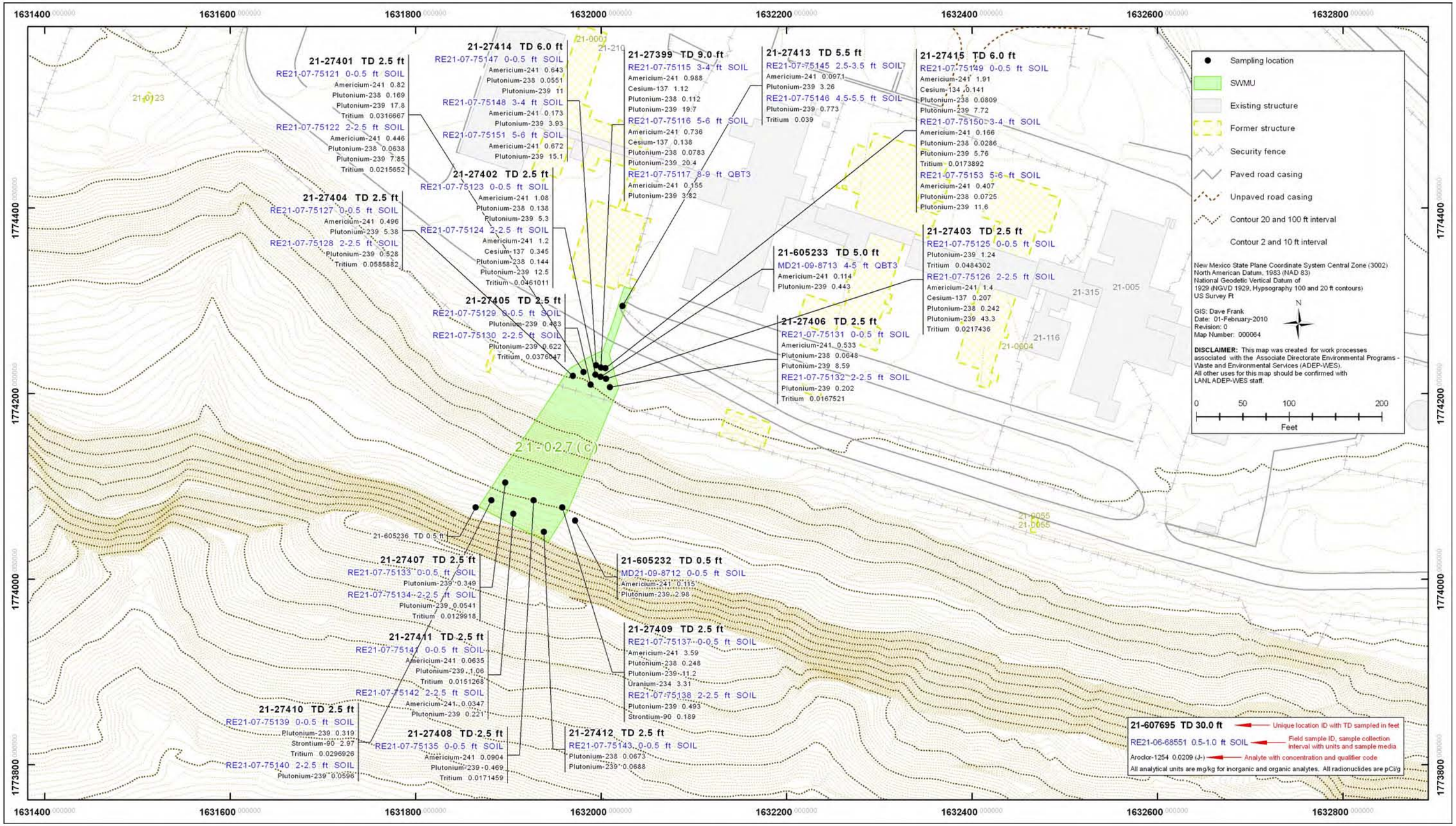

Figure 6.24-3 Radionuclides detected or detected above BVs/FVs at SWMU 21-027(c)

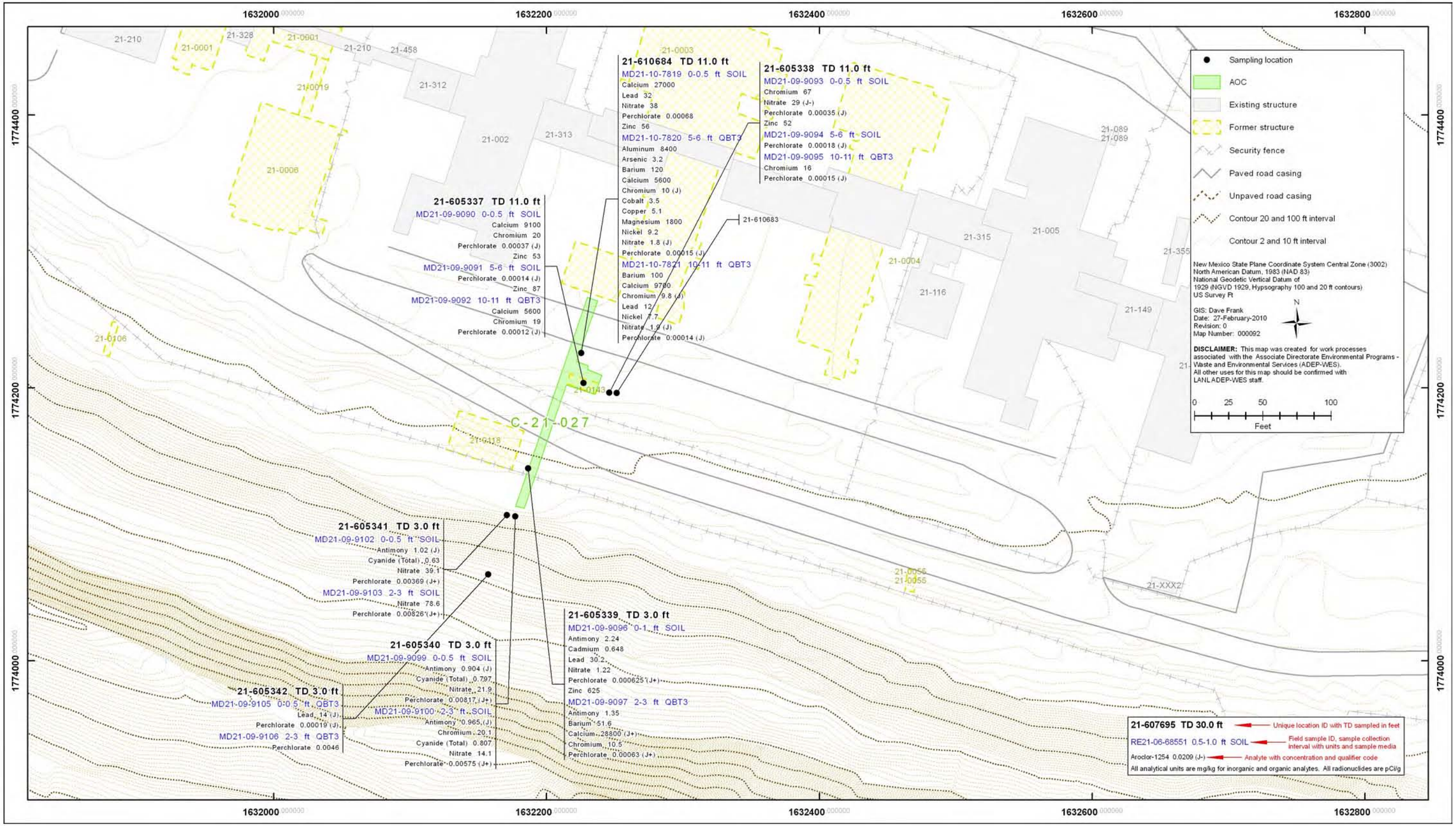

Figure 6.25-1 Inorganic chemicals detected or detected above BVs at AOC C-21-027

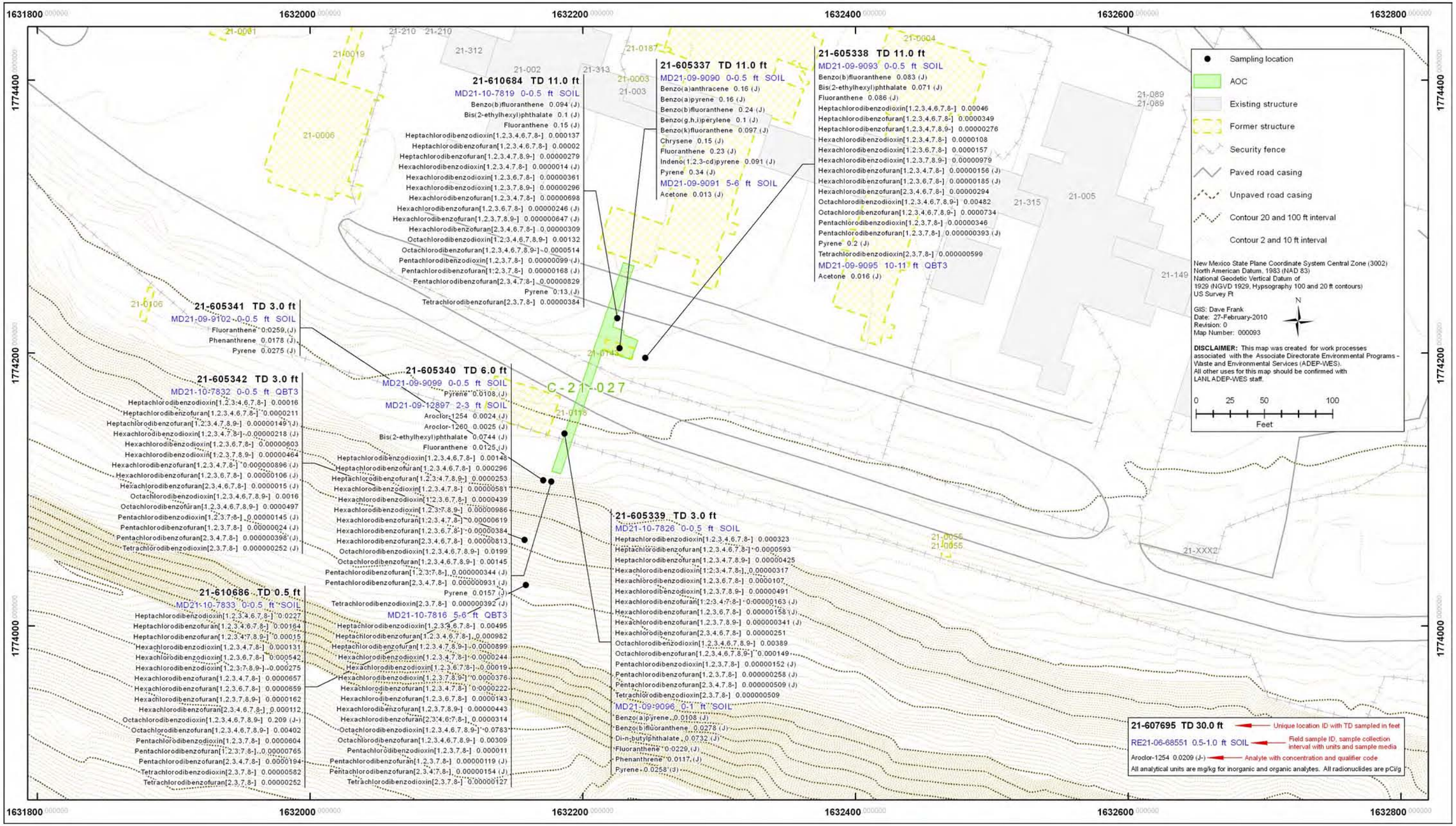

Figure 6.25-2 Organic chemicals detected at AOC-C-21-027

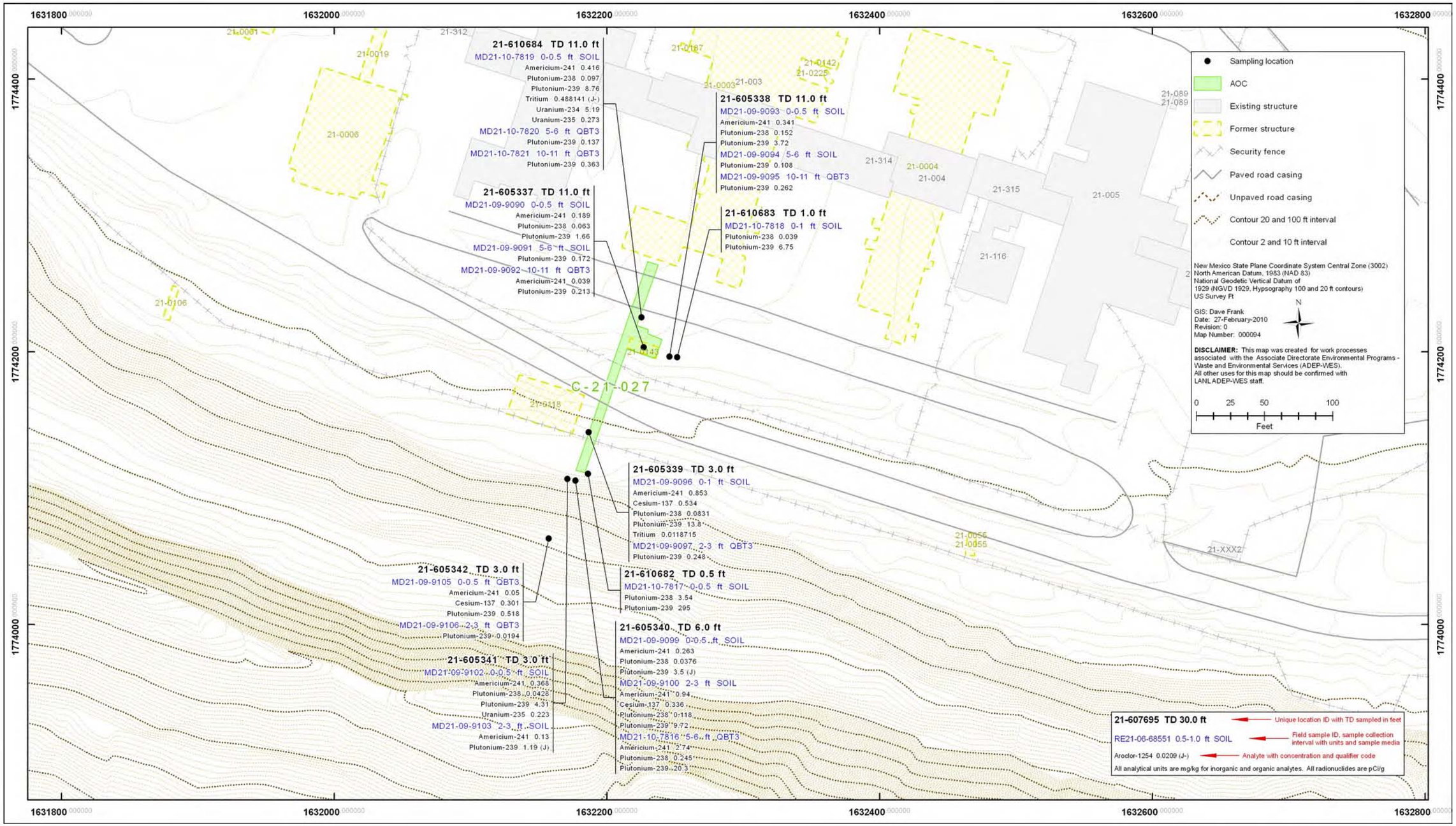

Figure 6.25-3 Radionuclides detected or detected above BVs/FVs at AOC C-21-027

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

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

Table 1.1-1 (continued)

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

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

* n/a = Not applicable.

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

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

Table 1.1-2 (continued)

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

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

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

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

Table 1.1-3 (continued)

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

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

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

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

Table 3.1-1 (continued)

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

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

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

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

Table 3.1-2 (continued)

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

Table 3.1-2 (continued)

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

Table 3.1-2 (continued)

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

Table 3.1-2 (continued)

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

Table 3.1-2 (continued)

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

Table 3.1-2 (continued)

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

Table 3.1-2 (continued)

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

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

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

*na = Not available.

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

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

Table 3.1-4 (continued)

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

Table 3.1-4 (continued)

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

Table 3.1-4 (continued)

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

Table 3.1-4 (continued)

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

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

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

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

Table 4.2-1 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only barium and selenium.

[c] Metals analysis included only lead and zinc.

[d] Metals analysis included only selenium.

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

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	—	5631S, 5632S
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68566	21-25738	0.0000–0.5000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	—	5631S, 5632S
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	—	5631S, 5632S
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	—	5631S, 5632S
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	—	5631S, 5632S
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	5633S	5631S	—	5633S	5633S	—	6633S	5633S	5631S	5630S	5631S	5633S	5630S	5630S	5631S, 5632S
MD21-07-74337	21-25748	4.0000–5.0000	QBT3	6906S	6905S	—	6906S	6906S	—	6906S	6906S	6905S	6904S	6905S	6906S	6904S	6904S	6905S
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	6906S	6905S	—	6906S	6906S	—	6906S	6906S	6905S	6904S	6905S	6906S	6904S	6904S	6905S
MD21-09-8979	21-25748	19.0000–20.0000	QBT3	09-2101	—	—	—	—	—	09-2101	—	09-2101[d]	09-2101	—	—	09-2101	—	—
MD21-09-9768	21-25748	26.0000–27.0000	QBT3	09-2101	—	—	—	—	—	09-2101	—	09-2101[d]	09-2101	—	—	09-2101	—	—
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	6421S	6420S	—	6421S	6421S	—	6421S	6421S	6420S	6418S	6420S	6421S	6418S	6418S	6419S,6420S
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	6421S	6420S	—	6421S	6421S	—	6421S	6421S	6420S	6418S	6420S	6421S	6418S	6418S	6419S,6420S
MD21-09-8990	21-25750	9.0000–10.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	09-2356[e]	—
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	6421S	6420S	—	6421S	6421S	—	6421S	6421S	6420S	6418S	6420S	6421S	6418S	6418S	6419S,6420S
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	6421S	6420S	—	6421S	6421S	—	6421S	6421S	6420S	6418S	6420S	6421S	6418S	6418S	6419S,6420S
MD21-07-142	21-25752	2.3300–3.3300	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	07-20	—
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	6717S	6716S	—	6717S	6717S	—	6717S	6717S	6716S	—	6716S	6717S	6715S	—	6716S
MD21-09-9860	21-25752	3.8000–4.8000	SOIL	—	—	—	—	—	—	—	—	—	09-2160	—	—	—	—	—
MD21-07-74344	21-25752	3.8300–4.8300	QBT3	6717S	6716S	—	6717S	6717S	—	6717S	6717S	6716S	—	6716S	6717S	6715S	6715S	6716S
MD21-09-9861	21-25753	2.3000–3.3000	QBT3	—	—	—	—	—	—	—	—	—	09-2160	—	—	—	—	—
MD21-07-143	21-25753	2.3300–3.3300	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	07-20	—
MD21-07-74345	21-25753	2.3300–3.3300	SOIL	6728S	6727S	—	6728S	6728S	—	6728S	6728S	6727S	—	6727S	6728S	6726S	—	6727S
MD21-09-9862	21-25753	3.8000–4.8000	QBT3	—	—	—	—	—	—	—	—	—	09-2160	—	—	—	—	—
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	6728S	6727S	—	6728S	6728S	—	6728S	6728S	6727S	—	6727S	6728S	6726S	6726S	6727S
MD21-07-144	21-25754	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	07-20	—
MD21-07-74347	21-25754	2.0000–3.0000	SOIL	6741S	6740S	—	6741S	6741S	—	6741S	6741S	6740S	6739S	6740S	6741S	6739S	—	6740S

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

Table 4.2-2 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only cobalt.

[c] Metals analysis included only chromium.

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

[e] VOC analysis included only tetrachloroethene.

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

[g] Metals analysis included only barium.

[h] Metals analysis included only zinc.

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

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

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

Table 4.2-3 (continued)

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

Table 4.2-3 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only copper.

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

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

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

* — = Analysis not requested.

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

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

Table 4.2-5 (continued)

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

Table 4.2-5 (continued)

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

Table 4.2-5 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only copper and lead.

[c] Metals analysis included only strontium.

[d] Metals analysis included only chromium.

[e] Metals analysis included only copper and zinc.

[f] Metals analysis included only zinc.

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

[h] VOCs analysis included only toluene.

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

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

Table 4.2-6 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only selenium.

[c] Metals analysis included only barium.

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

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

Note: Numbers in analyte columns are request numbers.

[a] — = Analysis not requested.

[b] Metals analysis included only lead and selenium.

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

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

Table 4.2-8 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only barium.

[c] Metals analysis included only molybdenum.

[d] Metals analysis included only molybdenum and selenium.

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

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

Table 4.2-9 (continued)

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

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

*— = Analysis not requested.

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

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

Table 4.2-10 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only copper.

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

[d] VOCs analysis included only toluene and trichloroethene.

[e] Metals analysis included only chromium.

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

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

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

*— = Analysis not requested.

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

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

Table 4.2-12 (continued)

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

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

[a] — = Analysis not requested.

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

[c] Metals analysis included only lead.

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

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

[f] VOCs analysis included only toluene and trichloroethene.

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

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

Table 4.2-13 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only lead.

[c] VOCs analysis included only toluene.

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

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

Table 4.2-14 (continued)

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

Table 4.2-14 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis only included chromium.

[c] Metals analysis only included lead.

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

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

Table 4.2-15 (continued)

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

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

[a] — = Analysis not requested.

[b] Metals analysis included only mercury and selenium.

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

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

Table 4.2-16 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic TH	Isotopic Uranium
0121-97-1453	21-05512	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—
0121-97-1454	21-05513	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—
MD21-98-0049	21-10501	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0047	21-10503	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0045	21-10504	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0046	21-10505	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0044	21-10506	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0043	21-10507	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0041	21-10509	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0040	21-10510	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0039	21-10511	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0038	21-10512	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0037	21-10513	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0036	21-10514	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-98-0034	21-10516	0.0000–0.5000	SOIL	—	—	—	4855R	4855R	—	—	4855R	4855R, 4855R-1
MD21-01-0001	21-11191	0.5000–1.1667	FILL	8296R	—	—	8296R	8296R	—	8296R	8296R	8296R
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	8306R	—	—	8306R	8306R	—	8306R	8306R	8306R
MD21-01-0002	21-11192	0.5000–1.0000	FILL	8296R	—	—	8296R	8296R	—	8296R	8296R	8296R
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	8306R	—	—	8306R	8306R	—	8306R	8306R	8306R
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	8306R	—	—	8306R	8306R	—	8306R	8306R	8306R
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	8355R	—	—	8355R	8355R	—	8355R	8355R	8355R
MD21-01-0008	21-11194	0.8333–1.3333	FILL	8355R	—	—	8355R	8355R	—	8355R	8355R	8355R
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	8355R	—	—	8355R	8355R	—	8355R	8355R	8355R
MD21-01-0011	21-11195	2.6667–4.0000	FILL	8368R	—	—	8368R	8368R	—	8368R	8368R	8368R
MD21-01-0012	21-11195	5.6667–6.6667	FILL	8368R	—	—	8368R	8368R	—	8368R	8368R	8368R
MD21-01-0526	21-11195	12.0000–13.0000	QBT3	133S	—	—	133S	133S	—	133S	133S	133S
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	8368R	—	—	8368R	8368R	—	8368R	8368R	8368R
MD21-01-0014	21-11196	4.5000–5.5000	QBT3	8368R	—	—	8368R	8368R	—	8368R	8368R	8368R
MD21-01-0015	21-11197	2.3333–3.3333	QBT3	8376R	—	—	8376R	8376R	—	8376R	8376R	8376R
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	8376R	—	—	8376R	8376R	—	8376R	8376R	8376R
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	8376R	—	—	8376R	8376R	—	8376R	8376R	8376R
MD21-01-0018	21-11198	5.3333–6.3333	QBT3	8376R	—	—	8376R	8376R	—	8376R	8376R	8376R

Table 4.2-16 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic TH	Isotopic Uranium
MD21-01-0019	21-11199	8.0000–9.0000	QBT3	8376R	—	—	8376R	8376R	—	8376R	8376R	8376R
MD21-01-0020	21-11199	12.0000–13.0000	QBT3	8376R	—	—	8376R	8376R	—	8376R	8376R	8376R
MD21-01-0522	21-11199	17.0000–18.0000	QBT3	133S	—	—	133S	133S	—	133S	133S	133S
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	8390R	—	—	8390R	8390R	—	8390R	8390R	8390R
MD21-01-0055	21-11200	12.0000–13.0000	QBT3	8390R	—	—	8390R	8390R	—	8390R	8390R	8390R
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	8390R	—	—	8390R	8390R	—	8390R	8390R	8390R
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	9638R	—	—	9638R	9638R	—	9638R	9638R	9638R
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	9638R	—	—	9638R	9638R	—	9638R	9638R	9638R
MD21-01-0309	21-11216	17.1700–18.0000	QBT3	9645R	—	—	9645R	9645R	—	9645R	9645R	9645R
MD21-01-0308	21-11217	8.0000–9.1700	QBT3	9645R	—	—	9645R	9645R	—	9645R	9645R	9645R
MD21-01-0313	21-11217	12.0000–13.0000	QBT3	9645R	—	—	9645R	9645R	—	9645R	9645R	9645R
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	9667R	—	—	9667R, 9667R-1	9667R	—	9667R, 9667R-1	9667R	9667R, 9667R-1
MD21-01-0314	21-11218	8.0000–9.0000	QBT3	9645R	—	—	9645R	9645R	—	9645R	9645R	9645R
MD21-01-0315	21-11218	12.0000–13.0000	QBT3	9645R	—	—	9645R	9645R	—	9645R	9645R	9645R
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	9667R	—	—	9667R	9667R	—	9667R, 9667R-1	9667R	9667R, 9667R-1
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	9667R	—	—	9667R	9667R	—	9667R	9667R	9667R
MD21-01-0301	21-11219	12.0000–13.0000	QBT3	9667R	—	—	9667R, 9667R-1	9667R	—	9667R	9667R	9667R, 9667R-1
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	9667R	—	—	9667R	9667R	—	9667R	9667R	9667R
MD21-01-0307	21-11220	2.0000–3.0000	FILL	9667R	—	—	9667R	9667R	—	9667R	9667R	9667R
MD21-01-0310	21-11220	5.0000–6.0000	FILL	9667R	—	—	9667R	9667R	—	9667R	9667R	9667R
MD21-01-0311	21-11221	4.0000–5.0000	QBT3	9667R	—	—	9667R	9667R	—	9667R	9667R	9667R
MD21-01-0304	21-11221	7.0000–8.0000	QBT3	9667R	—	—	9667R	9667R	—	9667R	9667R	9667R
MD21-01-0523	21-11222	12.0000–15.0000	FILL	133S	—	—	133S	133S	—	133S	133S	133S
MD21-01-0525	21-11222	17.0000–18.0000	FILL	133S	—	—	133S	133S	—	133S	133S	133S
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7190	21-603023	8.5000–9.5000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7191	21-603023	10.5000–11.5000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7192	21-603024	7.5000–8.5000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7208	21-603024	7.5000–8.5000	QBT3	—	—	08-152	—	—	08-151	—	—	—
RE21-08-7193	21-603024	9.5000–10.5000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7194	21-603025	7.5000–8.5000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
RE21-08-7195	21-603025	9.5000–10.5000	QBT3	08-110	08-109	—	08-110	08-110	—	08-110	—	08-110
MD21-09-8723	21-603022	19.0000–20.0000	QBT3	—	—	—	—	09-2012	—	—	—	—
MD21-09-8722	21-603025	14.5000–15.5000	QBT3	—	—	—	—	08-110	—	—	—	—

Table 4.2-16 (continued)

Sample ID	Location ID	Depth (ft)	Media	TAL Metals	PCBs	Perchlorate	Pesticides/ PCBs	Strontium-90	SVOCs	VOCs	Wet Chemistry
AAA4033	21-01604	1.0000–2.1667	QBT3	—	—	—	—	—	—	—	—
AAA4037	21-01605	1.0000–1.5000	QBT3	—	—	—	—	—	—	—	—
AAA4040	21-01606	1.0000–1.3333	QBT3	—	—	—	—	—	—	—	—
AAA4129	21-01672	0.0000–5.0000	QBT3	15412	—	—	—	—	15406	15410	—
AAA4131	21-01672	5.0000–10.0000	QBT3	15412	—	—	—	—	15406	15410	—
AAA4132	21-01672	10.0000–15.0000	QBT3	15412	—	—	—	—	15406	15410	—
AAA4133	21-01672	15.0000–20.0000	QBT3	15412	—	—	—	—	15406	15410	—
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	1289S	1288S	—	—	—	1288S	—	—
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	1289S	1288S	—	—	—	1288S	—	—
MD21-02-49587	21-02-21262	0.0000–0.5000	SOIL	1289S	1288S	—	—	—	1288S	—	—
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	1289S	1288S	—	—	—	1288S	—	—
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	1289S	1288S	—	—	—	1288S	—	—
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	1289S	1288S	—	—	—	1288S	—	—
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	1289S	1288S	—	—	—	1288S	—	—
0121-97-1236	21-05355	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1238	21-05355	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1226	21-05357	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1231	21-05357	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1221	21-05362	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1223	21-05362	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1224	21-05379	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1225	21-05379	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1230	21-05389	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1229	21-05389	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1228	21-05404	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1235	21-05404	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1239	21-05404	1.0000–1.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1237	21-05418	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1241	21-05418	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1227	21-05422	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1240	21-05422	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1232	21-05425	0.0000–0.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1234	21-05425	0.5000–1.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1233	21-05425	1.0000–1.5000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1222	21-05425	1.5000–2.0000	SOIL	3036R	—	—	—	—	—	—	—
0121-97-1453	21-05512	0.0000–0.5000	SOIL	3896R	—	—	—	—	—	—	—

Table 4.2-16 (continued)

Sample ID	Location ID	Depth (ft)	Media	TAL Metals	PCBs	Perchlorate	Pesticides/ PCBs	Strontium-90	SVOCs	VOCs	Wet Chemistry
0121-97-1454	21-05513	0.0000–0.5000	SOIL	3896R	—	—	—	—	—	—	—
MD21-98-0049	21-10501	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0047	21-10503	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0045	21-10504	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0046	21-10505	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0044	21-10506	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0043	21-10507	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0041	21-10509	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0040	21-10510	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0039	21-10511	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0038	21-10512	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0037	21-10513	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0036	21-10514	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	4854R	4853R	—	—	—	4853R	—	—
MD21-98-0034	21-10516	0.0000–0.5000	SOIL	4854R	4853R	—	—	—	4853R	—	—
MD21-01-0001	21-11191	0.5000–1.1667	FILL	8295R	—	—	8294R	8296R	8294R	8294R	—
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	8305R	—	—	8304R	8306R	8304R	8304R	—
MD21-01-0002	21-11192	0.5000–1.0000	FILL	8295R	—	—	8294R	8296R	8294R	8294R	—
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	8305R	—	—	8304R	8306R	8304R	8304R	—
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	8305R	—	—	8304R	8306R	8304R	8304R	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	8354R	—	—	8353R	8355R	8353R	8353R	—
MD21-01-0008	21-11194	0.8333–1.3333	FILL	8354R	—	—	8353R	8355R	8353R	8353R	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	8354R	—	—	8353R	8355R	8353R	8353R	—
MD21-01-0011	21-11195	2.6667–4.0000	FILL	8367R	—	—	8366R	8368R	8366R	8366R	—
MD21-01-0012	21-11195	5.6667–6.6667	FILL	8367R	—	—	8366R	8368R	8366R	8366R	—
MD21-01-0526	21-11195	12.0000–13.0000	QBT3	132S	131S	—	—	133S	131S	131S	—
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	8367R	—	—	8366R	8368R	8366R	8366R	—
MD21-01-0014	21-11196	4.5000–5.5000	QBT3	8367R	—	—	8366R	8368R	8366R	8366R	—
MD21-01-0015	21-11197	2.3333–3.3333	QBT3	8375R	—	—	8374R	8376R	8374R	8374R	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	8375R	—	—	8374R	8376R	8374R	8374R	—
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	8375R	—	—	8374R	8376R	8374R	8374R	—
MD21-01-0018	21-11198	5.3333–6.3333	QBT3	8375R	—	—	8374R	8376R	8374R	8374R	—
MD21-01-0019	21-11199	8.0000–9.0000	QBT3	8375R	—	—	8374R	8376R	8374R	8374R	—
MD21-01-0020	21-11199	12.0000–13.0000	QBT3	8375R	—	—	8374R	8376R	8374R	8374R	—

Table 4.2-16 (continued)

Sample ID	Location ID	Depth (ft)	Media	TAL Metals	PCBs	Perchlorate	Pesticides/ PCBs	Strontium-90	SVOCs	VOCs	Wet Chemistry
MD21-01-0522	21-11199	17.0000–18.0000	QBT3	132S	131S	—	—	133S	131S	131S	—
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	8389R	—	—	8388R	8390R	8388R	8388R	—
MD21-01-0055	21-11200	12.0000–13.0000	QBT3	8389R	—	—	8388R	8390R	8388R	8388R	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	8389R	—	—	8388R	8390R	8388R	8388R	—
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	9637R	9636R	—	—	9638R	9636R	9636R	—
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	9637R	9636R	—	—	9638R	9636R	9636R	—
MD21-01-0309	21-11216	17.1700–18.0000	QBT3	9644R	9643R	—	—	9645R	9643R	9643R	—
MD21-01-0308	21-11217	8.0000–9.1700	QBT3	9644R	9643R	—	—	9645R	9643R	9643R	—
MD21-01-0313	21-11217	12.0000–13.0000	QBT3	9644R	9643R	—	—	9645R	9643R	9643R	—
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0314	21-11218	8.0000–9.0000	QBT3	9644R	9643R	—	—	9645R	9643R	9643R	—
MD21-01-0315	21-11218	12.0000–13.0000	QBT3	9644R	9643R	—	—	9645R	9643R	9643R	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0301	21-11219	12.0000–13.0000	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0311	21-11221	4.0000–5.0000	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0304	21-11221	7.0000–8.0000	QBT3	9666R	9665R	—	—	9667R	9665R	9665R	—
MD21-01-0523	21-11222	12.0000–15.0000	FILL	132S	131S	—	—	133S	131S	131S	—
MD21-01-0525	21-11222	17.0000–18.0000	FILL	132S	131S	—	—	133S	131S	131S	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7190	21-603023	8.5000–9.5000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7191	21-603023	10.5000–11.5000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7192	21-603024	7.5000–8.5000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7208	21-603024	7.5000–8.5000	QBT3	—	08-151	—	—	—	—	—	—
RE21-08-7193	21-603024	9.5000–10.5000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7194	21-603025	7.5000–8.5000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
RE21-08-7195	21-603025	9.5000–10.5000	QBT3	08-109	—	08-109	—	08-110	08-108	08-108	08-109
MD21-09-8723	21-603022	19.0000–20.0000	QBT3	—	—	—	—	—	—	—	—
MD21-09-8722	21-603025	14.5000–15.5000	QBT3	09-2012[b]	—	—	—	—	—	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only calcium and selenium.

Table 4.2-17
Samples Collected and Analyses Requested at SWMU 21-024(j)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	07-226	07-225	—[a]	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	—	07-225
RE21-07-2286	21-600514	2.0000–3.0000	QBT3	07-226	07-225	—	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	07-224	07-225
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	07-226	07-225	—	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	—	07-225
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	07-226	07-225	—	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	07-224	07-225
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	—	07-250
RE21-08-10292	21-600516	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2290	21-600516	2.0000–3.0000	QBT3	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	07-249	07-250
RE21-08-10293	21-600516	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	—	07-250
RE21-08-10294	21-600517	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2292	21-600517	2.0000–3.0000	QBT3	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	07-249	07-250
RE21-08-10295	21-600517	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2293	21-600518	0.0000–0.5000	SOIL	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	—	07-250
RE21-08-10296	21-600518	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2294	21-600518	2.0000–3.0000	QBT3	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	07-249	07-250
RE21-08-10297	21-600518	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2295	21-600519	0.0000–0.5000	SOIL	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	—	07-250
RE21-08-10298	21-600519	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2296	21-600519	2.0000–3.0000	QBT3	07-251	07-250	—	07-251	07-251	—	07-251	07-251	07-251	—	07-250	07-251	07-249	07-249	07-250
RE21-08-10299	21-600519	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	07-226	07-225	—	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	—	07-225
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	07-226	07-225	—	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	07-224	07-225
RE21-07-2253	21-600524	5.0000–6.0000	QBT3	—	—	07-284	—	—	07-283	—	—	—	07-283	—	—	—	—	—
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	07-226	07-225	—	07-226	07-226	—	07-226	07-226	07-226	—	07-225	07-226	07-224	07-224	07-225
RE21-08-10300	21-600524	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—	08-573	—	—	—	—	—
RE21-07-6180	21-601290	12.0000–13.0000	QBT3	08-94	08-94	—	08-94	08-94	—	08-94	08-94	08-94	—	08-94	08-94	08-94	08-94	08-94
RE21-07-6181	21-601290	14.0000–15.0000	QBT3	08-94	08-94	—	08-94	08-94	—	08-94	08-94	08-94	—	08-94	08-94	08-94	08-94	08-94
RE21-07-6182	21-601291	12.0000–13.0000	QBT3	08-94	08-94	—	08-94	08-94	—	08-94	08-94	08-94	—	08-94	08-94	08-94	08-94	08-94
RE21-07-6183	21-601291	14.0000–15.0000	QBT3	08-94	08-94	—	08-94	08-94	—	08-94	08-94	08-94	—	08-94	08-94	08-94	08-94	08-94

Table 4.2-17 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	08-97	08-96	—	08-97	08-97	—	08-97	08-97	08-96	—	08-96	08-97	08-95	08-95	08-96
RE21-08-10286	21-601292	1.0000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	08-541	—	—	—	—	—
RE21-07-6185	21-601292	3.0000–4.0000	QBT3	08-97	08-96	—	08-97	08-97	—	08-97	08-97	08-96	—	08-96	08-97	08-95	08-95	08-96
RE21-08-10287	21-601292	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	08-541	—	—	—	—	—
RE21-07-6186	21-601293	1.0000–2.0000	QBT3	08-97	08-96	—	08-97	08-97	—	08-97	08-97	08-96	—	08-96	08-97	08-95	08-95	08-96
RE21-07-6187	21-601293	3.0000–4.0000	QBT3	08-97	08-96	—	08-97	08-97	—	08-97	08-97	08-96	—	08-96	08-97	08-95	08-95	08-96
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	08-97	08-96	—	08-97	08-97	—	08-97	08-97	08-96	—	08-96	08-97	08-95	08-95	08-96
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	08-97	08-96	—	08-97	08-97	—	08-97	08-97	08-96	—	08-96	08-97	08-95	08-95	08-96
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-07-6192	21-601296	5.0000–6.0000	QBT3	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-07-6193	21-601296	7.0000–8.0000	QBT3	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-08-10288	21-601297	3.0000–4.0000	SOIL	—	—	—	—	—	—	—	—	—	08-541	—	—	—	—	—
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-08-10289	21-601297	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	08-541	—	—	—	—	—
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-08-10290	21-601298	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	08-541	—	—	—	—	—
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-08-10291	21-601298	4.5000–5.5000	QBT3	—	—	—	—	—	—	—	—	—	08-541	—	—	—	—	—
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	08-104	08-103	—	08-104	08-104	—	08-104	08-104	08-103	—	08-103	08-104	08-102	08-102	08-103
RE21-07-6200	21-601300	2.0000–3.0000	SOIL	08-107	08-106	—	08-107	08-107	—	08-107	08-107	08-106	—	08-106	08-107	08-105	08-105	08-106
RE21-07-6201	21-601300	4.0000–5.0000	QBT3	08-107	08-106	—	08-107	08-107	—	08-107	08-107	08-106	—	08-106	08-107	08-105	08-105	08-106
RE21-07-6202	21-601301	2.0000–3.0000	SOIL	08-107	08-106	—	08-107	08-107	—	08-107	08-107	08-106	—	08-106	08-107	08-105	08-105	08-106
RE21-07-6203	21-601301	4.0000–5.0000	SOIL	08-107	08-106	—	08-107	08-107	—	08-107	08-107	08-106	—	08-106	08-107	08-105	08-105	08-106
RE21-07-6204	21-601302	12.0000–13.0000	QBT3	08-92	08-91	—	08-92	08-92	—	08-92	08-92	08-91	—	08-91	08-92	08-90	08-90	08-91
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	08-92	08-91	—	08-92	08-92	—	08-92	08-92	08-91	—	08-91	08-92	08-90	08-90	08-91
RE21-07-6206	21-601302	22.0000–23.0000	QBT3	08-92	08-91	—	08-92	08-92	—	08-92	08-92	08-91	—	08-91	08-92	08-90	08-90	08-91
MD21-09-8851	21-605287	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	09-2283[b]	—	—	—	—	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only lead and zinc.

Table 4.2-18
Samples Collected and Analyses Requested at SWMU 21-024(k)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Ph
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	07-243	07-242	—*	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	—	07-242
RE21-07-3840	21-600843	2.0000–3.0000	QBT3	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	07-241	07-242
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	—	07-242
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	07-241	07-242
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	—	07-242
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	07-241	07-242
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	—	07-242
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	07-243	07-242	—	07-243	07-243	—	07-243	07-243	07-242	—	—	07-243	07-241	07-241	07-242
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-08-10365	21-600847	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	08-572	—	—	—	—	—
RE21-07-3848	21-600847	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-08-10366	21-600847	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	08-572	—	—	—	—	—
RE21-07-3849	21-600848	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-07-3850	21-600848	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-07-3852	21-600849	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-08-10367	21-600851	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	08-572	—	—	—	—	—
RE21-07-3856	21-600851	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3893	21-600851	2.0000–3.0000	QBT3	—	—	07-294	—	—	07-293	—	—	—	07-293	—	—	—	—	—
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-07-3858	21-600852	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-07-3860	21-600853	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	—	07-253
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	07-254	07-253	—	07-254	07-254	—	07-254	07-254	07-253	—	07-253	07-254	07-252	07-252	07-253
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	07-246	07-245	—	07-246	07-246	—	07-246	07-246	07-245	—	07-245	07-246	07-244	—	07-245
RE21-07-3873	21-600859	2.0000–3.0000	SOIL	07-246	07-245	—	07-246	07-246	—	07-246	07-246	07-245	—	07-245	07-246	07-244	07-244	07-245
RE21-07-3874	21-600859	5.0000–6.0000	QBT3	07-246	07-245	—	07-246	07-246	—	07-246	07-246	07-245	—	07-245	07-246	07-244	07-244	07-245

Table 4.2-18 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Ph
MD21-09-8718	21-600859	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	09-2335	—	—	—	—	—	—
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	07-257	07-256	—	07-257	07-257	—	07-257	07-257	07-256	—	07-256	07-257	07-255	—	07-256
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	07-257	07-256	—	07-257	07-257	—	07-257	07-257	07-256	—	07-256	07-257	07-255	07-255	07-256
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	07-257	07-256	—	07-257	07-257	—	07-257	07-257	07-256	—	07-256	07-257	07-255	07-255	07-256
RE21-08-7241	21-603037	8.5000–9.5000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
MD21-09-8721	21-603038	13.5000–14.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2114	—	—
RE21-08-7245	21-603039	7.5000–8.5000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7246	21-603039	9.5000–10.5000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7247	21-603040	5.0000–6.0000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7248	21-603040	7.0000–8.0000	QBT3	08-236	08-235	—	08-236	08-236	—	08-236	08-236	08-235	—	08-235	08-236	08-234	08-234	08-235
RE21-08-7249	21-603041	5.5000–6.5000	SOIL	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
MD21-09-8720	21-603042	12.5000–13.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2102	—	—
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	08-239	08-238	—	08-239	08-239	—	08-239	08-239	08-238	—	08-238	08-239	08-237	08-237	08-238
RE21-08-7257	21-603045	11.0000–12.0000	QBT3	08-249	08-248	—	08-249	08-249	—	08-249	08-249	08-248	—	08-248	08-249	08-247	08-247	08-248
RE21-08-7258	21-603045	13.0000–14.0000	QBT3	08-249	08-248	—	08-249	08-249	—	08-249	08-249	08-248	—	08-248	08-249	08-247	08-247	08-248
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	08-464	08-464	—	08-464	08-464	—	08-464	08-464	08-464	—	08-464	08-464	08-464	08-464	08-464
RE21-08-7260	21-603046	4.0000–5.0000	QBT3	08-464	08-464	—	08-464	08-464	—	08-464	08-464	08-464	—	08-464	08-464	08-464	08-464	08-464
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	08-480	08-480	—	08-480	08-480	—	08-480	08-480	08-480	—	08-480	08-480	08-480	08-480	08-480
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	08-480	08-480	—	08-480	08-480	—	08-480	08-480	08-480	—	08-480	08-480	08-480	08-480	08-480
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	08-470	08-469	—	08-470	08-470	—	08-470	08-470	08-469	—	08-469	08-470	08-468	08-468	08-469
RE21-08-7276	21-603054	15.0000–16.0000	QBT3	08-470	08-469	—	08-470	08-470	—	08-470	08-470	08-469	—	08-469	08-470	08-468	08-468	08-469
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	08-470	08-469	—	08-470	08-470	—	08-470	08-470	08-469	—	08-469	08-470	08-468	08-468	08-469
MD21-09-8719	21-603054	25.0000–26.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2102	—	—
RE21-08-7281	21-603056	11.0000–12.0000	QBT3	08-286	08-285	—	08-286	08-286	—	08-286	08-286	08-285	—	08-285	08-286	08-284	08-284	08-285
RE21-08-7282	21-603056	16.0000–17.0000	QBT3	08-286	08-285	—	08-286	08-286	—	08-286	08-286	08-285	—	08-285	08-286	08-284	08-284	08-285

Table 4.2-18 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Ph
RE21-08-7283	21-603056	21.0000–22.0000	QBT3	08-286	08-285	—	08-286	08-286	—	08-286	08-286	08-285	—	08-285	08-286	08-284	08-284	08-285
RE21-08-7284	21-603056	26.0000–27.0000	QBT3	08-286	08-285	—	08-286	08-286	—	08-286	08-286	08-285	—	08-285	08-286	08-284	08-284	08-285
RE21-08-7285	21-603056	31.0000–32.0000	QBT3	08-286	08-285	—	08-286	08-286	—	08-286	08-286	08-285	—	08-285	08-286	08-284	08-284	08-285

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.
* — = Analysis not requested.

Table 4.2-19
Samples Collected and Analyses Requested at Consolidated Unit 21-024(l)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	6575S	6575S	—[a]	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75345	21-27441	5.0000–5.5000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	6575S	6575S	—	6575S	6575S	—	6575S	6575S	6575S	—	6575S	6575S	6574S	6574S	6575S
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
MD21-09-8819	21-27514	25.0000–26.0000	QBT3	09-1914	—	—	—	—	—	09-1914	—	—	—	—	—	09-1914	—	—
RE21-07-75619	21-27515	10.0000–11.0000	QBT3	7061S	7060S	—	7061S	7061S	—	7061S	7061S	7060S	—	7060S	7061S	7059S	7059S	7060S
RE21-07-3963	21-27515	15.0000–16.0000	QBT3	—	—	07-259	—	—	07-258	—	—	—	07-258	—	—	—	—	—
RE21-07-75620	21-27515	15.0000–16.0000	QBT3	7061S	7060S	—	7061S	7061S	—	7061S	7061S	7060S	—	7060S	7061S	7059S	7059S	7060S
RE21-07-75621	21-27515	20.0000–21.0000	QBT3	7061S	7060S	—	7061S	7061S	—	7061S	7061S	7060S	—	7060S	7061S	7059S	7059S	7060S

Table 4.2-19 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	7061S	7060S	—	7061S	7061S	—	7061S	7061S	7060S	—	7060S	7061S	7059S	7059S	7060S
RE21-07-75623	21-27516	4.0000–5.0000	QBT3	7061S	7060S	—	7061S	7061S	—	7061S	7061S	7060S	—	7060S	7061S	7059S	7059S	7060S
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	7061S	7060S	—	7061S	7061S	—	7061S	7061S	7060S	—	7060S	7061S	7059S	7059S	7060S
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	6603S	6602S	—	6603S	6603S	—	6603S	6603S	6602S	—	6602S	6603S	6601S	—	6602S
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	6603S	6602S	—	6603S	6603S	—	6603S	6603S	6602S	—	6602S	6603S	6601S	6601S	6602S
MD21-09-8824	21-27517	7.0000–8.0000	QBT3	09-1979	—	—	09-1979	—	—	09-1979	—	09-1979[b]	—	—	—	—	—	—
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	6603S	6602S	—	6603S	6603S	—	6603S	6603S	6602S	—	6602S	6603S	6601S	—	6602S
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	6603S	6602S	—	6603S	6603S	—	6603S	6603S	6602S	—	6602S	6603S	6601S	6601S	6602S
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	6603S	6602S	—	6603S	6603S	—	6603S	6603S	6602S	—	6602S	6603S	6601S	—	6602S
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	6603S	6602S	—	6603S	6603S	—	6603S	6603S	6602S	—	6602S	6603S	6601S	6601S	6602S
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	7043S	7042S	—	7043S	7043S	—	7043S	7043S	7042S	—	7042S	7043S	7041S	7041S	7042S
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	7043S	7042S	—	7043S	7043S	—	7043S	7043S	7042S	—	7042S	7043S	7041S	7041S	7042S
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	7049S	7048S	—	7049S	7049S	—	7049S	7049S	7048S	—	7048S	7049S	7047S	7047S	7048S
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	7049S	7048S	—	7049S	7049S	—	7049S	7049S	7048S	—	7048S	7049S	7047S	7047S	7048S
MD21-09-8831	21-27521	9.5000–10.5000	SOIL	—	—	—	—	—	—	—	—	09-1926[c]	—	—	—	—	—	—
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	7046S	7045S	—	7046S	7046S	—	7046S	7046S	7045S	—	7045S	7046S	7044S	7044S	7045S
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	7046S	7045S	—	7046S	7046S	—	7046S	7046S	7045S	—	7045S	7046S	7044S	7044S	7045S
MD21-09-8828	21-27522	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	09-1926[d]	—	—	—	—	—	—
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	7043S	7042S	—	7043S	7043S	—	7043S	7043S	7042S	—	7042S	7043S	7041S	7041S	7042S
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	7043S	7042S	—	7043S	7043S	—	7043S	7043S	7042S	—	7042S	7043S	7041S	7041S	7042S
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	7046S	7045S	—	7046S	7046S	—	7046S	7046S	7045S	—	7045S	7046S	7044S	7044S	7045S
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	7046S	7045S	—	7046S	7046S	—	7046S	7046S	7045S	—	7045S	7046S	7044S	7044S	7045S
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	7055S	7054S	—	7055S	7055S	—	7055S	7055S	7054S	—	7054S	7055S	7053S	7053S	7054S
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	7058S	7057S	—	7058S	7058S	—	7058S	7058S	7057S	—	7057S	7058S	7056S	—	7057S
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	7058S	7057S	—	7058S	7058S	—	7058S	7058S	7057S	—	7057S	7058S	7056S	7056S	7057S
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	7058S	7057S	—	7058S	7058S	—	7058S	7058S	7057S	—	7057S	7058S	7056S	7056S	7057S
MD21-09-8834	21-27530	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-1950	—	—
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S
RE21-07-75673	21-27533	2.0000–3.0000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75674	21-27534	0.0000–0.5000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S

Table 4.2-19 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	7040S	7039S	—	7040S	7040S	—	7040S	7040S	7039S	—	7039S	7040S	7038S	—	7039S
RE21-07-75679	21-27536	2.0000–3.0000	QBT3	7040S	7039S	—	7040S	7040S	—	7040S	7040S	7039S	—	7039S	7040S	7038S	7038S	7039S
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	7040S	7039S	—	7040S	7040S	—	7040S	7040S	7039S	—	7039S	7040S	7038S	—	7039S
RE21-07-75681	21-27537	2.0000–3.0000	QBT3	7040S	7039S	—	7040S	7040S	—	7040S	7040S	7039S	—	7039S	7040S	7038S	7038S	7039S
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	7035S	7035S	—	7035S	7035S	—	7035S	7035S	7035S	—	7035S	7035S	7035S	7035S	7035S
RE21-07-75685	21-27539	5.0000–6.0000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
MD21-09-8829	21-27539	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	09-1950[e]	—	—	—	—	—	—
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
MD21-09-8827	21-27540	7.0000–8.0000	SOIL	—	—	—	09-1950	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S
RE21-07-75691	21-27542	2.0000–3.0000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	—	7033S
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75695	21-27544	4.0000–5.0000	QBT3	7034S	7033S	—	7034S	7034S	—	7034S	7034S	7033S	—	7033S	7034S	7032S	7032S	7033S
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	7052S	7051S	—	7052S	7052S	—	7052S	7052S	7051S	—	7051S	7052S	7050S	7050S	7051S
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	7052S	7051S	—	7052S	7052S	—	7052S	7052S	7051S	—	7051S	7052S	7050S	7050S	7051S
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	7052S	7051S	—	7052S	7052S	—	7052S	7052S	7051S	—	7051S	7052S	7050S	7050S	7051S
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	7052S	7051S	—	7052S	7052S	—	7052S	7052S	7051S	—	7051S	7052S	7050S	7050S	7051S
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	7052S	7051S	—	7052S	7052S	—	7052S	7052S	7051S	—	7051S	7052S	7050S	7050S	7051S
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	7052S	7051S	—	7052S	7052S	—	7052S	7052S	7051S	—	7051S	7052S	7050S	7050S	7051S
MD21-09-8835	21-27547	7.5000–8.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	09-1926	—	—
MD21-09-8820	21-605272	0.0000–0.5000	SOIL	09-1950	—	—	09-1950	—	—	09-1950	—	—	—	—	09-1950	—	—	—
MD21-09-8821	21-605272	7.0000–8.0000	QBT3	09-1950	—	—	09-1950	—	—	09-1950	—	—	—	—	09-1950	—	—	—
MD21-09-8822	21-605273	0.0000–0.5000	SOIL	09-1979	—	—	09-1979	—	—	09-1979	—	09-1979[b]	—	—	—	—	—	—
MD21-09-8823	21-605273	7.0000–8.0000	QBT3	09-1979	—	—	09-1979	—	—	09-1979	—	09-1979[b]	—	—	—	—	—	—
MD21-09-8825	21-605274	0.0000–0.5000	SOIL	09-1979	—	—	—	—	—	09-1979	—	09-1979[f]	—	—	—	—	—	—

Table 4.2-19 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
MD21-09-8826	21-605275	0.0000–0.5000	QBT3	09-1979	—	—	—	—	—	09-1979	—	09-1979[f]	—	—	—	—	—	—
MD21-09-8830	21-605276	0.0000–0.5000	SOIL	—	—	—	—	—	—	09-1926	—	—	—	—	—	—	—	—
MD21-09-8832	21-605277	5.0000–6.0000	SOIL	—	—	—	—	—	—	—	—	09-1926[c]	—	—	—	—	—	—
MD21-09-8833	21-605277	7.0000–8.0000	SOIL	—	—	—	—	—	—	—	—	09-1926[c]	—	—	—	—	—	—
MD21-09-8836	21-605278	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	09-1950	—	—
MD21-09-8837	21-605278	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-1950	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only lead, mercury, and zinc.

[c] Metals analysis included only zinc.

[d] Metals analysis included only lead.

[e] Metals analysis included only lead and zinc.

[f] Metals analysis included only selenium.

Table 4.2-20
Samples Collected and Analyses Requested at SWMU 21-024(n)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-3114	21-600667	0.0000–0.5000	SOIL	07-179	07-178	—[a]	07-179	07-179	—	07-179	07-179	07-178	—	07-178	07-179	07-177	—	07-178
RE21-07-3115	21-600667	2.0000–3.0000	QBT3	07-179	07-178	—	07-179	07-179	—	07-179	07-179	07-178	—	07-178	07-179	07-177	07-177	07-178
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	07-179	07-178	—	07-179	07-179	—	07-179	07-179	07-178	—	07-178	07-179	07-177	—	07-178
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	07-179	07-178	—	07-179	07-179	—	07-179	07-179	07-178	—	07-178	07-179	07-177	07-177	07-178
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	07-179	07-178	—	07-179	07-179	—	07-179	07-179	07-178	—	07-178	07-179	07-177	—	07-178
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	07-179	07-178	—	07-179	07-179	—	07-179	07-179	07-178	—	07-178	07-179	07-177	07-177	07-178
MD21-09-8765	21-600669	7.0000–8.0000	SOIL	—	—	—	—	—	—	09-2286	—	—	—	—	—	—	09-2286	—
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	—	07-181
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	07-180	07-181
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	—	07-181
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	07-180	07-181
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	—	07-181
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	07-180	07-181
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	—	07-181
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	07-180	07-181
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	—	07-181
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	07-182	07-181	—	07-182	07-182	—	07-182	07-182	07-181	—	07-181	07-182	07-180	07-180	07-181
RE21-07-3130	21-600675	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3188	21-600676	2.0000–3.0000	QBT3	—	—	07-248	—	—	07-247	—	—	—	07-247	—	—	—	—	—
RE21-07-3134	21-600677	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	—	07-183	07-184
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3136	21-600678	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3140	21-600680	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3142	21-600681	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184

Table 4.2-20 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
MD21-09-8759	21-600682	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	09-2317[b]	—	—	—	—	—	—
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
MD21-09-8763	21-600684	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	09-2286[c]	—	—	—	09-2286	—	—
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	—	07-184
RE21-07-3151	21-600685	2.0000–3.0000	QBT3	07-185	07-184	—	07-185	07-185	—	07-185	07-185	07-184	—	07-184	07-185	07-183	07-183	07-184
RE21-07-3152	21-600686	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3155	21-600687	2.0000–3.0000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
RE21-07-3156	21-600688	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3157	21-600688	2.0000–3.0000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
MD21-09-8769	21-600689	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2286	—	—
RE21-07-3160	21-600690	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3161	21-600690	2.0000–3.0000	QBT3	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	—	07-190
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	07-191	07-190	—	07-191	07-191	—	07-191	07-191	07-190	—	07-190	07-191	07-189	07-189	07-190
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	07-222	07-221	—	07-222	07-222	—	07-222	07-222	07-221	—	07-221	07-222	07-220	—	07-221
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	07-222	07-221	—	07-222	07-222	—	07-222	07-222	07-221	—	07-221	07-222	07-220	07-220	07-221
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	07-222	07-221	—	07-222	07-222	—	07-222	07-222	07-221	—	07-221	07-222	07-220	07-220	07-221
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	07-222	07-221	—	07-222	07-222	—	07-222	07-222	07-221	—	07-221	07-222	07-220	—	07-221
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	07-222	07-221	—	07-222	07-222	—	07-222	07-222	07-221	—	07-221	07-222	07-220	07-220	07-221
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	07-222	07-221	—	07-222	07-222	—	07-222	07-222	07-221	—	07-221	07-222	07-220	07-220	07-221
MD21-09-8760	21-600695	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	09-2286	09-2286[b]	—	—	—	—	—	—

Table 4.2-20 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	07-194	07-193	—	07-194	07-194	—	07-194	07-194	07-193	—	07-193	07-194	07-192	—	07-193
RE21-07-3266	21-600710	2.0000–3.0000	QBT3	07-194	07-193	—	07-194	07-194	—	07-194	07-194	07-193	—	07-193	07-194	07-192	07-192	07-193
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	—	07-208
RE21-07-3268	21-600711	2.0000–3.0000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	07-197	07-196	—	07-197	07-197	—	07-197	07-197	07-196	—	07-196	07-197	07-195	—	07-196
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	07-197	07-196	—	07-197	07-197	—	07-197	07-197	07-196	—	07-196	07-197	07-195	07-195	07-196
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	—	07-208
RE21-07-3272	21-600713	2.0000–3.0000	QBT3	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	07-197	07-196	—	07-197	07-197	—	07-197	07-197	07-196	—	07-196	07-197	07-195	—	07-196
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	07-197	07-196	—	07-197	07-197	—	07-197	07-197	07-196	—	07-196	07-197	07-195	07-195	07-196
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	07-197	07-196	—	07-197	07-197	—	07-197	07-197	07-196	—	07-196	07-197	07-195	—	07-196
RE21-07-3276	21-600715	2.0000–3.0000	QBT3	07-197	07-196	—	07-197	07-197	—	07-197	07-197	07-196	—	07-196	07-197	07-195	07-195	07-196
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	—	07-208
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	—	07-208
RE21-07-3280	21-600717	2.0000–3.0000	QBT3	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	—	07-208
RE21-07-3282	21-600718	2.0000–3.0000	QBT3	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3286	21-600720	2.0000–3.0000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3288	21-600721	2.0000–3.0000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3294	21-600724	2.0000–3.0000	QBT3	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3296	21-600725	2.0000–3.0000	QBT3	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213

Table 4.2-20 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-3297	21-600726	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3298	21-600726	2.0000–3.0000	QBT3	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	—	07-208
RE21-07-3318	21-600735	2.0000–3.0000	QBT3	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	07-209	07-208	—	07-209	07-209	—	07-209	07-209	07-208	—	07-208	07-209	07-207	07-207	07-208
MD21-09-8768	21-600735	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2317	—	—
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	—	07-213
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	07-214	07-213	—	07-214	07-214	—	07-214	07-214	07-213	—	07-213	07-214	07-212	07-212	07-213
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	07-219	07-218	—	07-219	07-219	—	07-219	07-219	07-218	—	07-218	07-219	07-217	—	07-218
RE21-07-3324	21-600737	2.0000–3.0000	QBT3	07-219	07-218	—	07-219	07-219	—	07-219	07-219	07-218	—	07-218	07-219	07-217	07-217	07-218
RE21-07-3325	21-600737	5.0000–6.0000	QBT3	07-219	07-218	—	07-219	07-219	—	07-219	07-219	07-218	—	07-218	07-219	07-217	07-217	07-218
RE21-07-6248	21-601304	2.5000–3.5000	SOIL	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6249	21-601304	4.5000–5.5000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6250	21-601305	3.0000–4.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6251	21-601305	5.0000–6.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
MD21-09-8766	21-601305	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	09-2282[d]	—	—	—	—	—	—
RE21-07-6252	21-601306	1.0000–2.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6253	21-601306	3.0000–4.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6254	21-601307	3.5000–4.5000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6255	21-601307	5.5000–6.5000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	08-491	08-491	—	08-491	08-491	—	08-491	08-491	08-491	—	08-491	08-491	08-491	08-491	08-491
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	08-491	08-491	—	08-491	08-491	—	08-491	08-491	08-491	—	08-491	08-491	08-491	08-491	08-491
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	08-491	08-491	—	08-491	08-491	—	08-491	08-491	08-491	—	08-491	08-491	08-491	08-491	08-491
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	08-491	08-491	—	08-491	08-491	—	08-491	08-491	08-491	—	08-491	08-491	08-491	08-491	08-491
RE21-07-6260	21-601310	6.0000–7.0000	QBT3	08-545	08-544	—	08-545	08-545	—	08-545	08-545	08-544	—	08-544	08-545	08-543	08-543	08-544
RE21-07-6261	21-601310	8.0000–9.0000	QBT3	08-545	08-544	—	08-545	08-545	—	08-545	08-545	08-544	—	08-544	08-545	08-543	08-543	08-544
RE21-07-6262	21-601311	6.0000–7.0000	QBT3	08-545	08-544	—	08-545	08-545	—	08-545	08-545	08-544	—	08-544	08-545	08-543	08-543	08-544
RE21-07-6263	21-601311	8.0000–9.0000	QBT3	08-545	08-544	—	08-545	08-545	—	08-545	08-545	08-544	—	08-544	08-545	08-543	08-543	08-544
RE21-07-6264	21-601312	4.0000–5.0000	QBT3	08-545	08-544	—	08-545	08-545	—	08-545	08-545	08-544	—	08-544	08-545	08-543	08-543	08-544
RE21-07-6265	21-601312	6.0000–7.0000	QBT3	08-545	08-544	—	08-545	08-545	—	08-545	08-545	08-544	—	08-544	08-545	08-543	08-543	08-544
MD21-09-8771	21-601312	11.0000–12.0000	QBT3	—	—	—	—	—	—	—	—	09-2317[e]	—	—	—	—	—	—

Table 4.2-20 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-6270	21-601315	3.0000–4.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6271	21-601315	8.0000–9.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
RE21-07-6272	21-601315	13.0000–14.0000	QBT3	08-483	08-482	—	08-483	08-483	—	08-483	08-483	08-482	—	08-482	08-483	08-481	08-481	08-482
MD21-09-8758	21-605251	0.0000–0.5000	SOIL	09-2286	—	—	—	—	—	09-2286	—	—	—	—	—	—	—	—
MD21-09-8761	21-605252	0.0000–0.5000	SOIL	09-2317	—	—	—	—	—	—	09-2317	09-2317[f]	—	—	—	—	—	—
MD21-09-8762	21-605252	4.0000–5.0000	QBT3	09-2317	—	—	—	—	—	—	09-2317	09-2317[f]	—	—	—	—	—	—
MD21-09-8764	21-605253	0.0000–0.5000	SOIL	—	—	—	—	—	—	09-2317	—	—	—	—	—	—	—	—
MD21-09-8767	21-605254	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	09-2286[d]	—	—	—	—	—	—
MD21-09-8770	21-605255	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2286	—	—
MD21-09-12458	21-608021	0.0000–0.5000	SOIL	—	—	—	—	—	—	09-3253	—	—	—	—	—	—	—	—
MD21-10-4657	21-609833	0.0000–0.5000	SOIL	—	—	—	—	—	—	10-744	—	—	—	—	—	—	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only chromium.

[c] Metals analysis included only copper and lead.

[d] Metals analysis included only zinc.

[e] Metals analysis included only lead.

[f] Metals analysis included only chromium, copper, lead, and zinc.

Table 4.2-21
Samples Collected and Analyses Requested at SWMU 21-024(o)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-74952	21-27346	0.0000–0.5000	SOIL	6521S	6519S	—[a]	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74953	21-27346	2.0000–2.5000	QBT3	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74955	21-27347	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74956	21-27347	2.0000–2.5000	QBT3	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74958	21-27348	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74959	21-27348	2.0000–2.5000	QBT3	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74960	21-27349	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74961	21-27349	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74962	21-27350	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74963	21-27350	2.0000–2.5000	QBT3	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74964	21-27351	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74965	21-27351	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74966	21-27352	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74967	21-27352	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74968	21-27353	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74969	21-27353	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74970	21-27354	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74971	21-27354	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74972	21-27355	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-4030	21-27355	2.0000–2.5000	QBT3	—	—	07-266	—	—	07-265	—	—	—	07-265	—	—	—	—	—
RE21-07-74973	21-27355	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
RE21-07-74974	21-27356	0.0000–0.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	—	6519S, 6520S
RE21-07-74975	21-27356	2.0000–2.5000	SOIL	6521S	6519S	—	6521S	6521S	—	6521S	6521S	6519S	—	6519S	6521S	6518S	6518S	6519S, 6520S
MD21-09-7573	21-605201	0.0000–0.5000	SOIL	09-1776	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-09-7574	21-605202	0.0000–0.5000	SOIL	—	—	—	—	—	—	09-1776	—	09-1776[b]	—	—	—	—	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only zinc.

Table 4.2-22
Samples Collected and Analyses Requested at Consolidated Unit 21-026(a)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Gross Alpha/Beta	Tritium	Herbicides	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	7010S	7009S	—	7010S	—	7010S	—	—	7010S	7010S
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	7010S	7009S	—	7010S	—	7010S	—	—	7010S	7010S
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	7010S	7009S	—	7010S	—	7010S	—	—	7010S	7010S
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	7010S	7009S	—	7010S	—	7010S	—	—	7010S	7010S
MD21-09-8736	21-27550	14.3000–15.3000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-75730	21-27551	10.0000–11.0000	QBT3	7027S	7026S	—	7027S	—	7027S	—	—	7027S	7027S
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	7027S	7026S	—	7027S	—	7027S	—	—	7027S	7027S
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	7027S	7026S	—	7027S	—	7027S	—	—	7027S	7027S
RE21-07-75734	21-27552	0.0000–0.5000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75736	21-27552	5.0000–6.0000	QBT3	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75737	21-27553	0.0000–0.5000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75739	21-27553	5.0000–6.0000	QBT3	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
MD21-09-8729	21-27553	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-75752	21-27554	0.0000–0.5000	SOIL	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75753	21-27554	2.5000–3.5000	QBT3	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75754	21-27554	4.5000–5.5000	QBT3	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75744	21-27555	2.0000–2.5000	QBT3	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75746	21-27556	2.0000–2.5000	QBT3	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75748	21-27557	2.0000–2.5000	QBT3	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75749	21-27558	0.0000–0.5000	SOIL	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	6651S	6650S	—	6651S	—	6651S	—	—	6651S	6651S
RE21-07-583	21-27558	2.0000–3.0000	QBT3	—	—	07-292	—	—	—	—	07-291	—	—
RE21-07-75755	21-27559	0.0000–0.5000	SOIL	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75756	21-27559	2.5000–3.5000	QBT3	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75757	21-27559	4.5000–5.5000	QBT3	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75765	21-27560	0.0000–0.5000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S

Table 4.2-22 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Gross Alpha/Beta	Tritium	Herbicides	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium
RE21-07-75766	21-27560	2.0000–3.0000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
MD21-09-8727	21-27560	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	09-2184	—
RE21-07-75767	21-27561	0.0000–0.5000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75768	21-27561	2.0000–3.0000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
MD21-09-8728	21-27561	7.0000–8.0000	SOIL	—	—	—	09-2184	—	—	—	—	—	—
RE21-07-75769	21-27562	0.0000–0.5000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75770	21-27562	2.0000–3.0000	QBT3	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75772	21-27563	2.0000–3.0000	SOIL	6990S	6989S	—	6990S	—	6990S	—	—	6990S	6990S
RE21-07-75773	21-27564	9.5000–10.5000	QBT3	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75774	21-27564	11.5000–12.5000	QBT3	6993S	6992S	—	6993S	—	6993S	—	—	6993S	6993S
RE21-07-75775	21-27565	12.0000–13.0000	QBT3	7004S	7003S	—	7004S	—	7004S	—	—	7004S	7004S
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	7004S	7003S	—	7004S	—	7004S	—	—	7004S	7004S
RE21-07-75777	21-27566	12.0000–13.0000	QBT3	7004S	7003S	—	7004S	—	7004S	—	—	7004S	7004S
RE21-07-75778	21-27566	14.0000–15.0000	QBT3	7004S	7003S	—	7004S	—	7004S	—	—	7004S	7004S
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	7027S	7026S	—	7027S	—	7027S	—	—	7027S	7027S
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	7027S	7026S	—	7027S	—	7027S	—	—	7027S	7027S
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	7007S	7006S	—	7007S	—	7007S	—	—	7007S	7007S
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	7007S	7006S	—	7007S	—	7007S	—	—	7007S	7007S
RE21-07-75806	21-27570	5.5000–6.5000	QBT3	7007S	7006S	—	7007S	—	7007S	—	—	7007S	7007S
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	7007S	7006S	—	7007S	—	7007S	—	—	7007S	7007S
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	7007S	7006S	—	7007S	—	7007S	—	—	7007S	7007S
RE21-07-75809	21-27571	5.5000–6.5000	QBT3	7007S	7006S	—	7007S	—	7007S	—	—	7007S	7007S
MD21-09-8735	21-27571	10.5000–11.5000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-75810	21-27572	0.0000–0.5000	QBT3	7021S	7020S	—	7021S	—	7021S	—	—	7021S	7021S
RE21-07-75811	21-27572	2.0000–3.0000	QBT3	7021S	7020S	—	7021S	—	7021S	—	—	7021S	7021S
RE21-07-75812	21-27572	5.0000–6.0000	QBT3	7021S	7020S	—	7021S	—	7021S	—	—	7021S	7021S
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75814	21-27573	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75815	21-27574	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75816	21-27574	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S

Table 4.2-22 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Gross Alpha/Beta	Tritium	Herbicides	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium
MD21-09-8726	21-27575	4.0000–5.0000	QBT3	09-2240	—	—	—	—	—	—	—	09-2240	—
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75821	21-27577	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75822	21-27577	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75823	21-27578	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75824	21-27578	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75827	21-27580	0.0000–0.5000	SOIL	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75828	21-27580	2.0000–3.0000	QBT3	7015S	7014S	—	7015S	—	7015S	—	—	7015S	7015S
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	7030S	7029S	—	7030S	—	7030S	—	—	7030S	7030S
RE21-07-75830	21-27581	12.0000–13.0000	QBT3	7030S	7029S	—	7030S	—	7030S	—	—	7030S	7030S
MD21-09-8730	21-605238	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-09-8731	21-605238	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-09-12422	21-605238	19.0000–20.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-09-8732	21-605239	2.0000–3.0000	QBT3	—	—	—	09-2240	—	—	—	—	—	—
MD21-09-8733	21-605239	7.0000–8.0000	QBT3	—	—	—	09-2240	—	—	—	—	—	—
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	09-2240

Table 4.2-22 (continued)

Sample ID	Location ID	Depth (ft)	Media	TAL Metals	PCBs	Perchlorate	Pesticides	Strontium-90	SVOCs	TPH-DRO	TPH-GRO	VOCs	Wet Chemistry
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	7009S	—	7009S	—	7010S	7008S	—	—	—	7009S
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	7009S	—	7009S	—	7010S	7008S	—	—	7008S	7009S
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	7009S	—	7009S	—	7010S	7008S	—	—	7008S	7009S
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	7009S	—	7009S	—	7010S	7008S	—	—	7008S	7009S
MD21-09-8736	21-27550	14.3000–15.3000	QBT3	—	—	—	—	—	09-2035	—	—	—	—
RE21-07-75730	21-27551	10.0000–11.0000	QBT3	7026S	—	7026S	—	7027S	7025S	—	—	7025S	7026S
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	7026S	—	7026S	—	7027S	7025S	—	—	7025S	7026S
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	7026S	—	7026S	—	7027S	7025S	—	—	7025S	7026S
RE21-07-75734	21-27552	0.0000–0.5000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	—	6989S
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
RE21-07-75736	21-27552	5.0000–6.0000	QBT3	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
RE21-07-75737	21-27553	0.0000–0.5000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	—	6989S
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
RE21-07-75739	21-27553	5.0000–6.0000	QBT3	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
MD21-09-8729	21-27553	10.0000–11.0000	QBT3	09-2184[b]	—	—	—	—	—	—	—	—	—
RE21-07-75752	21-27554	0.0000–0.5000	SOIL	6992S	—	6992S	—	6993S	6991S	—	—	—	6992S
RE21-07-75753	21-27554	2.5000–3.5000	QBT3	6992S	—	6992S	—	6993S	6991S	—	—	6991S	6992S
RE21-07-75754	21-27554	4.5000–5.5000	QBT3	6992S	—	6992S	—	6993S	6991S	—	—	6991S	6992S
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	6650S	—	6650S	—	6651S	6649S	—	—	—	6650S
RE21-07-75744	21-27555	2.0000–2.5000	QBT3	6650S	—	6650S	—	6651S	6649S	—	—	6649S	6650S
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	6650S	—	6650S	—	6651S	6649S	—	—	—	6650S
RE21-07-75746	21-27556	2.0000–2.5000	QBT3	6650S	—	6650S	—	6651S	6649S	—	—	6649S	6650S
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	6650S	—	6650S	—	6651S	6649S	—	—	—	6650S
RE21-07-75748	21-27557	2.0000–2.5000	QBT3	6650S	—	6650S	—	6651S	6649S	—	—	6649S	6650S
RE21-07-75749	21-27558	0.0000–0.5000	SOIL	6650S	—	6650S	—	6651S	6649S	—	—	—	6650S
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	6650S	—	6650S	—	6651S	6649S	—	—	6649S	6650S
RE21-07-583	21-27558	2.0000–3.0000	QBT3	—	07-291	—	—	—	—	—	—	—	—
RE21-07-75755	21-27559	0.0000–0.5000	SOIL	6992S	—	6992S	—	6993S	6991S	—	—	—	6992S
RE21-07-75756	21-27559	2.5000–3.5000	QBT3	6992S	—	6992S	—	6993S	6991S	—	—	6991S	6992S
RE21-07-75757	21-27559	4.5000–5.5000	QBT3	6992S	—	6992S	—	6993S	6991S	—	—	6991S	6992S
RE21-07-75765	21-27560	0.0000–0.5000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	—	6989S
RE21-07-75766	21-27560	2.0000–3.0000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
MD21-09-8727	21-27560	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-75767	21-27561	0.0000–0.5000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	—	6989S

Table 4.2-22 (continued)

Sample ID	Location ID	Depth (ft)	Media	TAL Metals	PCBs	Perchlorate	Pesticides	Strontium-90	SVOCs	TPH-DRO	TPH-GRO	VOCs	Wet Chemistry
RE21-07-75768	21-27561	2.0000–3.0000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
MD21-09-8728	21-27561	7.0000–8.0000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-75769	21-27562	0.0000–0.5000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	—	6989S
RE21-07-75770	21-27562	2.0000–3.0000	QBT3	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	—	6989S
RE21-07-75772	21-27563	2.0000–3.0000	SOIL	6989S	—	6989S	—	6990S	6988S	—	—	6988S	6989S
RE21-07-75773	21-27564	9.5000–10.5000	QBT3	6992S	—	6992S	—	6993S	6991S	—	—	6991S	6992S
RE21-07-75774	21-27564	11.5000–12.5000	QBT3	6992S	—	6992S	—	6993S	6991S	—	—	6991S	6992S
RE21-07-75775	21-27565	12.0000–13.0000	QBT3	7003S	—	7003S	—	7004S	7002S	—	—	7002S	7003S
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	7003S	—	7003S	—	7004S	7002S	—	—	7002S	7003S
RE21-07-75777	21-27566	12.0000–13.0000	QBT3	7003S	—	7003S	—	7004S	7002S	—	—	7002S	7003S
RE21-07-75778	21-27566	14.0000–15.0000	QBT3	7003S	—	7003S	—	7004S	7002S	—	—	7002S	7003S
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	7026S	—	7026S	—	7027S	7025S	—	—	7025S	7026S
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	7026S	—	7026S	—	7027S	7025S	—	—	7025S	7026S
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	7006S	—	7006S	—	7007S	7005S	—	—	—	7006S
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	7006S	—	7006S	—	7007S	7005S	—	—	7005S	7006S
RE21-07-75806	21-27570	5.5000–6.5000	QBT3	7006S	—	7006S	—	7007S	7005S	—	—	7005S	7006S
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	7006S	—	7006S	—	7007S	7005S	—	—	—	7006S
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	7006S	—	7006S	—	7007S	7005S	—	—	7005S	7006S
RE21-07-75809	21-27571	5.5000–6.5000	QBT3	7006S	—	7006S	—	7007S	7005S	—	—	7005S	7006S
MD21-09-8735	21-27571	10.5000–11.5000	SOIL	09-2184[c]	—	—	—	—	—	—	—	—	—
RE21-07-75810	21-27572	0.0000–0.5000	QBT3	7020S	—	7020S	—	7021S	7019S	—	—	—	7020S
RE21-07-75811	21-27572	2.0000–3.0000	QBT3	7020S	—	7020S	—	7021S	7019S	—	—	7019S	7020S
RE21-07-75812	21-27572	5.0000–6.0000	QBT3	7020S	—	7020S	—	7021S	7019S	—	—	7019S	7020S
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75814	21-27573	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75815	21-27574	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75816	21-27574	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
MD21-09-8726	21-27575	4.0000–5.0000	QBT3	09-2240[d]	—	—	—	—	—	—	—	—	—
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75821	21-27577	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S

Table 4.2-22 (continued)

Sample ID	Location ID	Depth (ft)	Media	TAL Metals	PCBs	Perchlorate	Pesticides	Strontium-90	SVOCs	TPH-DRO	TPH-GRO	VOCs	Wet Chemistry
RE21-07-75822	21-27577	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75823	21-27578	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75824	21-27578	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75827	21-27580	0.0000–0.5000	SOIL	7014S	—	7014S	—	7015S	7013S	—	—	—	7014S
RE21-07-75828	21-27580	2.0000–3.0000	QBT3	7014S	—	7014S	—	7015S	7013S	—	—	7013S	7014S
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	7029S	—	7029S	—	7030S	7028S	—	—	7028S	7029S
RE21-07-75830	21-27581	12.0000–13.0000	QBT3	7029S	—	7029S	—	7030S	7028S	—	—	7028S	7029S
MD21-09-8730	21-605238	5.0000–6.0000	QBT3	09-2184[b]	—	—	—	—	—	—	—	—	—
MD21-09-8731	21-605238	10.0000–11.0000	QBT3	09-2209[b]	—	—	—	—	—	—	—	—	—
MD21-09-12422	21-605238	19.0000–20.0000	QBT3	09-3031[b]	—	—	—	—	—	—	—	—	—
MD21-09-8732	21-605239	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-09-8733	21-605239	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	09-2240[e]	—	—	—	—	09-2240	—	—	—	09-2240[f]

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

[a] — = Analysis not requested.

[b] Metals analysis included only calcium.

[c] Metals analysis included only lead.

[d] Metals analysis included only silver.

[e] Metals analysis included only silver and uranium.

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

Table 4.2-23
Samples Collected and Analyses Requested at SWMU 21-027(a)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Thorium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	07-267	07-267	—[a]	07-267	07-267	—	07-267	—	07-267	07-267	—	07-267	07-267	07-267	—	07-267
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	07-267	07-267	—	07-267	07-267	—	07-267	—	07-267	07-267	—	07-267	07-267	07-267	07-267	07-267
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	07-267	07-267	—	07-267	07-267	—	07-267	—	07-267	07-267	—	07-267	07-267	07-267	—	07-267
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	07-267	07-267	—	07-267	07-267	—	07-267	—	07-267	07-267	—	07-267	07-267	07-267	07-267	07-267
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	07-267	07-267	—	07-267	07-267	—	07-267	—	07-267	07-267	—	07-267	07-267	07-267	—	07-267
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	07-267	07-267	—	07-267	07-267	—	07-267	—	07-267	07-267	—	07-267	07-267	07-267	07-267	07-267
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	—	07-270
RE21-08-10373	21-600864	0.0000–0.5000	SOIL	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3901	21-600864	2.0000–3.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-08-10374	21-600864	2.0000–3.0000	QBT3	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	—	07-270
RE21-07-3903	21-600865	2.0000–3.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	—	07-270
RE21-07-3905	21-600866	2.0000–3.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	—	07-270
RE21-08-10375	21-600867	0.0000–0.5000	SOIL	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3907	21-600867	2.0000–3.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-08-10376	21-600867	2.0000–3.0000	QBT3	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	—	07-270
RE21-07-3909	21-600868	2.0000–3.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	—	07-270
RE21-07-3925	21-600872	0.0000–0.5000	SOIL	—	—	07-286	—	—	07-285	—	—	—	—	07-285	—	—	—	—	—
RE21-07-3917	21-600872	2.0000–3.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-08-10371	21-600872	2.0000–3.0000	QBT3	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3918	21-600872	5.0000–6.0000	QBT3	07-271	07-270	—	07-271	07-271	—	07-271	—	07-271	07-270	—	07-270	07-271	07-269	07-269	07-270
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	07-735	07-734	—	07-735	07-735	—	07-735	—	07-735	07-734	—	07-734	07-735	07-733	07-733	07-734
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	07-735	07-734	—	07-735	07-735	—	07-735	—	07-735	07-734	—	07-734	07-735	07-733	07-733	07-734
MD21-09-8594	21-601224	8.0000–9.0000	QBT3	09-2038	—	—	—	—	—	09-2038	—	—	—	—	—	—	—	—	—
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	07-735	07-734	—	07-735	07-735	—	07-735	—	07-735	07-734	—	07-734	07-735	07-733	07-733	07-734
RE21-08-10372	21-601225	1.0000–2.0000	QBT3	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	07-735	07-734	—	07-735	07-735	—	07-735	—	07-735	07-734	—	07-734	07-735	07-733	07-733	07-734
RE21-07-5893	21-601225	3.0000–4.0000	QBT3	—	—	08-347	—	—	08-348	—	—	—	—	08-348	—	—	—	—	—

Table 4.2-23 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Thorium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
MD21-09-12457	21-601225	7.0000–8.0000	QBT3	—	—	09-3252	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	07-735	07-734	—	07-735	07-735	—	07-735	—	07-735	07-734	—	07-734	07-735	07-733	07-733	07-734
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	07-735	07-734	—	07-735	07-735	—	07-735	—	07-735	07-734	—	07-734	07-735	07-733	07-733	07-734
MD21-09-8599	21-601226	9.5000–10.5000	QBT3	—	—	—	—	09-2038	—	—	—	—	—	—	—	—	—	—	—
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	07-745	07-745	—	07-745	07-745	—	07-745	—	07-745	07-745	—	07-745	07-745	07-745	07-745	07-745
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	07-745	07-745	—	07-745	07-745	—	07-745	—	07-745	07-745	—	07-745	07-745	07-745	07-745	07-745
MD21-09-8593	21-601227	8.5000–9.5000	QBT3	09-2038	—	—	—	—	—	09-2038	—	—	09-2038[b]	—	—	—	—	09-2038[c]	—
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	07-910	07-910	—	07-910	07-910	—	07-910	07-910	07-910	07-910	—	07-910	07-910	07-910	07-910	07-910
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	07-910	07-910	—	07-910	07-910	—	07-910	07-910	07-910	07-910	—	07-910	07-910	07-910	07-910	07-910
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	08-273	08-272	—	08-273	08-273	—	08-273	—	08-273	08-272	—	08-272	08-273	08-271	08-271	08-272
RE21-08-10369	21-601229	1.0000–2.0000	SOIL	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-5871	21-601229	6.0000–7.0000	QBT3	08-273	08-272	—	08-273	08-273	—	08-273	—	08-273	08-272	—	08-272	08-273	08-271	08-271	08-272
RE21-08-10370	21-601229	6.0000–7.0000	SOIL	—	—	08-557	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-09-8597	21-601229	11.0000–12.0000	QBT3	—	—	09-2037	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-5872	21-601229	11.0000–12.0000	QBT3	08-273	08-272	—	08-273	08-273	—	08-273	—	08-273	08-272	—	08-272	08-273	08-271	08-271	08-272
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	08-273	08-272	—	08-273	08-273	—	08-273	—	08-273	08-272	—	08-272	08-273	08-271	08-271	08-272
RE21-07-5876	21-601229	21.0000–22.0000	QBT3	08-273	08-272	—	08-273	08-273	—	08-273	—	08-273	08-272	—	08-272	08-273	08-271	08-271	08-272
MD21-09-8838	21-605279	0.0000–0.5000	QBT3	09-2489	—	—	—	—	—	09-2489	—	09-2489	09-2489[d]	—	—	—	09-2489	—	—
MD21-09-8839	21-605280	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	09-2489[e]	—	—	—	—	—	—
MD21-09-12456	21-608020	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	09-3251[e]	—	—	—	—	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only zinc.

[c] VOCs analysis included only tetrachloroethene.

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

[e] Metals analysis included only chromium.

Table 4.2-24
Samples Collected and Analyses Requested at SWMU 21-027(c)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-75115	21-27399	3.0000–4.0000	SOIL	7104S	7103S	—[a]	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	7102S	7103S
RE21-07-75116	21-27399	5.0000–6.0000	SOIL	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	7102S	7103S
RE21-07-75117	21-27399	8.0000–9.0000	QBT3	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	7102S	7103S
RE21-07-75121	21-27401	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75122	21-27401	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
MD21-09-8717	21-27401	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	09-2377	—	—
RE21-07-75123	21-27402	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75124	21-27402	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75125	21-27403	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75126	21-27403	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75127	21-27404	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75128	21-27404	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75129	21-27405	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75130	21-27405	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75131	21-27406	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75132	21-27406	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75133	21-27407	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75134	21-27407	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75135	21-27408	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75136	21-27408	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75137	21-27409	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75138	21-27409	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75139	21-27410	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75140	21-27410	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-5087	21-27411	0.0000–0.5000	SOIL	—	—	07-308	—	—	07-309	—	—	—	07-309	—	—	—	—	—
RE21-07-75141	21-27411	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75142	21-27411	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
RE21-07-75143	21-27412	0.0000–0.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	—	6576S
RE21-07-75144	21-27412	2.0000–2.5000	SOIL	6577S	6576S	—	6577S	6577S	—	6577S	6577S	6576S	—	6576S	6577S	6578S	6578S	6576S
MD21-09-8715	21-27412	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	09-2466[b]	—	—	—	—	—	—
MD21-09-12452	21-27412	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	09-3249[b]	—	—	—	—	—	—
RE21-07-75145	21-27413	2.5000–3.5000	SOIL	7099S	7099S	—	7099S	7099S	—	7099S	7099S	7099S	—	7099S	7099S	7099S	7099S	7099S

Table 4.2-24 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOCs	VOCs	Wet Chemistry
RE21-07-75146	21-27413	4.5000–5.5000	SOIL	7099S	7099S	—	7099S	7099S	—	7099S	7099S	7099S	—	7099S	7099S	7099S	7099S	7099S
RE21-07-75147	21-27414	0.0000–0.5000	SOIL	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	—	7103S
RE21-07-75148	21-27414	3.0000–4.0000	SOIL	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	7102S	7103S
RE21-07-75151	21-27414	5.0000–6.0000	SOIL	7108S	7107S	—	7108S	7108S	—	7108S	7108S	7107S	—	7107S	7108S	7106S	7106S	7107S
RE21-07-75149	21-27415	0.0000–0.5000	SOIL	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	—	7103S
RE21-07-75150	21-27415	3.0000–4.0000	SOIL	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	7102S	7103S
RE21-07-75153	21-27415	5.0000–6.0000	SOIL	7104S	7103S	—	7104S	7104S	—	7104S	7104S	7103S	—	7103S	7104S	7102S	7102S	7103S
MD21-09-8712	21-605232	0.0000–0.5000	SOIL	09-2441	—	—	—	—	—	09-2441	—	—	—	—	—	—	—	—
MD21-09-8713	21-605233	4.0000–5.0000	QBT3	09-2377	—	—	09-2377	—	—	09-2377	—	—	—	—	—	—	—	—
MD21-09-8714	21-605234	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	09-2441[b]	—	—	—	—	—	—
MD21-09-8716	21-605236	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	09-2466	—	—	—
MD21-09-12453	21-608017	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	09-3249[b]	—	—	—	—	—	—

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

[a] — = Analysis not requested.

[b] Metals analysis included only lead.

Table 4.2-25
Samples Collected and Analyses Requested at AOC C-21-027

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Anions	Dioxins/Furans	Gamma Spectroscopy	Tritium	Hexavalent Chromium	Explosive Compounds	Isotopic Plutonium	Isotopic Uranium	TAL Metals	PCBs	Perchlorate	Strontium-90	SVOSs	VOCs	Wet Chemistry
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	09-3186	09-3185	—*	09-3186	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3185	09-3186	09-3184	09-3184	09-3185
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3185	09-3186	09-3184	09-3184	09-3185
MD21-09-9092	21-605337	10.0000–11.0000	QBT3	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3185	09-3186	09-3184	09-3184	09-3185
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3185	09-3186	09-3184	09-3184	09-3185
MD21-10-7825	21-605338	0.0000–0.5000	SOIL	—	—	10-855	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-09-9094	21-605338	5.0000–6.0000	SOIL	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3185	09-3186	09-3184	09-3184	09-3185
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3186	09-3186	09-3185	—	09-3185	09-3186	09-3184	09-3184	09-3185
MD21-10-7826	21-605339	0.0000–0.5000	SOIL	—	—	10-855	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3193	09-3194	09-3194	09-3194, 09-3199	09-3193
MD21-09-9097	21-605339	2.0000–3.0000	QBT3	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3193	09-3194	09-3194	09-3199	09-3193
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3193	09-3194	09-3194	09-3199	09-3193
MD21-09-12897	21-605340	2.0000–3.0000	SOIL	—	—	09-3311	—	—	—	09-3310	—	—	—	09-3310	—	—	—	—	—
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3193	09-3194	09-3194	09-3199	09-3193
MD21-10-7816	21-605340	5.0000–6.0000	QBT3	10-857	—	10-855	—	—	—	—	10-857	—	—	—	—	—	—	—	—
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3193	09-3194	09-3194	09-3199	09-3193
MD21-09-9103	21-605341	2.0000–3.0000	SOIL	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3194	09-3194	09-3193	—	09-3193	09-3194	09-3194	09-3199	09-3193
MD21-09-9105	21-605342	0.0000–0.5000	QBT3	09-3263	09-3263	—	09-3263	09-3263	09-3263	—	09-3263	09-3263	09-3263	—	09-3263	09-3263	09-3263	—	09-3263
MD21-10-7832	21-605342	0.0000–0.5000	QBT3	—	—	10-1058	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-09-9106	21-605342	2.0000–3.0000	QBT3	09-3263	09-3263	—	09-3263	09-3263	09-3263	—	09-3263	09-3263	09-3263	—	09-3263	09-3263	09-3263	09-3263	09-3263
MD21-10-7817	21-610682	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	10-857	—	—	—	—	—	—	—	—
MD21-10-7818	21-610683	0.0000–1.0000	SOIL	—	—	—	—	—	—	—	10-857	—	—	—	—	—	—	—	—
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	10-857	10-856	10-855	10-857	10-857	10-856	—	10-857	10-857	10-856	—	10-856	10-857	10-856	—	10-856
MD21-10-7820	21-610684	5.0000–6.0000	QBT3	10-857	10-856	—	10-857	10-857	10-856	—	10-857	10-857	10-856	—	10-856	10-857	10-856	10-856	10-856
MD21-10-7821	21-610684	10.0000–11.0000	QBT3	10-857	10-856	—	10-857	10-857	10-856	—	10-857	10-857	10-856	—	10-856	10-857	10-856	10-856	10-856
MD21-10-7833	21-610686	0.0000–0.5000	SOIL	—	—	10-1058	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: Numbers in analyte columns are request numbers. Samples with request numbers starting with 09 or 10 were collected during Phase II investigation activities.
* — = Analysis not requested.

Table 6.1-1
Summary of Inorganic Chemicals above BVs at AOC 21-002(b)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Magnesium	Nitrate	Perchlorate	Selenium	Silver	Uranium	Zinc
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**1690**	**na**[a]	**na**	**0.3**	**1**	**2.4**	**63.5**
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**4610**	**na**	**na**	**1.52**	**1**	**1.82**	**48.8**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**3130**	**1560**	**400**	**na**	**125000**	**54.8**	**391**	**391**	**235**	**23500**
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**	**na**	**1820000**	**795**	**5680**	**5680**	**3410**	**341000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**	**na**	**496000**	**217**	**1550**	**1550**	**929**	**92900**
RE21-06-68368	21-25679	0.0000–0.5000	SOIL	—[c]	—	—	0.685	8590 (J)	28.6	—	1.14	140	—	4.68 (J-)	—	1.74 (U)	2.15	—	195
RE21-06-68369	21-25679	2.5000–3.0000	QBT3	10400 (J+)	2.93	82.3	—	—	11.3	—	—	—	—	1.17 (J-)	—	1.54 (U)	—	—	—
RE21-06-68370	21-25680	0.0000–0.5000	SOIL	—	—	—	0.497 (J)	—	—	—	0.913	66.4	—	7.74 (J-)	—	1.64 (U)	—	—	93.5
RE21-06-68371	21-25680	2.5000–3.0000	QBT3	7390 (J+)	3.38	—	—	—	17.2	—	—	—	—	—	—	1.6 (U)	—	—	—
RE21-06-68373	21-25681	0.0000–0.5000	SOIL	—	—	—	0.474 (J)	—	—	—	—	40.6	—	2.68 (J-)	—	1.67 (U)	—	2.29 (J)	75.3
RE21-06-68374	21-25681	2.5000–3.0000	QBT3	—	3.3	—	—	—	19.7	—	—	—	—	—	—	1.54 (U)	—	—	—
RE21-06-68375	21-25682	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	29.9	—	2.19 (J-)	—	1.71 (U)	—	—	48.9
RE21-06-68376	21-25682	2.5000–3.0000	QBT3	12500 (J+)	3.55	138	—	2760 (J)	12.2	—	—	—	1880	—	0.000696 (J)	1.64 (U)	—	—	—
RE21-06-68378	21-25683	0.0000–0.5000	SOIL	—	—	—	0.984	—	—	—	1.49	267	—	10.1 (J-)	0.00127 (J)	1.7 (U)	—	—	262
RE21-06-68379	21-25683	2.5000–3.0000	QBT3	—	—	—	—	—	7.55	—	—	—	—	1.37 (J-)	—	1.56 (U)	—	—	—
RE21-06-68380	21-25684	0.0000–0.5000	SOIL	—	—	—	0.494 (J)	—	—	—	—	63.6	—	4.36 (J-)	—	1.67 (U)	—	—	88.1
RE21-06-68381	21-25684	2.5000–3.0000	QBT3	7590 (J+)	—	75.2	—	—	15.4	—	—	—	—	—	—	1.6 (U)	—	—	—
RE21-06-68383	21-25685	0.0000–0.5000	SOIL	—	—	—	0.523 (J)	—	—	—	—	28.9	—	1.71 (J-)	—	1.62 (U)	—	—	67.5
RE21-06-68384	21-25685	2.5000–3.0000	QBT3	—	9.49	—	—	—	15.4	—	—	14.9	—	—	—	1.59 (U)	—	—	—
RE21-06-68385	21-25686	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	1.58 (U)	—	—	—
RE21-06-68386	21-25686	2.5000–3.0000	QBT3	—	—	58.6	—	—	25.1	—	—	—	—	—	—	1.61 (U)	—	—	—
RE21-06-68388	21-25687	0.0000–0.5000	SOIL	—	—	—	0.891	—	—	—	—	451	—	1.87 (J-)	0.000785 (J)	1.6 (U)	—	—	221
RE21-06-68389	21-25687	2.5000–3.0000	QBT3	11000 (J+)	—	67.1	—	—	22.5	—	—	—	1730	—	—	1.66 (U)	—	—	—
RE21-06-68390	21-25688	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	13.8	—	1.81 (U)	—	—	—
RE21-06-68391	21-25688	2.5000–3.0000	QBT3	—	—	79.8	—	3810 (J)	9.06	—	—	—	—	2.19	—	1.59 (U)	—	—	—
RE21-06-68396	21-25689	0.0000–0.5000	SOIL	—	—	—	0.557 (U)	—	—	—	—	58.4 (J-)	—	1.71	—	8.27	—	—	61.8
RE21-06-68397	21-25689	2.5000–3.0000	QBT3	12700	—	61.7	2.62 (U)	—	10.6	—	0.547	—	1990 (J+)	0.77 (J)	—	6.93	—	—	—
RE21-06-68398	21-25690	0.0000–0.5000	SOIL	—	—	—	0.52 (U)	—	—	—	—	—	—	0.726 (J)	—	3.12	—	—	—
RE21-06-68399	21-25690	2.5000–3.0000	QBT3	7390	3.06	—	—	—	20.5	—	—	—	—	0.761 (J)	0.00125 (J)	4.81	—	—	—
RE21-06-68400	21-25691	0.0000–0.5000	SOIL	—	—	—	0.531 (U)	—	—	—	—	—	—	1.64	—	7.21	—	—	—
RE21-06-68401	21-25691	2.5000–3.0000	QBT3	—	—	—	—	—	8.69	—	—	—	—	0.753 (J)	—	2.3	—	—	—
RE21-06-68402	21-25692	0.0000–0.5000	SOIL	—	—	—	0.583 (U)	—	—	—	—	69.9 (J-)	—	3.75	—	7.35	—	—	100

Table 6.1-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Magnesium	Nitrate	Perchlorate	Selenium	Silver	Uranium	Zinc
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**1690**	**na**[a]	**na**	**0.3**	**1**	**2.4**	**63.5**
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**4610**	**na**	**na**	**1.52**	**1**	**1.82**	**48.8**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**3130**	**1560**	**400**	**na**	**125000**	**54.8**	**391**	**391**	**235**	**23500**
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**	**na**	**1820000**	**795**	**5680**	**5680**	**3410**	**341000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**	**na**	**496000**	**217**	**1550**	**1550**	**929**	**92900**
RE21-06-68403	21-25692	2.5000–3.0000	QBT3	—	—	—	—	—	15.9	—	—	—	—	0.953 (J)	—	3.38	—	—	—
RE21-06-68404	21-25693	0.0000–0.5000	SOIL	—	—	—	0.573 (U)	—	—	—	0.749	155 (J-)	—	10.6	0.000862 (J)	6.58	—	—	182
RE21-06-68405	21-25693	2.5000–3.0000	QBT3	8930	4.87	61.4	—	—	13.2	—	—	20.4 (J-)	—	0.751 (J)	—	6	—	—	—
RE21-06-68406	21-25694	0.0000–0.5000	SOIL	—	—	—	0.566 (U)	—	—	—	—	66.9 (J-)	—	3.29	—	6.91	—	—	73.1
RE21-06-68407	21-25694	2.5000–3.0000	QBT3	—	—	—	—	—	18.1	—	—	—	—	0.762 (J)	—	3.6	—	—	—
RE21-06-68408	21-25695	0.0000–0.5000	SOIL	—	—	—	0.546 (U)	—	—	—	—	25.7 (J-)	—	—	—	5.85	—	—	—
RE21-06-68409	21-25695	2.5000–3.0000	QBT3	—	3.43	—	—	—	10.8	—	—	—	—	—	—	3.9	—	—	—
RE21-06-68410	21-25696	0.0000–0.5000	SOIL	—	—	—	0.524 (U)	—	—	—	—	36.7 (J-)	—	0.75 (J)	—	7.69	—	—	55.7
RE21-06-68411	21-25696	2.5000–3.0000	QBT3	13600	3.26	146	2.69 (U)	2500	13.1	4.8	—	16.6 (J-)	2420 (J+)	—	0.00114 (J)	8.01	—	—	—
RE21-09-3625	21-604522	0.0000–0.5000	SOIL	NA[d]	NA	NA	NA	NA	NA	NA	NA	31	NA	NA	NA	NA	NA	NA	92

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] — = Not detected or not detected above BV.
[d] NA = Not Analyzed.

Table 6.1-2
Summary of Organic Chemicals Detected at AOC 21-002(b)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Di-n-butylphthalate	Dimethyl Phthalate
Residential SSL				**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**	**6110**	**611000**
Industrial SSL				**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**2340**	**68400**	**6840000**
Construction Worker SSL				**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**20600**	**23800**	**2380000**
RE21-06-68368	21-25679	0.0000–0.5000	SOIL	NA[b]	—[c]	NA	NA	0.0654	0.076 (J)	0.152 (J)	—	—	—	—	—	—
RE21-06-68369	21-25679	2.5000–3.0000	QBT3	0.00598 (J)	—	0.0418	0.017	—	0.0807	0.335	0.172	—	—	0.099	—	—
RE21-09-3629	21-25679	7.0000–8.0000	SOIL	NA	—	NA	NA	—	—	—	—	—	0.085 (J)	—	0.12 (J)	—
RE21-06-68371	21-25680	2.5000–3.0000	QBT3	0.0123 (J)	—	NA	NA	—	—	—	—	—	—	—	—	—
RE21-06-68373	21-25681	0.0000–0.5000	SOIL	NA	0.0075 (J)	NA	NA	—	—	—	—	0.41	—	0.174	0.0433 (J)	0.12 (J)
RE21-06-68375	21-25682	0.0000–0.5000	SOIL	NA	0.0076 (J)	NA	NA	—	0.0627	0.155	0.139	—	—	0.0544	—	—
RE21-06-68378	21-25683	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	—	0.0388	—	—
RE21-06-68379	21-25683	2.5000–3.0000	QBT3	—	—	0.0394	0.0148	—	—	—	—	—	—	—	—	—
RE21-06-68380	21-25684	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	0.0625	—	0.0352 (J)	—	—
RE21-06-68383	21-25685	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	—	0.052	—	—
RE21-06-68388	21-25687	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	—	—	—	—
RE21-06-68396	21-25689	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	0.795	—	—	—
RE21-06-68398	21-25690	0.0000–0.5000	SOIL	NA	0.0149 (J)	NA	NA	—	—	0.0559	—	—	—	—	—	—
RE21-06-68400	21-25691	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	—	—	—	—
RE21-06-68402	21-25692	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	—	—	0.47 (J)	—
RE21-06-68404	21-25693	0.0000–0.5000	SOIL	NA	0.00992 (J)	NA	NA	—	—	0.172 (J)	—	0.0757 (J)	—	—	—	—
RE21-06-68406	21-25694	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	0.358	—	—	—	—	—	—
RE21-06-68408	21-25695	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	0.073 (J)	—	—	1.99	—	—	—
RE21-06-68410	21-25696	0.0000–0.5000	SOIL	NA	—	NA	NA	—	—	—	—	—	—	—	—	—

Table 6.1-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Methyl-2-pentanone[4-]
Residential SSL				**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**6.21**	**5950**
Industrial SSL				**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**23.4**	**73300**
Construction Worker SSL				**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**213**	**23100**
RE21-06-68368	21-25679	0.0000–0.5000	SOIL	0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.144 (J)	NA
RE21-06-68369	21-25679	2.5000–3.0000	QBT3	0.0637	2.63E-06	6.02E-06	0.00000107 (J)	0.00000264 (J)	6.41E-07	1.96E-07	0.000000124 (J)	0.0000000943 (J)	1.36E-06	0.166	—
RE21-09-3629	21-25679	7.0000–8.0000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68371	21-25680	2.5000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00171 (J)
RE21-06-68373	21-25681	0.0000–0.5000	SOIL	0.119	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68375	21-25682	0.0000–0.5000	SOIL	0.0363 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.14	NA
RE21-06-68378	21-25683	0.0000–0.5000	SOIL	0.0421	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68379	21-25683	2.5000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—
RE21-06-68380	21-25684	0.0000–0.5000	SOIL	0.0534	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68383	21-25685	0.0000–0.5000	SOIL	0.0403	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68388	21-25687	0.0000–0.5000	SOIL	0.0224 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68396	21-25689	0.0000–0.5000	SOIL	0.0909 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68398	21-25690	0.0000–0.5000	SOIL	0.0336 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68400	21-25691	0.0000–0.5000	SOIL	0.0231 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68402	21-25692	0.0000–0.5000	SOIL	0.0686 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68404	21-25693	0.0000–0.5000	SOIL	0.143	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68406	21-25694	0.0000–0.5000	SOIL	0.118 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68408	21-25695	0.0000–0.5000	SOIL	0.0164 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA
RE21-06-68410	21-25696	0.0000–0.5000	SOIL	0.05 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA

Table 6.1-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**na**	**na**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**1090**[e]
Industrial SSL				**1090**	**na**	**na**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**3610**[e]
Construction Worker SSL				**10600**	**na**	**na**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**3130**[e]
RE21-06-68368	21-25679	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0329 (J)	0.0659	NA	NA	NA
RE21-06-68369	21-25679	2.5000–3.0000	QBT3	0.00531 (J)	0.000025	0.00000278 (J)	0.0000000852 (J)	8.52E-08	0.000000204 (J)	1.37E-06	—	0.066	0.000000466 (J)	1.59E-06	0.000502 (J)
RE21-09-3629	21-25679	7.0000–8.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-06-68371	21-25680	2.5000–3.0000	QBT3	0.00547 (J)	NA	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-06-68373	21-25681	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0368 (J)	0.116	NA	NA	NA
RE21-06-68375	21-25682	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0287 (J)	NA	NA	NA
RE21-06-68378	21-25683	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0471	NA	NA	NA
RE21-06-68379	21-25683	2.5000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-06-68380	21-25684	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0474	NA	NA	NA
RE21-06-68383	21-25685	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-06-68388	21-25687	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0124 (J)	0.0218 (J)	NA	NA	NA
RE21-06-68396	21-25689	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0745 (J)	NA	NA	NA
RE21-06-68398	21-25690	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0292 (J)	NA	NA	NA
RE21-06-68400	21-25691	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0168 (J)	NA	NA	NA
RE21-06-68402	21-25692	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0767 (J)	NA	NA	NA
RE21-06-68404	21-25693	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.155	NA	NA	NA
RE21-06-68406	21-25694	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.102 (J)	NA	NA	NA
RE21-06-68408	21-25695	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	0.0181 (J)	NA	NA	NA
RE21-06-68410	21-25696	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA

Source: SSLs from NMED (2009, 108070).

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

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

[b] NA= Not analyzed.

[c] — = Not detected.

[d] na= Not available.

[e] SSLs for xylenes used as a surrogate based on structural similarity.

Table 6.1-3
Summary of Radionuclides Detected or Detected above BVs/FVs at AOC 21-002(b)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Plutonium-238	Plutonium-239/240	Tritium
QBT3 Background Value				**na**[a]	**na**	**na**	**na**
SOIL Background Value				**0.013**[b]	**0.023**[b]	**0.054**[b]	**na**
Residential SAL				**30**	**37**	**33**	**750**
Industrial SAL				**180**	**240**	**210**	**440000**
Construction Worker SAL				**34**	**40**	**36**	**320000**
RE21-06-68368	21-25679	0.0000–0.5000	SOIL	0.0478	—[c]	1.66	—
RE21-06-68369	21-25679	2.5000–3.0000	QBT3	—	—	0.0751	0.018013
RE21-06-68370	21-25680	0.0000–0.5000	SOIL	0.0491	0.0244	0.553	0.030528
RE21-06-68371	21-25680	2.5000–3.0000	QBT3	—	—	—	0.020465
RE21-06-68373	21-25681	0.0000–0.5000	SOIL	—	0.0849	0.354	—
RE21-06-68375	21-25682	0.0000–0.5000	SOIL	0.0426	—	1.15	—
RE21-06-68378	21-25683	0.0000–0.5000	SOIL	0.1	0.0356	2.9	0.042295
RE21-06-68379	21-25683	2.5000–3.0000	QBT3	—	—	0.0256	—
RE21-06-68380	21-25684	0.0000–0.5000	SOIL	0.0383	0.027	0.478	—
RE21-06-68381	21-25684	2.5000–3.0000	QBT3	—	—	—	0.025745
RE21-06-68383	21-25685	0.0000–0.5000	SOIL	0.0371	0.14	0.228	—
RE21-06-68384	21-25685	2.5000–3.0000	QBT3	—	0.103	—	0.02483
RE21-06-68385	21-25686	0.0000–0.5000	SOIL	—	0.0523	—	—

Table 6.1-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Plutonium-238	Plutonium-239/240	Tritium
QBT3 Background Value				**na**[a]	**na**	**na**	**na**
SOIL Background Value				**0.013**[b]	**0.023**[b]	**0.054**[b]	**na**
Residential SAL				**30**	**37**	**33**	**750**
Industrial SAL				**180**	**240**	**210**	**440000**
Construction Worker SAL				**34**	**40**	**36**	**320000**
RE21-06-68386	21-25686	2.5000–3.0000	QBT3	—	0.0596	—	—
RE21-06-68388	21-25687	0.0000–0.5000	SOIL	—	—	0.352	—
RE21-06-68389	21-25687	2.5000–3.0000	QBT3	—	—	—	0.038746
RE21-06-68390	21-25688	0.0000–0.5000	SOIL	0.0457	—	0.589 (J-)	—
RE21-06-68396	21-25689	0.0000–0.5000	SOIL	—	—	0.474 (J-)	—
RE21-06-68398	21-25690	0.0000–0.5000	SOIL	0.0996	—	0.595 (J-)	—
RE21-06-68399	21-25690	2.5000–3.0000	QBT3	—	—	—	0.023189
RE21-06-68400	21-25691	0.0000–0.5000	SOIL	—	—	0.411 (J-)	—
RE21-06-68401	21-25691	2.5000–3.0000	QBT3	—	—	0.0585 (J-)	—
RE21-06-68402	21-25692	0.0000–0.5000	SOIL	—	—	1.6 (J-)	—
RE21-06-68403	21-25692	2.5000–3.0000	QBT3	—	—	—	0.015348
RE21-06-68404	21-25693	0.0000–0.5000	SOIL	0.133	0.0319	5.2 (J-)	—
RE21-06-68405	21-25693	2.5000–3.0000	QBT3	—	—	0.0518 (J-)	—
RE21-06-68406	21-25694	0.0000–0.5000	SOIL	0.0851	—	1.34 (J-)	—
RE21-06-68407	21-25694	2.5000–3.0000	QBT3	—	—	—	0.014609
RE21-06-68408	21-25695	0.0000–0.5000	SOIL	—	—	0.195 (J-)	—
RE21-06-68409	21-25695	2.5000–3.0000	QBT3	—	—	0.0419 (J-)	0.011096
RE21-06-68410	21-25696	0.0000–0.5000	SOIL	—	—	0.66 (J-)	—
RE21-06-68411	21-25696	2.5000–3.0000	QBT3	—	—	0.0229 (J-)	0.01827
RE21-09-3622	21-604519	0.0000–0.5000	SOIL	0.072	—	0.981	NA
RE21-09-3627	21-604524	0.0000–0.5000	SOIL	NA[d]	—	0.192	NA
RE21-09-3628	21-604525	0.0000–0.5000	SOIL	NA	—	1.97	NA
MD21-10-4658	21-609834	0.0000–0.5000	SOIL	NA	—	0.718	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.2-1
Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-003-99 and SWMU 21-024(c)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68436	21-25704	1.5000–2.0000	SOIL	—[e]	—	—	—	—	—	39.8	—	—	—	—
RE21-06-68440	21-25706	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68441	21-25706	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68442	21-25706	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68443	21-25707	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68444	21-25707	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68445	21-25707	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68446	21-25708	0.0000–0.5000	SOIL	—	—	—	—	1.15	—	—	—	17	—	28.6 (J)
RE21-06-68447	21-25708	0.5000–1.0000	SOIL	—	—	—	—	0.987	—	—	—	—	—	—
RE21-06-68448	21-25708	1.5000–2.0000	SOIL	—	—	—	—	0.757	—	—	—	—	—	—
RE21-06-68450	21-25709	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68451	21-25709	1.5000–2.0000	SOIL	—	—	—	—	0.53 (U)	—	—	—	—	—	—
RE21-06-68452	21-25710	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68453	21-25710	0.5000–1.0000	SOIL	—	—	—	—	0.545 (U)	—	—	—	—	—	—
RE21-06-68454	21-25710	1.5000–2.0000	SOIL	—	—	—	—	0.548 (U)	—	23.3	—	—	—	—
RE21-06-68459	21-25712	0.5000–1.0000	SOIL	—	—	—	—	0.522 (U)	—	—	—	—	—	—
RE21-06-68461	21-25713	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68462	21-25713	0.5000–1.0000	QBT3	—	—	—	—	—	—	17.7	—	—	—	—
RE21-06-68463	21-25713	1.5000–2.0000	QBT3	—	—	—	—	—	—	24.4	—	—	—	—
RE21-06-68464	21-25714	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	16.4	—	29.1
RE21-06-68465	21-25714	0.5000–1.0000	SOIL	—	—	—	—	0.554 (U)	—	20.1	—	—	—	—
RE21-06-68466	21-25714	1.5000–2.0000	QBT3	—	—	54.5	—	—	—	14.6	—	—	—	—
RE21-06-68467	21-25715	0.0000–0.5000	SOIL	—	—	—	—	0.548	—	—	—	—	—	60.1
RE21-06-68468	21-25715	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	26.8
RE21-06-68469	21-25715	1.5000–2.0000	QBT3	8480 (J+)	—	46.9	—	—	—	14	—	—	—	16.1
RE21-06-68470	21-25716	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	39.9
RE21-06-68471	21-25716	0.5000–1.0000	QBT3	—	—	—	—	—	—	13.6	—	—	—	—
RE21-06-68472	21-25716	1.5000–2.0000	QBT3	7380 (J+)	—	107	—	—	—	10.8	22.3	—	—	—
RE21-06-68474	21-25717	0.5000–1.0000	QBT3	8540 (J+)	—	58.4	—	—	—	8.53	—	6.47	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68475	21-25717	1.5000–2.0000	QBT3	—	—	—	—	—	—	19.6	—	—	—	—
RE21-06-68476	21-25718	0.0000–0.5000	SOIL	—	—	—	—	0.522 (U)	—	—	—	—	—	—
RE21-06-68477	21-25718	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68478	21-25718	1.5000–2.0000	QBT3	—	—	—	—	—	—	7.8	—	—	—	—
RE21-06-68479	21-25719	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68480	21-25719	0.5000–1.0000	QBT3	11500 (J+)	—	59	—	—	—	10.8	—	—	—	—
RE21-06-68481	21-25719	1.5000–2.0000	QBT3	34400 (J+)	3.98	197	2.29	—	4530 (J+)	23.6	4.27	10.1	21600	13.5
MD21-09-8978	21-25719	7.0000–8.0000	QBT3	—	—	57	—	—	—	29	—	—	—	—
MD21-10-7815	21-25719	9.0000–10.0000	QBT3	NA[f]	NA	NA	NA	NA	NA	38.7	NA	NA	NA	NA
RE21-06-68482	21-25720	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	18.4	—	—
RE21-06-68483	21-25720	0.5000–1.0000	QBT3	14100 (J+)	—	84.5	—	—	—	14	—	5.14	—	—
RE21-06-68484	21-25720	1.5000–2.0000	QBT3	15800 (J+)	2.99	94.9	—	—	2570 (J+)	11.5	3.36	20.1	—	21.4
RE21-06-68502	21-25722	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	24.3
RE21-06-68503	21-25722	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68504	21-25722	1.5000–2.0000	QBT3	8930	—	64.6	—	—	—	—	—	—	—	—
RE21-06-68507	21-25723	0.5000–1.0000	QBT3	10500	4.65	99.2	—	—	3420	8.64	3.16	51.2	—	18
RE21-06-68508	21-25723	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	9.05	—	—
RE21-06-68511	21-25724	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	15.7
RE21-06-68512	21-25724	1.5000–2.0000	QBT3	—	—	—	—	—	—	7.79	—	—	—	—
RE21-06-68514	21-25725	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	29.1
RE21-06-68515	21-25725	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-72611	21-25725	3.0000–3.5000	SOIL	—	—	—	—	—	11700	—	—	—	—	—
RE21-06-68518	21-25726	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68519	21-25726	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68520	21-25726	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68521	21-25727	0.0000–0.5000	SOIL	—	—	—	—	0.567 (U)	—	—	—	—	—	—
RE21-06-68522	21-25727	0.5000–1.0000	QBT3	10700 (J+)	4.15	74	—	—	2560	—	—	4.68	—	—
RE21-06-68523	21-25727	1.5000–2.0000	QBT3	11600 (J+)	5	97	—	—	8280	—	—	5.47	—	—
RE21-06-68524	21-25728	0.0000–0.5000	SOIL	—	—	—	—	0.584 (U)	—	—	—	—	—	30.4
RE21-06-68525	21-25728	0.5000–1.0000	QBT3	13300 (J+)	3.43	152	—	—	49000	8.28	—	8.48	—	12.3

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68526	21-25728	1.5000–2.0000	QBT3	11800 (J+)	5.32	111	—	—	19700	7.65	—	9.11	—	15.5
RE21-06-68527	21-25729	0.0000–0.5000	SOIL	—	—	—	—	0.503 (U)	—	—	—	—	—	—
RE21-06-68528	21-25729	0.5000–1.0000	QBT3	15700 (J+)	4.75	69.8	1.69	—	2320	9.46	—	5.2	—	—
RE21-06-68529	21-25729	1.5000–2.0000	QBT3	13500 (J+)	5.74	72.6	1.94	—	3850	15.5	—	5.32	—	—
RE21-06-68530	21-25730	0.0000–0.5000	SOIL	—	—	—	—	0.505 (U)	—	—	—	—	—	—
RE21-06-68532	21-25730	0.5000–1.0000	QBT3	—	4.03	—	—	—	—	—	—	—	—	—
RE21-06-68533	21-25730	1.5000–2.0000	QBT3	—	4.31	—	—	—	2850	11	—	—	—	—
RE21-06-68534	21-25731	0.0000–0.5000	SOIL	—	—	—	—	0.522 (U)	—	—	—	—	—	—
RE21-06-68536	21-25731	0.5000–1.0000	QBT3	10600 (J+)	7.04	65	—	—	3740	8.92	—	6.12	—	12.1
RE21-06-68537	21-25731	1.5000–2.0000	QBT3	—	3.61	—	—	—	—	—	—	—	—	—
RE21-06-68548	21-25732	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	18.8	—	—
RE21-06-68549	21-25732	0.5000–1.0000	QBT3	10500	—	74.2 (J+)	—	—	—	8.26	—	—	—	—
RE21-06-68550	21-25732	1.5000–2.0000	QBT3	10700	—	73.2 (J+)	—	—	2740	8.76	—	4.9	—	16.5
RE21-06-68551	21-25733	0.0000–0.5000	SOIL	—	—	—	—	0.763	—	—	—	25.3	—	58.4
RE21-06-68552	21-25733	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	9.25	—	12.2
RE21-06-68553	21-25733	1.5000–2.0000	QBT3	—	—	—	—	—	—	9.67	—	—	—	—
RE21-06-68554	21-25734	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	22.2	—	—
RE21-06-68555	21-25734	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68556	21-25734	1.5000–2.0000	QBT3	12400	—	91 (J+)	—	—	3220	9.97	—	6.51	—	—
RE21-06-68557	21-25735	0.0000–0.5000	SOIL	—	—	—	—	0.524 (U)	—	—	—	18.8	—	—
RE21-06-68558	21-25735	0.5000–1.0000	QBT3	8560	—	55 (J+)	—	—	—	21.6	—	—	—	—
RE21-06-68559	21-25735	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68560	21-25736	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68561	21-25736	0.5000–1.0000	QBT3	10500	—	102 (J+)	—	—	2400	13.8	3.62	6.87	—	15.4
RE21-06-68562	21-25736	1.5000–2.0000	QBT3	14000	—	109 (J+)	—	—	—	16.2	—	5.3	—	—
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	30000	—	—	—	—	—	—	—	—	—	—
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	30200	4.36	237 (J+)	—	—	2990	23.9	—	8.18	17200	—
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	11400	—	159 (J+)	—	—	—	7.38	—	—	—	—
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	14700	2.9	95.9 (J+)	—	—	2240	11.3	—	6.89	—	11.6
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	—	—	85.1 (J+)	—	—	10600 (J)	22.9	—	—	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	—	—	—	—	0.513 (U)	—	—	—	—	—	—
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	—	—	—	—	0.586 (U)	—	—	—	—	—	—
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	15.2	—	23
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	—	—	67.7	—	—	10400	18.4	—	30.8 (J)	—	35.9 (J)
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	23.6 (J+)
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	7680 (J+)	2.88	135	—	—	3010 (J)	7.42	—	24.3	15400	32.4 (J+)
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	—	—	80.2	—	—	3600 (J)	—	—	11.2	—	14 (J+)
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	—	—	—	—	—	12700 (J)	—	—	—	—	—
MD21-07-74344	21-25752	3.8300–4.8300	QBT3	—	—	—	—	—	5290 (J)	—	—	—	—	—
MD21-07-74345	21-25753	2.3300–3.3300	SOIL	—	—	—	—	—	—	—	—	—	—	41.4 (J-)
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	—	—	—	—	—	—	12	—	—	—	—
RE21-06-68640	21-25758	1.5000–2.0000	QBT3	—	—	—	—	—	—	8.58	—	—	—	—
RE21-06-68646	21-25761	1.5000–2.0000	QBT3	9820 (J+)	—	51.8	—	—	—	13.8	—	7	—	—
RE21-06-68648	21-25762	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
MD21-09-8980	21-25763	5.0000–6.0000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	—
RE21-06-68652	21-25764	1.5000–2.0000	SOIL	—	—	—	—	0.542 (U)	—	—	—	—	—	—
RE21-06-68653	21-25765	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68654	21-25765	1.5000–2.0000	QBT3	11200 (J+)	3.01 (J-)	50.8	—	—	2380	11.6	—	5.86	—	11.5
RE21-06-68655	21-25766	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68656	21-25766	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68657	21-25767	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68658	21-25767	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68659	21-25768	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68660	21-25768	1.5000–2.0000	QBT3	—	—	—	—	—	4900	7.28	—	—	—	—
RE21-06-68661	21-25769	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68662	21-25769	1.5000–2.0000	QBT3	—	—	—	—	—	2500	9.91	—	—	—	11.5
RE21-06-68663	21-25770	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68664	21-25770	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68665	21-25771	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68666	21-25771	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
MD21-09-8982	21-605290	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8987	21-605293	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8988	21-605294	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8989	21-605295	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**7.71**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**49.9**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**63.6**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-06-68436	21-25704	1.5000–2.0000	SOIL	—	—	—	4.86	—	1.56 (U)	—	—	—	—
RE21-06-68440	21-25706	0.0000–0.5000	SOIL	—	—	—	2.02 (J-)	—	1.65 (U)	—	—	—	—
RE21-06-68441	21-25706	0.5000–1.0000	SOIL	—	—	—	0.991 (J-)	—	1.55 (U)	—	—	—	—
RE21-06-68442	21-25706	1.5000–2.0000	SOIL	—	—	—	—	—	1.6 (U)	—	—	—	—
RE21-06-68443	21-25707	0.0000–0.5000	SOIL	—	0.219 (J-)	—	1.77 (J-)	—	1.6 (U)	—	—	—	—
RE21-06-68444	21-25707	0.5000–1.0000	SOIL	—	—	—	1.78 (J-)	—	—	—	—	—	—
RE21-06-68445	21-25707	1.5000–2.0000	SOIL	—	—	—	1.82 (J-)	—	1.83 (U)	—	—	—	—
RE21-06-68446	21-25708	0.0000–0.5000	SOIL	—	3.77 (J-)	—	2.29 (J-)	—	—	—	26.1	—	141
RE21-06-68447	21-25708	0.5000–1.0000	SOIL	—	1.09 (J-)	—	1.4 (J-)	—	1.62 (U)	—	9.81	—	140
RE21-06-68448	21-25708	1.5000–2.0000	SOIL	—	0.358 (J-)	—	1.2 (J-)	—	1.7 (U)	—	3.89	—	114
RE21-06-68450	21-25709	0.5000–1.0000	SOIL	—	—	—	—	—	1.6 (U)	—	—	—	—
RE21-06-68451	21-25709	1.5000–2.0000	SOIL	—	—	—	—	—	1.59 (U)	—	—	—	—
RE21-06-68452	21-25710	0.0000–0.5000	SOIL	—	—	—	—	—	1.57 (U)	—	—	—	—
RE21-06-68453	21-25710	0.5000–1.0000	SOIL	—	—	—	0.958 (J-)	—	1.64 (U)	—	—	—	—
RE21-06-68454	21-25710	1.5000–2.0000	SOIL	—	—	—	—	—	1.64 (U)	—	—	—	—
RE21-06-68459	21-25712	0.5000–1.0000	SOIL	—	—	—	—	—	1.57 (U)	—	—	—	—
RE21-06-68461	21-25713	0.0000–0.5000	SOIL	—	—	—	—	—	1.59 (U)	—	—	—	—
RE21-06-68462	21-25713	0.5000–1.0000	QBT3	—	—	—	—	—	1.65 (U)	—	—	—	—
RE21-06-68463	21-25713	1.5000–2.0000	QBT3	—	—	—	—	—	1.66 (U)	—	—	—	—
RE21-06-68464	21-25714	0.0000–0.5000	SOIL	—	0.289	—	2.06	—	—	—	5.09	—	187
RE21-06-68465	21-25714	0.5000–1.0000	SOIL	—	—	—	1.11 (J)	—	1.66 (U)	—	—	—	—
RE21-06-68466	21-25714	1.5000–2.0000	QBT3	—	—	—	—	—	1.52 (U)	—	—	—	—
RE21-06-68467	21-25715	0.0000–0.5000	SOIL	—	0.176	—	1.7	—	—	—	—	—	146
RE21-06-68468	21-25715	0.5000–1.0000	SOIL	—	0.108	—	1.47	—	1.76 (U)	—	—	—	62.1
RE21-06-68469	21-25715	1.5000–2.0000	QBT3	—	—	—	—	—	1.64 (U)	—	—	—	—
RE21-06-68470	21-25716	0.0000–0.5000	SOIL	—	—	—	2.86	0.000792 (J)	1.62 (U)	—	—	—	74.7
RE21-06-68471	21-25716	0.5000–1.0000	QBT3	—	—	—	0.857 (J)	—	1.52 (U)	—	—	—	—
RE21-06-68472	21-25716	1.5000–2.0000	QBT3	—	—	6.62	0.881 (J)	—	1.53 (U)	—	—	—	—
RE21-06-68474	21-25717	0.5000–1.0000	QBT3	—	—	—	0.798 (J)	—	1.52 (U)	—	—	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**7.71**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**49.9**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**63.6**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-06-68475	21-25717	1.5000–2.0000	QBT3	—	—	—	—	—	1.51 (U)	—	—	—	—
RE21-06-68476	21-25718	0.0000–0.5000	SOIL	—	—	—	2.46	0.00105 (J)	1.57 (U)	—	—	—	—
RE21-06-68477	21-25718	0.5000–1.0000	QBT3	—	—	—	2.02	0.00141 (J)	1.55 (U)	—	—	—	—
RE21-06-68478	21-25718	1.5000–2.0000	QBT3	—	—	—	2.44	0.000742 (J)	1.51 (U)	—	—	—	—
RE21-06-68479	21-25719	0.0000–0.5000	SOIL	—	—	—	1.11	—	—	—	—	—	62.3
RE21-06-68480	21-25719	0.5000–1.0000	QBT3	—	—	—	1.54	—	0.703 (J)	—	—	—	—
RE21-06-68481	21-25719	1.5000–2.0000	QBT3	5520	—	16	—	0.00238	1.65 (U)	—	—	31.8	—
MD21-09-8978	21-25719	7.0000–8.0000	QBT3	—	NA	13	NA	NA	0.51 (U)	—	NA	—	—
MD21-10-7815	21-25719	9.0000–10.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68482	21-25720	0.0000–0.5000	SOIL	—	0.117	—	5.29	0.00102 (J)	—	—	2.68 (J)	—	51.2
RE21-06-68483	21-25720	0.5000–1.0000	QBT3	1940	—	—	1.46	—	1.67 (U)	—	—	—	—
RE21-06-68484	21-25720	1.5000–2.0000	QBT3	2200	0.111	6.72	6.24	0.00235	0.674 (J)	—	3.66 (J)	20.5	—
RE21-06-68502	21-25722	0.0000–0.5000	SOIL	—	0.159	—	10.7	0.00279	—	—	2.41	—	—
RE21-06-68503	21-25722	0.5000–1.0000	SOIL	—	—	—	3.26	0.00102 (J)	1.62 (U)	—	—	—	—
RE21-06-68504	21-25722	1.5000–2.0000	QBT3	—	—	—	2.32	0.00159 (J)	1.58 (U)	—	—	—	—
RE21-06-68507	21-25723	0.5000–1.0000	QBT3	1820 (J+)	—	—	3.33	0.000611 (J)	1.6 (U)	—	2.42	21.2	70.3
RE21-06-68508	21-25723	1.5000–2.0000	QBT3	—	—	—	1.28	—	1.48 (U)	—	—	—	—
RE21-06-68511	21-25724	0.5000–1.0000	QBT3	—	0.446	—	1.83	—	1.55 (U)	—	5.37	—	—
RE21-06-68512	21-25724	1.5000–2.0000	QBT3	—	—	—	1.14	—	1.52 (U)	—	—	—	—
RE21-06-68514	21-25725	0.0000–0.5000	SOIL	—	—	—	9.66	0.000608 (J)	1.76 (U)	—	2.72	—	—
RE21-06-68515	21-25725	0.5000–1.0000	SOIL	—	—	—	1.44	—	1.58 (U)	—	—	—	—
RE21-06-72611	21-25725	3.0000–3.5000	SOIL	—	—	16.3	—	0.00323	1.57 (U)	—	—	—	—
RE21-06-68518	21-25726	0.0000–0.5000	SOIL	—	—	—	85.2	0.00148 (J)	1.69 (U)	—	—	—	—
RE21-06-68519	21-25726	0.5000–1.0000	QBT3	—	—	—	17.2	0.00116 (J)	1.62 (U)	—	—	—	—
RE21-06-68520	21-25726	1.5000–2.0000	QBT3	—	—	—	2.46	—	1.46 (U)	—	—	—	—
RE21-06-68521	21-25727	0.0000–0.5000	SOIL	—	—	—	6.24	0.00086 (J)	2.29	—	—	—	—
RE21-06-68522	21-25727	0.5000–1.0000	QBT3	1700	—	—	3.14	0.00141 (J)	2.25	—	—	—	—
RE21-06-68523	21-25727	1.5000–2.0000	QBT3	1900	—	6.82	2.99	0.00159 (J)	0.995 (J)	—	—	—	—
RE21-06-68524	21-25728	0.0000–0.5000	SOIL	—	—	—	24.3	0.0022 (J)	3.27	—	2.14	—	50.9
RE21-06-68525	21-25728	0.5000–1.0000	QBT3	2660	—	10.4	6.4	0.0038	1.62 (U)	—	—	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**7.71**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**49.9**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**63.6**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-06-68526	21-25728	1.5000–2.0000	QBT3	2260	—	7.27	24.6	0.00347	1.58 (U)	—	—	—	—
RE21-06-68527	21-25729	0.0000–0.5000	SOIL	—	—	—	7.22	0.000951 (J)	2.89	—	—	—	—
RE21-06-68528	21-25729	0.5000–1.0000	QBT3	2370	—	7.82	2.43	0.00104 (J)	4.22	—	—	—	—
RE21-06-68529	21-25729	1.5000–2.0000	QBT3	2200	—	10.1	1.68	0.000911 (J)	2.93	—	—	—	—
RE21-06-68530	21-25730	0.0000–0.5000	SOIL	—	—	—	3.64	0.000771 (J)	3.35	—	—	—	62.7
RE21-06-68532	21-25730	0.5000–1.0000	QBT3	—	—	—	1.83	—	1.97	—	—	—	—
RE21-06-68533	21-25730	1.5000–2.0000	QBT3	—	—	11.5	1.27	—	1.03 (J)	—	—	—	—
RE21-06-68534	21-25731	0.0000–0.5000	SOIL	—	—	—	1.27	—	3.63	—	—	—	—
RE21-06-68536	21-25731	0.5000–1.0000	QBT3	—	—	—	1.37	—	1.49 (J)	—	—	—	—
RE21-06-68537	21-25731	1.5000–2.0000	QBT3	—	—	—	1.2	—	2.13	—	—	—	—
RE21-06-68548	21-25732	0.0000–0.5000	SOIL	—	—	—	2.82	—	—	—	—	—	57.5
RE21-06-68549	21-25732	0.5000–1.0000	QBT3	—	—	—	1.48	—	1.56 (U)	—	—	—	—
RE21-06-68550	21-25732	1.5000–2.0000	QBT3	—	—	—	1.11	—	1.55 (U)	—	—	—	—
RE21-06-68551	21-25733	0.0000–0.5000	SOIL	—	0.69	—	3.31	0.000912 (J)	—	—	26.2	—	93.5
RE21-06-68552	21-25733	0.5000–1.0000	QBT3	—	0.304	—	1.29	—	1.57 (U)	—	5.16	—	—
RE21-06-68553	21-25733	1.5000–2.0000	QBT3	—	—	—	1.33 (J-)	—	1.64 (U)	—	—	—	—
RE21-06-68554	21-25734	0.0000–0.5000	SOIL	—	—	—	17.7 (J-)	0.00136 (J)	1.58 (U)	—	2.02	—	52.6
RE21-06-68555	21-25734	0.5000–1.0000	SOIL	—	—	—	5.84 (J-)	0.000584 (J)	1.65 (U)	—	—	—	—
RE21-06-68556	21-25734	1.5000–2.0000	QBT3	1730 (J+)	—	—	5.25 (J-)	0.000742 (J)	1.56 (U)	—	—	—	—
RE21-06-68557	21-25735	0.0000–0.5000	SOIL	—	—	—	3.2 (J-)	—	1.57 (U)	—	—	—	—
RE21-06-68558	21-25735	0.5000–1.0000	QBT3	—	—	—	0.865 (J-)	—	1.59 (U)	—	—	—	—
RE21-06-68559	21-25735	1.5000–2.0000	QBT3	—	—	—	0.854 (J-)	—	1.57 (U)	—	—	—	—
RE21-06-68560	21-25736	0.0000–0.5000	SOIL	—	—	—	1.11 (J-)	—	1.55 (U)	—	—	—	—
RE21-06-68561	21-25736	0.5000–1.0000	QBT3	1850 (J+)	—	—	0.996 (J-)	—	1.55 (U)	—	—	20.1	—
RE21-06-68562	21-25736	1.5000–2.0000	QBT3	2040 (J+)	—	7.5	0.985 (J-)	—	1.69 (U)	—	—	—	—
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	—	—	—	1.57 (J-)	—	1.68 (U)	—	2.5	—	50.7
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	3650 (J+)	—	8	0.99 (J-)	—	1.7 (U)	—	—	25.7	—
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	1930 (J+)	—	—	0.947 (J-)	—	1.57 (U)	—	—	—	—
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	1780 (J+)	—	—	1.67 (J-)	—	1.6 (U)	—	—	19.9	—
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	—	—	NA	3.23	—	1.56 (U)	—	—	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**7.71**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**49.9**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**63.6**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	—	—	NA	1.09	—	1.56 (U)	—	—	—	—
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	—	—	NA	1.02 (J)	0.000896 (J)	1.59 (U)	—	—	—	—
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	—	—	NA	0.948 (J)	—	1.59 (U)	—	—	—	—
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	—	—	NA	0.982 (J)	—	—	—	—	—	—
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	—	—	NA	0.985 (J)	—	—	—	—	—	—
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	—	—	NA	1.03 (J)	—	1.76 (U)	—	—	—	—
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	—	—	NA	2.02	—	—	—	2.07	—	55
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	—	0.11	NA	1.47	—	—	—	2.44	—	99.9
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	—	—	NA	1.09	—	1.68 (U)	—	—	—	63.1
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	1980 (J+)	1.77 (J)	—	2.35	0.000568 (J)	1.53 (U)	1.22	8.56	—	—
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	—	0.111	—	—	0.000882 (J)	1.72 (U)	—	—	—	64
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	—	—	—	—	0.000821 (J)	—	—	—	—	49.9
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	—	1.7	—	1.47	0.000885 (J)	0.897 (J)	—	9.56 (J+)	—	105
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	—	1.64	—	1.18	0.000978 (J)	1.61 (U)	—	10.2 (J+)	—	69.3
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	—	0.399	—	0.611 (J)	0.000799 (J)	1.96	—	4.88 (J-)	—	—
MD21-07-74344	21-25752	3.8300–4.8300	QBT3	—	—	—	0.535 (J)	—	0.838 (J)	—	2.93 (J-)	—	—
MD21-07-74345	21-25753	2.3300–3.3300	SOIL	—	0.315	—	0.652 (J)	0.000569 (J)	1.63 (U)	—	—	—	49.2 (J-)
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	—	—	—	—	—	1.47 (U)	—	—	—	—
RE21-06-68640	21-25758	1.5000–2.0000	QBT3	—	—	—	1.11	—	NA	—	—	—	—
RE21-06-68646	21-25761	1.5000–2.0000	QBT3	—	—	—	4.37	0.000728 (J)	NA	—	—	—	—
RE21-06-68648	21-25762	1.5000–2.0000	SOIL	—	0.119	—	4.9	0.00111 (J)	NA	—	—	—	—
MD21-09-8980	21-25763	5.0000–6.0000	SOIL	NA	—	NA	NA	NA	NA	1.1 (U)	—	NA	—
RE21-06-68652	21-25764	1.5000–2.0000	SOIL	—	—	—	3.73	—	NA	—	2.01	—	—
RE21-06-68653	21-25765	0.0000–0.5000	SOIL	—	0.147	—	12.7	—	NA	—	—	—	—
RE21-06-68654	21-25765	1.5000–2.0000	QBT3	—	—	—	3.54	—	NA	—	—	—	—
RE21-06-68655	21-25766	0.0000–0.5000	SOIL	—	—	—	26.4	0.00184 (J)	NA	—	4.27	—	—
RE21-06-68656	21-25766	1.5000–2.0000	QBT3	—	—	—	3.83	0.000608 (J)	NA	—	—	—	—
RE21-06-68657	21-25767	0.0000–0.5000	SOIL	—	—	—	24.8	—	1.58 (U)	—	2.05 (J)	—	—
RE21-06-68658	21-25767	1.5000–2.0000	QBT3	—	—	—	3.54	0.000937 (J)	1.48 (U)	—	—	—	—
RE21-06-68659	21-25768	0.0000–0.5000	SOIL	—	—	—	31.5	0.00224	—	—	2.1 (J)	—	—
RE21-06-68660	21-25768	1.5000–2.0000	QBT3	—	—	—	8.41	0.000607 (J)	1.49 (U)	—	—	—	—

Table 6.2-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**7.71**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**49.9**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**63.6**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-06-68661	21-25769	0.0000–0.5000	SOIL	—	—	—	8	0.000557 (J)	—	—	—	—	—
RE21-06-68662	21-25769	1.5000–2.0000	QBT3	—	—	—	2.08	—	1.47 (U)	—	—	—	—
RE21-06-68663	21-25770	0.0000–0.5000	SOIL	—	—	—	3.92	—	—	—	—	—	—
RE21-06-68664	21-25770	1.5000–2.0000	QBT3	—	—	—	0.939 (J)	—	1.49 (U)	—	—	—	—
RE21-06-68665	21-25771	0.0000–0.5000	SOIL	—	—	—	6.87	0.000562 (J)	—	—	2.54 (J)	—	—
RE21-06-68666	21-25771	1.5000–2.0000	QBT3	—	—	—	0.995 (J)	—	1.53 (U)	—	—	—	—
MD21-09-8982	21-605290	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	57
MD21-09-8987	21-605293	0.0000–0.5000	SOIL	NA	3	NA	NA	NA	NA	NA	—	NA	—
MD21-09-8988	21-605294	0.0000–0.5000	SOIL	NA	NA	NA	20 (J)	NA	NA	NA	NA	NA	NA
MD21-09-8989	21-605295	0.0000–0.5000	SOIL	NA	NA	NA	5.4	NA	NA	NA	NA	NA	NA

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] Used EPA Region 6 2009 SSL (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL not available. Used EPA Region 6 2009 industrial outdoor worker SSL (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

Table 6.2-2
Organic Chemicals Detected at Consolidated Unit 21-003-99 and SWMU 21-024(c)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
RE21-06-68436	21-25704	1.5000–2.0000	SOIL	—[c]	0.00956 (J+)	—	—	—	—	0.007 (J-)	0.0114 (J-)	—	—	—	—	—	—
RE21-06-68440	21-25706	0.0000–0.5000	SOIL	—	NA[d]	—	—	—	—	0.0056	0.0071	NA	—	—	—	—	—
RE21-06-68441	21-25706	0.5000–1.0000	SOIL	—	0.0273 (J+)	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68442	21-25706	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68443	21-25707	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0744	0.104	NA	—	—	—	—	—
RE21-06-68444	21-25707	0.5000–1.0000	SOIL	—	0.00928 (J+)	—	—	—	—	0.0047 (J-)	0.0068 (J-)	—	—	—	—	—	—
RE21-06-68445	21-25707	1.5000–2.0000	SOIL	—	0.0228 (J+)	—	—	0.254 (J)	—	—	—	—	—	—	—	—	—
RE21-06-68446	21-25708	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.104	0.268	NA	—	—	—	—	—
RE21-06-68447	21-25708	0.5000–1.0000	SOIL	—	0.00936 (J+)	—	—	—	—	0.0204 (J-)	0.0605 (J-)	—	—	—	—	—	—
RE21-06-68448	21-25708	1.5000–2.0000	SOIL	—	0.0291 (J+)	—	—	—	—	0.0053 (J-)	0.0142 (J-)	—	—	—	—	—	—
RE21-06-68449	21-25709	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0097	0.0378	NA	—	—	—	—	—
RE21-06-68450	21-25709	0.5000–1.0000	SOIL	—	0.0089 (J+)	—	—	—	—	0.0052 (J-)	0.0134 (J-)	—	—	—	—	—	—
RE21-06-68451	21-25709	1.5000–2.0000	SOIL	—	—	—	—	—	—	0.0029 (J-)	0.0032 (J-)	—	—	—	—	—	—
RE21-06-68452	21-25710	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.009	0.0394	NA	—	—	—	—	—
RE21-06-68453	21-25710	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	0.0074 (J-)	—	—	—	—	—	—
RE21-06-68454	21-25710	1.5000–2.0000	SOIL	—	0.0144 (J+)	—	—	—	—	—	0.0068 (J-)	—	—	—	—	—	—
RE21-06-68458	21-25712	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0506	0.0669	NA	—	—	—	—	—
RE21-06-68459	21-25712	0.5000–1.0000	SOIL	—	—	—	—	—	—	0.0103	0.0183	—	—	—	—	—	—
RE21-06-68460	21-25712	1.5000–2.0000	SOIL	—	—	—	—	—	—	0.0051 (J-)	0.0098 (J-)	—	—	—	—	—	—
RE21-06-68461	21-25713	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.13	0.143	NA	—	—	—	—	—
RE21-06-68462	21-25713	0.5000–1.0000	QBT3	—	—	—	—	0.00336 (J)	—	0.0076	0.0091	—	—	—	—	—	—
RE21-06-68463	21-25713	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0028 (J)	—	—	—	—	—	—
RE21-06-68464	21-25714	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.269	0.356	NA	—	—	—	—	—
RE21-06-68465	21-25714	0.5000–1.0000	SOIL	—	—	—	—	—	—	0.0528	0.082	—	—	—	—	—	—
RE21-06-68466	21-25714	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0024 (J)	—	—	—	—	—	—
RE21-06-68467	21-25715	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.107	0.102	NA	—	—	—	—	—
RE21-06-68468	21-25715	0.5000–1.0000	SOIL	—	—	—	—	—	—	0.0103	0.0114	—	—	—	—	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
RE21-06-68469	21-25715	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0049	0.0036 (J)	—	—	—	—	—	—
RE21-06-68470	21-25716	0.0000–0.5000	SOIL	—	NA	0.00761 (J)	—	0.138	—	0.0545	0.0638	NA	—	—	—	—	—
RE21-06-68471	21-25716	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0017 (J)	0.002 (J)	—	—	—	—	—	—
RE21-06-68474	21-25717	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.12	0.172	—	—	—	—	—	—
RE21-06-68475	21-25717	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.023	0.033	—	—	—	—	—	—
RE21-06-68476	21-25718	0.0000–0.5000	SOIL	0.381	NA	—	—	—	—	—	0.0029 (J)	NA	—	—	—	—	—
RE21-06-68478	21-25718	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0034 (J)	0.002 (J)	—	—	—	—	—	—
RE21-06-68479	21-25719	0.0000–0.5000	SOIL	—	NA	0.00863 (J)	—	—	—	0.344	0.583	NA	0.0452	—	—	—	—
RE21-06-68480	21-25719	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0159	0.0402	—	—	—	—	—	—
RE21-06-68481	21-25719	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0031 (J)	0.0087	—	—	—	—	—	—
RE21-06-68482	21-25720	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.293	0.401	NA	—	—	—	—	—
RE21-06-68483	21-25720	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0026 (J)	0.0069	—	—	—	—	—	—
RE21-06-68484	21-25720	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.301	0.61	—	0.0108 (J)	—	0.0439	—	—
RE21-06-68502	21-25722	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	NA	—	—	—	—	—
RE21-06-68503	21-25722	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68504	21-25722	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68507	21-25723	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.058	0.118	—	—	—	—	—	—
RE21-06-68508	21-25723	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0227	0.0393	—	—	—	0.026 (J)	—	—
RE21-06-68511	21-25724	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.167	0.235	—	—	—	—	—	—
RE21-06-68512	21-25724	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0184	0.0277	—	—	—	—	—	—
RE21-06-68514	21-25725	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0478	0.0571	NA	—	—	—	—	—
RE21-06-68515	21-25725	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-72611	21-25725	3.0000–3.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68518	21-25726	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0169	0.0235	NA	—	—	—	—	—
RE21-06-68519	21-25726	0.5000–1.0000	QBT3	0.259	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68521	21-25727	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0094	0.0096	NA	—	—	—	—	—
RE21-06-68522	21-25727	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0042	0.0062	—	—	—	—	—	—
RE21-06-68523	21-25727	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0033 (J)	0.0055	—	—	—	—	—	—
RE21-06-68524	21-25728	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0397	0.0365	NA	—	—	—	—	—
RE21-06-68525	21-25728	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0064	0.0066	—	—	—	—	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
RE21-06-68526	21-25728	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0106	0.0094	—	—	—	—	—	—
RE21-06-68527	21-25729	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.005	0.0043	NA	—	—	—	—	—
RE21-06-68528	21-25729	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	0.0024 (J)	—	—	—	—	—	—
RE21-06-68530	21-25730	0.0000–0.5000	SOIL	0.0407	NA	—	—	—	—	0.0699	0.1	NA	—	—	—	—	—
RE21-06-68532	21-25730	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0092	0.0158	—	—	—	—	—	—
RE21-06-68533	21-25730	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0048	0.0081	—	—	—	—	—	—
RE21-06-68534	21-25731	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0241	0.0363	NA	—	—	—	—	—
RE21-06-68536	21-25731	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0043	0.0067	—	—	—	—	—	—
RE21-06-68537	21-25731	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0023 (J)	0.0029 (J)	—	—	—	—	—	—
RE21-06-68548	21-25732	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0065	0.0155	NA	—	—	—	—	—
RE21-06-68549	21-25732	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0026 (J)	0.0019 (J)	—	—	—	—	—	—
RE21-06-68551	21-25733	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.203	0.646	NA	—	0.087 (J)	—	—	—
RE21-06-68552	21-25733	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0068	0.0209	—	—	—	—	—	—
RE21-06-68553	21-25733	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0056	0.0176	—	—	—	—	—	—
RE21-06-68554	21-25734	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0136	0.0563	NA	—	—	—	—	0.459 (J)
RE21-06-68555	21-25734	0.5000–1.0000	SOIL	—	—	—	—	—	—	0.0029 (J)	0.0038	0.000662 (J)	—	—	—	—	—
RE21-06-68556	21-25734	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0029 (J)	—	—	—	—	—	—
RE21-06-68557	21-25735	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0943	0.236	NA	—	—	—	—	—
RE21-06-68558	21-25735	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0273	0.0118	—	—	—	—	—	—
RE21-06-68559	21-25735	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0042	—	—	—	—	—	—
RE21-06-68560	21-25736	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0024 (J)	0.0038	NA	—	—	—	—	—
RE21-06-68562	21-25736	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0019 (J)	—	—	—	—	—	—
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0678	0.257	NA	—	0.0126 (J)	0.0297 (J)	—	—
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.0142	0.0631	—	—	—	—	—	—
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0039	—	—	—	—	—	—
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	—	—	—	—	—	—	0.157	0.267	—	—	—	—	—	—
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0394	0.0551	—	—	—	—	—	—
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	—	NA	—	—	—	0.0985	0.0622	0.0168	NA	—	—	—	—	—
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	—	—	—	—	—	0.0197	0.0111	0.002 (J)	—	—	—	—	—	—
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	—	—	—	—	—	0.0073	0.0037	—	—	—	—	—	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0788	0.0392	NA	—	—	—	—	—
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	—	—	—	—	—	—	0.195	0.209	—	—	—	—	—	—
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	—	—	—	—	—	—	0.0796	0.0887	—	—	—	—	—	—
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	—	NA	—	—	—	0.167	0.194	0.277	NA	—	—	—	—	—
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	—	—	—	—	—	0.157	0.191	0.275	—	—	—	—	—	—
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	—	—	—	—	—	—	0.094	0.106	—	—	—	—	—	—
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	—	—	—	—	—	—	2.98	1.16	—	—	—	—	—	—
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	—	—	0.0196 (J)	—	0.0532 (J-)	—	0.0801 (J)	0.041 (J-)	—	—	0.0384	0.039	0.0317 (J)	—
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	—	—	—	—	—	—	0.0553 (J)	0.095 (J-)	—	—	—	—	—	—
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	—	—	—	—	—	—	0.0621 (J)	0.0674 (J-)	—	—	—	—	—	—
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	—	NA	—	NA	NA	NA	NA	NA	NA	—	—	—	—	—
MD21-09-9860	21-25752	3.8000–4.8000	SOIL	NA	NA	NA	—	—	—	—	0.071	NA	NA	NA	NA	NA	NA
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	—	—	0.00737 (J)	NA	NA	NA	NA	NA	—	—	—	—	—	—
RE21-06-68640	21-25758	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.166	0.0906	—	—	—	—	—	—
RE21-06-68646	21-25761	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0752	0.057	—	—	—	—	—	—
RE21-06-68648	21-25762	1.5000–2.0000	SOIL	—	—	—	—	—	—	0.506	0.0718	—	—	—	—	—	—
RE21-06-68652	21-25764	1.5000–2.0000	SOIL	—	—	—	—	—	—	0.169	0.0644	—	—	—	—	—	—
RE21-06-68653	21-25765	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0999	0.0631	NA	—	—	—	—	—
RE21-06-68654	21-25765	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.01	0.0098	—	—	—	—	—	—
RE21-06-68655	21-25766	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0356	0.0213	NA	—	—	—	—	—
RE21-06-68656	21-25766	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0027 (J)	—	—	—	—	—	—	—
RE21-06-68657	21-25767	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0952	0.0828	NA	—	—	—	—	—
RE21-06-68658	21-25767	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0037	0.0026 (J)	—	—	—	—	—	—
RE21-06-68659	21-25768	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0204	0.0194	NA	—	—	—	—	—
RE21-06-68660	21-25768	1.5000–2.0000	QBT3	—	—	—	—	—	—	0.0064	0.0073	—	—	—	—	—	—
RE21-06-68661	21-25769	0.0000–0.5000	SOIL	—	NA	—	—	—	—	0.0151	0.0238	NA	—	—	—	—	—
RE21-06-68662	21-25769	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.0023 (J)	—	—	—	—	—	—
RE21-06-68663	21-25770	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	0.002 (J)	NA	—	—	—	—	—
RE21-06-68665	21-25771	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	0.0075	NA	—	—	—	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
RE21-09-2642	21-604461	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	0.23	0.44	NA	NA	NA	NA	NA	NA
RE21-09-2643	21-604461	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	0.081	0.15	NA	NA	NA	NA	NA	NA
RE21-09-2644	21-604461	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.059	NA	NA	NA	NA	NA	NA
RE21-09-2645	21-604462	0.0000–0.5000	SOIL	NA	NA	NA	—	—	0.15	—	0.26	NA	NA	NA	NA	NA	NA
RE21-09-2646	21-604462	0.5000–1.0000	QBT3	NA	NA	NA	—	—	0.021 (J)	—	0.047	NA	NA	NA	NA	NA	NA
RE21-09-2648	21-604463	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	0.1	0.15 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2649	21-604463	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	0.53 (J-)	0.32 (J-)	NA	NA	NA	NA	NA	NA
RE21-09-2650	21-604463	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	0.1	0.069 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2651	21-604464	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.049	NA	NA	NA	NA	NA	NA
RE21-09-2652	21-604464	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.023 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2655	21-604465	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	0.51	0.33	NA	NA	NA	NA	NA	NA
RE21-09-2656	21-604465	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	0.092	0.18	NA	NA	NA	NA	NA	NA
RE21-09-2662	21-604467	1.5000–2.0000	SOIL	NA	NA	NA	—	—	—	0.13	0.28	NA	NA	NA	NA	NA	NA
RE21-09-2665	21-604468	1.5000–2.0000	SOIL	NA	NA	NA	—	—	—	0.087	0.16 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2669	21-604470	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.083	NA	NA	NA	NA	NA	NA
RE21-09-2672	21-604471	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	0.059	0.11	NA	NA	NA	NA	NA	NA
RE21-09-2673	21-604471	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.52 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2674	21-604471	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.015 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2675	21-604472	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.11	NA	NA	NA	NA	NA	NA
RE21-09-2676	21-604472	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	0.036 (J)	0.023 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2677	21-604472	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.0086 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2680	21-604473	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	0.23	0.44	NA	NA	NA	NA	NA	NA
RE21-09-2681	21-604474	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.95	NA	NA	NA	NA	NA	NA
RE21-09-2682	21-604474	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.31	NA	NA	NA	NA	NA	NA
RE21-09-2683	21-604474	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.14	NA	NA	NA	NA	NA	NA
RE21-09-2685	21-604475	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	0.3	0.58 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2686	21-604475	1.5000–2.0000	SOIL	NA	NA	NA	—	—	—	—	0.02 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2687	21-604476	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.1	NA	NA	NA	NA	NA	NA
RE21-09-2699	21-604480	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.43	NA	NA	NA	NA	NA	NA
RE21-09-2700	21-604480	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.064	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
RE21-09-2701	21-604480	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.018 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2702	21-604481	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.13	NA	NA	NA	NA	NA	NA
RE21-09-2703	21-604481	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.03 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2704	21-604481	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.016 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2705	21-604482	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.061	NA	NA	NA	NA	NA	NA
RE21-09-2706	21-604482	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.017 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2708	21-604483	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.25	NA	NA	NA	NA	NA	NA
RE21-09-2709	21-604483	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.16	NA	NA	NA	NA	NA	NA
RE21-09-2710	21-604483	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.079	NA	NA	NA	NA	NA	NA
RE21-09-2711	21-604484	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.15	NA	NA	NA	NA	NA	NA
RE21-09-2712	21-604484	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.044	NA	NA	NA	NA	NA	NA
RE21-09-2713	21-604485	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.48 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2714	21-604485	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.03 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2721	21-604489	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.038	NA	NA	NA	NA	NA	NA
MD21-09-9864	21-605366	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.85	NA	NA	NA	NA	NA	NA
MD21-09-9865	21-605366	1.5000–2.0000	SOIL	NA	NA	NA	—	—	—	—	0.27	NA	NA	NA	NA	NA	NA
MD21-09-9867	21-605367	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.35 (J)	NA	NA	NA	NA	NA	NA
MD21-09-9868	21-605367	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.19	NA	NA	NA	NA	NA	NA
MD21-09-9869	21-605368	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.061	NA	NA	NA	NA	NA	NA
MD21-09-9870	21-605368	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.1 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10518	21-605368	3.0000–3.5000	QBT3	NA	NA	NA	—	—	—	—	0.044	NA	NA	NA	NA	NA	NA
MD21-09-9872	21-605369	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.19	NA	NA	NA	NA	NA	NA
MD21-09-9873	21-605369	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.054	NA	NA	NA	NA	NA	NA
MD21-09-9876	21-605370	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.25	NA	NA	NA	NA	NA	NA
MD21-09-9877	21-605370	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.12	NA	NA	NA	NA	NA	NA
MD21-09-9879	21-605371	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.041	NA	NA	NA	NA	NA	NA
MD21-09-9884	21-605372	1.5000–2.0000	SOIL	NA	NA	NA	—	—	—	0.17	0.082	NA	NA	NA	NA	NA	NA
MD21-09-9885	21-605373	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	0.14 (J)	0.39	NA	NA	NA	NA	NA	NA
MD21-09-9886	21-605373	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.087	NA	NA	NA	NA	NA	NA
MD21-09-9888	21-605374	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.12	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-9891	21-605375	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	0.31	0.65	NA	NA	NA	NA	NA	NA
MD21-09-9892	21-605375	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.86	NA	NA	NA	NA	NA	NA
MD21-09-9893	21-605375	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	0.22	0.43	NA	NA	NA	NA	NA	NA
MD21-09-9895	21-605376	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	0.12	0.2	NA	NA	NA	NA	NA	NA
MD21-09-9896	21-605376	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	0.13	0.22	NA	NA	NA	NA	NA	NA
MD21-09-9897	21-605377	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.1	NA	NA	NA	NA	NA	NA
MD21-09-9900	21-605378	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.17	NA	NA	NA	NA	NA	NA
MD21-09-9901	21-605378	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.019 (J)	NA	NA	NA	NA	NA	NA
MD21-09-9902	21-605378	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.072 (J)	NA	NA	NA	NA	NA	NA
MD21-09-9903	21-605378	3.0000–3.5000	QBT3	NA	NA	NA	—	—	—	—	0.018 (J)	NA	NA	NA	NA	NA	NA
MD21-09-9904	21-605379	0.0000–0.5000	QBT3	NA	NA	NA	—	—	—	—	0.81	NA	NA	NA	NA	NA	NA
MD21-09-9905	21-605379	0.5000–1.0000	QBT3	NA	NA	NA	—	—	—	—	0.078	NA	NA	NA	NA	NA	NA
MD21-09-9906	21-605379	1.5000–2.0000	QBT3	NA	NA	NA	—	—	—	—	0.09 (J-)	NA	NA	NA	NA	NA	NA
MD21-09-9907	21-605380	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.042	NA	NA	NA	NA	NA	NA
MD21-09-9909	21-605380	1.5000–2.0000	SOIL	NA	NA	NA	—	—	—	0.12	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10519	21-605532	0.0000–0.5000	SOIL	NA	NA	NA	—	—	—	—	0.77 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10521	21-605533	0.5000–1.0000	SOIL	NA	NA	NA	—	—	—	—	0.02 (J)	NA	NA	NA	NA	NA	NA
MD21-09-9415	21-605617	10.0000–10.5000	QBT3	NA	NA	NA	—	—	—	0.095	0.16	NA	NA	NA	NA	NA	NA
MD21-09-9416	21-605618	10.0000–10.5000	QBT3	NA	NA	NA	—	—	—	0.23	0.24	NA	NA	NA	NA	NA	NA
MD21-09-9417	21-605619	10.0000–10.5000	QBT3	NA	NA	NA	—	—	—	0.26	0.33	NA	NA	NA	NA	NA	NA
MD21-09-9418	21-605620	4.7500–5.2500	QBT3	NA	NA	NA	—	—	—	0.066	0.15	NA	NA	NA	NA	NA	NA
MD21-09-10409	21-605698	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.071	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10410	21-605699	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.1	0.23	NA	NA	NA	NA	NA	NA
MD21-09-10411	21-605700	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.076	0.15	NA	NA	NA	NA	NA	NA
MD21-09-10412	21-605701	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.068	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10413	21-605702	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.061	0.1	NA	NA	NA	NA	NA	NA
MD21-09-10414	21-605703	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	0.032 (J)	0.063	NA	NA	NA	NA	NA	NA
MD21-09-10415	21-605704	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.071	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10418	21-605707	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.025 (J)	0.061	NA	NA	NA	NA	NA	NA
MD21-09-10419	21-605708	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.03 (J)	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10420	21-605709	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.065	0.11	NA	NA	NA	NA	NA	NA
MD21-09-10421	21-605710	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.033 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10422	21-605711	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	0.046	0.068	NA	NA	NA	NA	NA	NA
MD21-09-10423	21-605712	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	—	0.041	NA	NA	NA	NA	NA	NA
MD21-09-10424	21-605713	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.012 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10425	21-605714	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	—	0.014 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10426	21-605715	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.051	0.1	NA	NA	NA	NA	NA	NA
MD21-09-10427	21-605716	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	0.022 (J)	0.041	NA	NA	NA	NA	NA	NA
MD21-09-10428	21-605717	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.039	NA	NA	NA	NA	NA	NA
MD21-09-10429	21-605718	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.023 (J)	0.08	NA	NA	NA	NA	NA	NA
MD21-09-10430	21-605719	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.088	NA	NA	NA	NA	NA	NA
MD21-09-10431	21-605720	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.096	NA	NA	NA	NA	NA	NA
MD21-09-10432	21-605721	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	—	0.011 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10433	21-605722	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.046	0.14	NA	NA	NA	NA	NA	NA
MD21-09-10434	21-605723	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.084	0.092	NA	NA	NA	NA	NA	NA
MD21-09-10435	21-605724	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.39	0.25	NA	NA	NA	NA	NA	NA
MD21-09-10438	21-605727	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.59	0.34 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10439	21-605728	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.045 (J)	0.023 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10440	21-605729	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.3	0.48	NA	NA	NA	NA	NA	NA
MD21-09-10443	21-605732	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.031 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10445	21-605734	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.018 (J)	0.053	NA	NA	NA	NA	NA	NA
MD21-09-10446	21-605735	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.036	NA	NA	NA	NA	NA	NA
MD21-09-10448	21-605737	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.093	0.098	NA	NA	NA	NA	NA	NA
MD21-09-10449	21-605738	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.087	NA	NA	NA	NA	NA	NA
MD21-09-10450	21-605739	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10451	21-605740	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.025 (J)	0.052	NA	NA	NA	NA	NA	NA
MD21-09-10452	21-605741	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.16	NA	NA	NA	NA	NA	NA
MD21-09-10453	21-605742	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.088	NA	NA	NA	NA	NA	NA
MD21-09-10454	21-605743	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.057	0.15	NA	NA	NA	NA	NA	NA
MD21-09-10455	21-605744	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.48	0.29 (J)	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10456	21-605745	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.11	0.2 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10457	21-605746	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.33	NA	NA	NA	NA	NA	NA
MD21-09-10458	21-605747	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.24	NA	NA	NA	NA	NA	NA
MD21-09-10459	21-605748	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.55	NA	NA	NA	NA	NA	NA
MD21-09-10460	21-605749	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.057	NA	NA	NA	NA	NA	NA
MD21-09-10462	21-605751	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.17	NA	NA	NA	NA	NA	NA
MD21-09-10463	21-605752	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.47	NA	NA	NA	NA	NA	NA
MD21-09-10464	21-605753	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.027 (J)	0.072	NA	NA	NA	NA	NA	NA
MD21-09-10465	21-605754	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.23	NA	NA	NA	NA	NA	NA
MD21-09-10466	21-605755	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.043	0.1	NA	NA	NA	NA	NA	NA
MD21-09-10467	21-605756	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.022 (J)	0.082	NA	NA	NA	NA	NA	NA
MD21-10-1940	21-605759	2.6600–2.7500	SOIL	NA	NA	NA	—	—	0.0523	0.132	0.244	NA	NA	NA	NA	NA	NA
MD21-09-10475	21-605764	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	—	0.79	NA	NA	NA	NA	NA	NA
MD21-09-10476	21-605765	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.31 (J)	0.44	NA	NA	NA	NA	NA	NA
MD21-09-10768	21-605766	1.5000–1.7500	SOIL	NA	NA	NA	—	—	—	0.17 (J)	0.24 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10479	21-605768	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.3 (J-)	0.49 (J-)	NA	NA	NA	NA	NA	NA
MD21-09-10480	21-605769	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.2	0.21	NA	NA	NA	NA	NA	NA
MD21-09-10481	21-605770	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.11 (J)	0.18 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10482	21-605771	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.17	0.27	NA	NA	NA	NA	NA	NA
MD21-09-13221	21-605772	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	0.12	0.214	NA	NA	NA	NA	NA	NA
MD21-09-10487	21-605776	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.13 (J)	0.4	NA	NA	NA	NA	NA	NA
MD21-09-10488	21-605777	2.1600–2.2500	SOIL	NA	NA	NA	—	—	—	0.29	0.62	NA	NA	NA	NA	NA	NA
MD21-09-13202	21-605777	2.1600–2.2500	SOIL	NA	NA	NA	—	—	—	0.11 (J)	0.25	NA	NA	NA	NA	NA	NA
MD21-09-10510	21-607149	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.027 (J)	0.1	NA	NA	NA	NA	NA	NA
MD21-09-10511	21-607150	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.12	0.24	NA	NA	NA	NA	NA	NA
MD21-09-10512	21-607151	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.16 (J)	0.43	NA	NA	NA	NA	NA	NA
MD21-09-10514	21-607153	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.03 (J)	0.064	NA	NA	NA	NA	NA	NA
MD21-09-10528	21-607687	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.048 (J)	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10529	21-607688	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.15	0.29	NA	NA	NA	NA	NA	NA
MD21-09-10530	21-607689	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.047 (J)	0.17	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10531	21-607690	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.056 (J)	0.16	NA	NA	NA	NA	NA	NA
MD21-09-10532	21-607691	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.047	0.13	NA	NA	NA	NA	NA	NA
MD21-09-10533	21-607692	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	—	0.31	NA	NA	NA	NA	NA	NA
MD21-09-10534	21-607693	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.02 (J)	0.051	NA	NA	NA	NA	NA	NA
MD21-09-10535	21-607694	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.021 (J)	0.072	NA	NA	NA	NA	NA	NA
MD21-09-10536	21-607695	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	—	0.28	NA	NA	NA	NA	NA	NA
MD21-09-10540	21-607699	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.14	0.22	NA	NA	NA	NA	NA	NA
MD21-09-10541	21-607700	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.2 (J)	0.69	NA	NA	NA	NA	NA	NA
MD21-09-10546	21-607705	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.11 (J)	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10547	21-607706	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.1 (J)	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10548	21-607707	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.22	0.59	NA	NA	NA	NA	NA	NA
MD21-09-10550	21-607709	1.6600–1.7500	SOIL	NA	NA	NA	—	—	0.03 (J)	—	0.13 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13220	21-607710	3.1600–3.2500	QBT3	NA	NA	NA	—	—	0.0233	0.044	0.0732	NA	NA	NA	NA	NA	NA
MD21-09-10552	21-607711	1.6600–1.7600	SOIL	NA	NA	NA	—	—	—	0.069 (J)	0.12 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10553	21-607712	1.6600–1.7500	SOIL	NA	NA	NA	—	—	0.051	—	0.15 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10554	21-607713	1.6600–1.7500	SOIL	NA	NA	NA	0.43 (J)	—	—	—	—	NA	NA	NA	NA	NA	NA
MD21-09-10555	21-607714	1.6600–1.7500	SOIL	NA	NA	NA	—	—	0.16 (J)	—	0.053 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10556	21-607715	1.6600–1.7500	SOIL	NA	NA	NA	—	—	0.037 (J)	—	0.17 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10559	21-607718	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.27 (J)	0.18 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10560	21-607719	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.12 (J)	0.15 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10563	21-607722	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.059 (J)	0.21 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10564	21-607723	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.084 (J)	0.19 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10565	21-607724	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.16 (J)	0.38 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10566	21-607725	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.31	0.64 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10567	21-607726	4.1600–4.2500	QBT3	NA	NA	NA	—	—	—	0.15 (J)	—	NA	NA	NA	NA	NA	NA
MD21-09-10568	21-607727	10.1600–10.2500	QBT3	NA	NA	NA	—	—	—	0.79 (J)	0.19 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10569	21-607728	4.1600–4.2500	SOIL	NA	NA	NA	—	—	—	0.44 (J)	0.19 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10570	21-607729	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.042 (J)	0.095 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10571	21-607730	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.11 (J)	0.21 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10572	21-607731	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.16 (J)	0.3 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10574	21-607733	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.29 (J)	0.61 (J)	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-13199	21-607738	5.1600–5.2500	QBT3	NA	NA	NA	—	—	—	0.15 (J)	0.33	NA	NA	NA	NA	NA	NA
MD21-09-10582	21-607741	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.41	0.18	NA	NA	NA	NA	NA	NA
MD21-09-10583	21-607742	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.24	0.27	NA	NA	NA	NA	NA	NA
MD21-10-1948	21-607744	5.1600–5.2500	QBT3	NA	NA	NA	—	—	—	0.0387	0.0404	NA	NA	NA	NA	NA	NA
MD21-09-10586	21-607745	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.042	0.034 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10587	21-607746	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.11	0.1 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10588	21-607747	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.091	0.12 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10589	21-607748	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.12	0.075 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10590	21-607749	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.2	0.13 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10591	21-607750	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.092	0.038 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10592	21-607751	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.24	0.17 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10594	21-607753	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.23	0.17 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13210	21-607754	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.33 (J)	0.49	NA	NA	NA	NA	NA	NA
MD21-09-13211	21-607756	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	0.17 (J)	0.16	NA	NA	NA	NA	NA	NA
MD21-10-1947	21-607763	5.1600–5.2500	QBT3	NA	NA	NA	—	—	—	0.0562	0.0672	NA	NA	NA	NA	NA	NA
MD21-09-10605	21-607764	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.14	0.3	NA	NA	NA	NA	NA	NA
MD21-09-10606	21-607765	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.22	0.3	NA	NA	NA	NA	NA	NA
MD21-09-10607	21-607766	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.063	0.1	NA	NA	NA	NA	NA	NA
MD21-09-10608	21-607767	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.05 (J)	0.087 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10609	21-607768	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.075	0.18	NA	NA	NA	NA	NA	NA
MD21-09-10610	21-607769	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.2	0.27	NA	NA	NA	NA	NA	NA
MD21-09-10611	21-607770	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.1	0.18	NA	NA	NA	NA	NA	NA
MD21-09-10612	21-607771	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.22 (J)	0.46 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10613	21-607772	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.19	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10614	21-607773	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.52	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10615	21-607774	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.04	0.065	NA	NA	NA	NA	NA	NA
MD21-09-10616	21-607775	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.043	0.07	NA	NA	NA	NA	NA	NA
MD21-09-10617	21-607776	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.077	0.13	NA	NA	NA	NA	NA	NA
MD21-09-10618	21-607777	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.13	0.18 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10620	21-607779	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.35	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10621	21-607780	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.14 (J)	0.39	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10622	21-607781	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.58	0.4	NA	NA	NA	NA	NA	NA
MD21-10-1946	21-607782	2.6600–2.7500	QBT3	NA	NA	NA	—	—	—	0.134	0.124	NA	NA	NA	NA	NA	NA
MD21-09-10625	21-607784	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.31	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10628	21-607787	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.19	0.26	NA	NA	NA	NA	NA	NA
MD21-09-10629	21-607788	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.18	0.25	NA	NA	NA	NA	NA	NA
MD21-09-13204	21-607790	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.12 (J)	0.18 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10633	21-607792	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.33	0.54	NA	NA	NA	NA	NA	NA
MD21-09-10636	21-607795	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.29	0.46	NA	NA	NA	NA	NA	NA
MD21-09-10637	21-607796	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.27	0.35	NA	NA	NA	NA	NA	NA
MD21-09-10638	21-607797	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.21	0.27	NA	NA	NA	NA	NA	NA
MD21-09-10639	21-607798	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.16	0.22	NA	NA	NA	NA	NA	NA
MD21-09-10640	21-607799	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.15	0.2	NA	NA	NA	NA	NA	NA
MD21-09-10641	21-607800	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.078	0.1	NA	NA	NA	NA	NA	NA
MD21-09-10642	21-607801	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.069	0.052	NA	NA	NA	NA	NA	NA
MD21-09-10643	21-607802	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.057	0.071	NA	NA	NA	NA	NA	NA
MD21-09-10644	21-607803	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.26	0.54	NA	NA	NA	NA	NA	NA
MD21-09-10645	21-607804	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.02 (J)	0.019 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13215	21-607812	5.6600–5.7500	QBT3	NA	NA	NA	—	—	—	0.099 (J)	0.22	NA	NA	NA	NA	NA	NA
MD21-09-10654	21-607813	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.12	0.21	NA	NA	NA	NA	NA	NA
MD21-09-10655	21-607814	4.6600–4.7500	SOIL	NA	NA	NA	—	—	—	0.079	0.074	NA	NA	NA	NA	NA	NA
MD21-09-10656	21-607815	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.04	0.042	NA	NA	NA	NA	NA	NA
MD21-09-10657	21-607816	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.026 (J)	0.026 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10658	21-607817	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.059	0.057	NA	NA	NA	NA	NA	NA
MD21-09-10659	21-607818	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.058	0.054	NA	NA	NA	NA	NA	NA
MD21-09-10660	21-607819	4.6600–4.7500	SOIL	NA	NA	NA	—	—	—	0.22	0.32	NA	NA	NA	NA	NA	NA
MD21-09-10661	21-607820	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.21	0.32	NA	NA	NA	NA	NA	NA
MD21-09-10663	21-607822	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.03 (J)	0.03 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13214	21-607824	5.6600–5.7500	QBT3	NA	NA	NA	—	—	—	0.027 (J)	0.044	NA	NA	NA	NA	NA	NA
MD21-09-10666	21-607825	4.6600–4.7500	QBT3	NA	NA	NA	—	—	—	0.21	0.25	NA	NA	NA	NA	NA	NA
MD21-09-10667	21-607826	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.084	0.12	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10668	21-607827	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.17	0.27	NA	NA	NA	NA	NA	NA
MD21-09-10669	21-607828	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.25	0.39	NA	NA	NA	NA	NA	NA
MD21-09-10670	21-607829	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.28	0.27	NA	NA	NA	NA	NA	NA
MD21-09-10671	21-607830	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.058	0.066	NA	NA	NA	NA	NA	NA
MD21-09-10672	21-607831	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.068	0.062	NA	NA	NA	NA	NA	NA
MD21-09-10673	21-607832	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.056	0.06	NA	NA	NA	NA	NA	NA
MD21-09-10674	21-607833	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.085	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10675	21-607834	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.14	0.14	NA	NA	NA	NA	NA	NA
MD21-09-10676	21-607835	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.069	0.068	NA	NA	NA	NA	NA	NA
MD21-09-10677	21-607836	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.059	0.081	NA	NA	NA	NA	NA	NA
MD21-09-10678	21-607837	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.12	0.16	NA	NA	NA	NA	NA	NA
MD21-09-10679	21-607838	1.6600–1.7500	QBT3	NA	NA	NA	—	—	—	0.076	0.068	NA	NA	NA	NA	NA	NA
MD21-09-10680	21-607839	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.25	0.51	NA	NA	NA	NA	NA	NA
MD21-09-10681	21-607840	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.25	0.53	NA	NA	NA	NA	NA	NA
MD21-09-10682	21-607841	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.12	0.25	NA	NA	NA	NA	NA	NA
MD21-09-10683	21-607842	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.016 (J)	0.024 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10684	21-607843	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.034 (J)	0.05	NA	NA	NA	NA	NA	NA
MD21-09-10695	21-607844	0.6600–75.0000	QBT3	NA	NA	NA	—	—	—	0.062	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10696	21-607845	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.036	0.078	NA	NA	NA	NA	NA	NA
MD21-09-10697	21-607846	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.086	0.16	NA	NA	NA	NA	NA	NA
MD21-09-10698	21-607847	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.1	0.2	NA	NA	NA	NA	NA	NA
MD21-09-10699	21-607848	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.12	0.23	NA	NA	NA	NA	NA	NA
MD21-09-10700	21-607849	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.08	0.16	NA	NA	NA	NA	NA	NA
MD21-09-10701	21-607850	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.16	0.29	NA	NA	NA	NA	NA	NA
MD21-09-10702	21-607851	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.19	0.33	NA	NA	NA	NA	NA	NA
MD21-09-10703	21-607852	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.18	0.29	NA	NA	NA	NA	NA	NA
MD21-09-10704	21-607853	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.43	0.52	NA	NA	NA	NA	NA	NA
MD21-09-13207	21-607855	1.1600–1.2500	SOIL	NA	NA	NA	—	—	—	0.14 (J)	0.25 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10707	21-607856	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.18	0.28	NA	NA	NA	NA	NA	NA
MD21-09-10708	21-607857	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.11	0.17	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10709	21-607858	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.15	0.2	NA	NA	NA	NA	NA	NA
MD21-09-10710	21-607859	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.27	0.34	NA	NA	NA	NA	NA	NA
MD21-09-10711	21-607860	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.13	0.21	NA	NA	NA	NA	NA	NA
MD21-09-10712	21-607861	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.091	0.13	NA	NA	NA	NA	NA	NA
MD21-09-10713	21-607862	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.21	0.27	NA	NA	NA	NA	NA	NA
MD21-09-10714	21-607863	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.34	0.48	NA	NA	NA	NA	NA	NA
MD21-09-10715	21-607864	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.3	0.37	NA	NA	NA	NA	NA	NA
MD21-09-10716	21-607865	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.16	0.24	NA	NA	NA	NA	NA	NA
MD21-09-10717	21-607866	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.17	0.23	NA	NA	NA	NA	NA	NA
MD21-09-10718	21-607867	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.098	0.13	NA	NA	NA	NA	NA	NA
MD21-09-10719	21-607868	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.19	0.23	NA	NA	NA	NA	NA	NA
MD21-09-10721	21-607870	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.26	0.38	NA	NA	NA	NA	NA	NA
MD21-09-10722	21-607871	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.15	0.27	NA	NA	NA	NA	NA	NA
MD21-09-10723	21-607872	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.073	0.11	NA	NA	NA	NA	NA	NA
MD21-09-10724	21-607873	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.11	0.17	NA	NA	NA	NA	NA	NA
MD21-09-10725	21-607874	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.19	0.4	NA	NA	NA	NA	NA	NA
MD21-09-10726	21-607875	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.23	0.3	NA	NA	NA	NA	NA	NA
MD21-09-10727	21-607876	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.14	0.25	NA	NA	NA	NA	NA	NA
MD21-09-10730	21-607879	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.12	0.15	NA	NA	NA	NA	NA	NA
MD21-09-10737	21-607886	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.3	0.34	NA	NA	NA	NA	NA	NA
MD21-09-10738	21-607887	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.36	0.43	NA	NA	NA	NA	NA	NA
MD21-09-13217	21-607888	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.24	0.34	NA	NA	NA	NA	NA	NA
MD21-09-10740	21-607889	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.25	0.31	NA	NA	NA	NA	NA	NA
MD21-09-10741	21-607890	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.28	0.39	NA	NA	NA	NA	NA	NA
MD21-09-10742	21-607891	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.25	0.34	NA	NA	NA	NA	NA	NA
MD21-09-10744	21-607893	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.13	0.18	NA	NA	NA	NA	NA	NA
MD21-09-10745	21-607894	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.074	0.14	NA	NA	NA	NA	NA	NA
MD21-09-10746	21-607895	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.27	0.2	NA	NA	NA	NA	NA	NA
MD21-09-10748	21-607897	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.095	0.16	NA	NA	NA	NA	NA	NA
MD21-09-10749	21-607898	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.2	0.19	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1016	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**67500**	**17200**	**3.93**	**2.22**	**2.22**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**62.1**	**240000**[a]
Industrial SSL				**36700**	**851000**	**183000**	**41.3**	**8.26**	**8.26**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**234**	**2500000**[a]
Construction Worker SSL				**18600**	**263000**	**66800**	**15.3**	**75.8**	**75.8**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**2060**	**952000**[b]
MD21-09-10752	21-607901	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.41	0.18	NA	NA	NA	NA	NA	NA
MD21-09-10753	21-607902	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.019 (J)	0.01 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10755	21-607904	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.43	0.22	NA	NA	NA	NA	NA	NA
MD21-09-10756	21-607905	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.2	0.13	NA	NA	NA	NA	NA	NA
MD21-09-10757	21-607906	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.037	0.043	NA	NA	NA	NA	NA	NA
MD21-09-10758	21-607907	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.11	0.085	NA	NA	NA	NA	NA	NA
MD21-09-10759	21-607908	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.018 (J)	0.012 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10760	21-607909	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.08	0.044	NA	NA	NA	NA	NA	NA
MD21-09-10761	21-607910	0.6600–0.7500	SOIL	NA	NA	NA	—	—	—	0.096	0.099	NA	NA	NA	NA	NA	NA
MD21-09-10762	21-607911	0.6600–0.7500	QBT3	NA	NA	NA	—	—	—	0.32	0.12	NA	NA	NA	NA	NA	NA
MD21-09-10765	21-607912	4.0000–4.5000	QBT3	NA	NA	NA	—	—	—	0.31	0.68	NA	NA	NA	NA	NA	NA
MD21-09-10769	21-607918	1.5000–1.7500	SOIL	NA	NA	NA	—	—	—	0.046 (J)	0.08 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10771	21-607920	1.5000–1.7500	SOIL	NA	NA	NA	—	—	—	0.18 (J)	0.35 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10772	21-607921	1.5000–1.7500	SOIL	NA	NA	NA	—	—	—	0.17 (J)	0.36 (J)	NA	NA	NA	NA	NA	NA
MD21-09-10774	21-607923	1.0000–1.2500	SOIL	NA	NA	NA	—	—	—	0.11 (J)	0.19 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13197	21-608084	5.1600–5.2500	SOIL	NA	NA	NA	—	—	—	0.32 (J)	0.57	NA	NA	NA	NA	NA	NA
MD21-09-13219	21-608087	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.164	0.351	NA	NA	NA	NA	NA	NA
MD21-09-13201	21-608088	2.1600–2.2500	SOIL	NA	NA	NA	—	—	—	0.16 (J)	0.35	NA	NA	NA	NA	NA	NA
MD21-09-13205	21-608092	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.21 (J)	0.16 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13208	21-608095	1.1600–1.2500	SOIL	NA	NA	NA	—	—	—	0.22 (J)	0.47 (J)	NA	NA	NA	NA	NA	NA
MD21-09-13209	21-608096	2.6600–2.7500	SOIL	NA	NA	NA	—	—	—	0.046 (J)	0.057	NA	NA	NA	NA	NA	NA
MD21-09-13216	21-608103	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.087	0.11	NA	NA	NA	NA	NA	NA
MD21-09-13218	21-608105	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.031 (J)	0.039 (J)	NA	NA	NA	NA	NA	NA
MD21-10-1941	21-608835	0.6600–0.7500	SOIL	NA	NA	NA	—	—	0.167	0.343	0.354	NA	NA	NA	NA	NA	NA
MD21-10-1942	21-608836	2.6600–2.7500	SOIL	NA	NA	NA	—	—	0.0266	0.0636	0.132	NA	NA	NA	NA	NA	NA
MD21-10-1943	21-608837	5.1600–5.2500	QBT3	NA	NA	NA	—	—	0.008	0.0192	0.0394	NA	NA	NA	NA	NA	NA
MD21-10-1945	21-608839	1.6600–1.7500	SOIL	NA	NA	NA	—	—	—	0.0574	0.0502	NA	NA	NA	NA	NA	NA
MD21-10-1949	21-608843	5.1600–5.2500	QBT3	NA	NA	NA	—	—	—	0.0381	0.0278	NA	NA	NA	NA	NA	NA
MD21-10-1951	21-608845	5.1600–5.2500	QBT3	NA	NA	NA	—	—	—	0.0145	0.0176	NA	NA	NA	NA	NA	NA
MD21-10-1953	21-608847	3.1600–3.2500	SOIL	NA	NA	NA	—	—	—	0.33 (J)	0.5	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
RE21-06-68436	21-25704	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68440	21-25706	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68441	21-25706	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	0.000648 (J)	—	NA	NA	NA	NA
RE21-06-68442	21-25706	1.5000–2.0000	SOIL	—	—	—	—	—	0.0579 (J)	—	—	—	—	NA	NA	NA	NA
RE21-06-68443	21-25707	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.205 (J)	NA	NA	NA	NA
RE21-06-68444	21-25707	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	0.000367 (J)	—	NA	NA	NA	NA
RE21-06-68445	21-25707	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	0.000325 (J)	—	NA	NA	NA	NA
RE21-06-68446	21-25708	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.813 (J)	NA	NA	NA	NA
RE21-06-68447	21-25708	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	0.000268 (J)	0.216 (J)	NA	NA	NA	NA
RE21-06-68448	21-25708	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	0.000281 (J)	0.219 (J)	NA	NA	NA	NA
RE21-06-68449	21-25709	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68450	21-25709	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68451	21-25709	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68452	21-25710	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68453	21-25710	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68454	21-25710	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68458	21-25712	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68459	21-25712	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68460	21-25712	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68461	21-25713	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68462	21-25713	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68463	21-25713	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68464	21-25714	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68465	21-25714	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68466	21-25714	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68467	21-25715	0.0000–0.5000	SOIL	—	—	NA	NA	0.15 (J+)	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68468	21-25715	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68469	21-25715	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68470	21-25716	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0919	NA	NA	NA	NA
RE21-06-68471	21-25716	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
RE21-06-68474	21-25717	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68475	21-25717	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68476	21-25718	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68478	21-25718	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68479	21-25719	0.0000–0.5000	SOIL	—	0.231	NA	NA	—	0.0507 (J)	—	NA	NA	0.0445	NA	NA	NA	NA
RE21-06-68480	21-25719	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68481	21-25719	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68482	21-25720	0.0000–0.5000	SOIL	—	—	NA	NA	0.0208 (J)	—	—	NA	NA	0.0377	NA	NA	NA	NA
RE21-06-68483	21-25720	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68484	21-25720	1.5000–2.0000	QBT3	—	—	—	—	0.0301 (J)	—	—	—	—	0.0643	NA	NA	NA	NA
RE21-06-68502	21-25722	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.905 (J)	NA	NA	NA	NA
RE21-06-68503	21-25722	0.5000–1.0000	SOIL	—	—	0.000246 (J)	—	—	—	—	0.00118	—	—	NA	NA	NA	NA
RE21-06-68504	21-25722	1.5000–2.0000	QBT3	—	—	0.000245 (J)	—	—	—	—	0.00109 (J)	—	0.213 (J)	NA	NA	NA	NA
RE21-06-68507	21-25723	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	0.00115 (J)	—	0.225 (J)	NA	NA	NA	NA
RE21-06-68508	21-25723	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	0.000411 (J)	—	0.218 (J)	NA	NA	NA	NA
RE21-06-68511	21-25724	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	0.000582 (J)	—	—	NA	NA	NA	NA
RE21-06-68512	21-25724	1.5000–2.0000	QBT3	—	0.232 (J)	—	—	—	—	—	—	—	0.211 (J)	NA	NA	NA	NA
RE21-06-68514	21-25725	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.342 (J)	NA	NA	NA	NA
RE21-06-68515	21-25725	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	0.000862 (J)	—	—	NA	NA	NA	NA
RE21-06-72611	21-25725	3.0000–3.5000	SOIL	—	—	—	—	—	—	—	—	—	—	3.67E-06	6.83E-06	0.00000175 (J)	1.75E-06
RE21-06-68518	21-25726	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.219 (J)	NA	NA	NA	NA
RE21-06-68519	21-25726	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	0.000706 (J)	—	—	NA	NA	NA	NA
RE21-06-68521	21-25727	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.229 (J)	NA	NA	NA	NA
RE21-06-68522	21-25727	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	0.214 (J)	NA	NA	NA	NA
RE21-06-68523	21-25727	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68524	21-25728	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.244 (J)	NA	NA	NA	NA
RE21-06-68525	21-25728	0.5000–1.0000	QBT3	—	—	0.000293 (J)	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68526	21-25728	1.5000–2.0000	QBT3	—	—	0.000485 (J)	—	—	—	—	—	—	0.207 (J)	NA	NA	NA	NA
RE21-06-68527	21-25729	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68528	21-25729	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
RE21-06-68530	21-25730	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.208 (J)	NA	NA	NA	NA
RE21-06-68532	21-25730	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68533	21-25730	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68534	21-25731	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.204 (J)	NA	NA	NA	NA
RE21-06-68536	21-25731	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	0.226 (J)	NA	NA	NA	NA
RE21-06-68537	21-25731	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68548	21-25732	0.0000–0.5000	SOIL	—	—	NA	NA	0.017 (J)	—	—	NA	NA	0.0268 (J)	NA	NA	NA	NA
RE21-06-68549	21-25732	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68551	21-25733	0.0000–0.5000	SOIL	—	—	NA	NA	0.42	—	—	NA	NA	0.723	NA	NA	NA	NA
RE21-06-68552	21-25733	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68553	21-25733	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68554	21-25734	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0223 (J)	NA	NA	NA	NA
RE21-06-68555	21-25734	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	0.00122	0.00248	—	NA	NA	NA	NA
RE21-06-68556	21-25734	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68557	21-25735	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68558	21-25735	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68559	21-25735	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68560	21-25736	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68562	21-25736	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	0.232 (J)	—	NA	NA	0.0167 (J)	—	—	NA	NA	0.0295 (J)	NA	NA	NA	NA
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	0.137 (J)	NA	NA	NA	NA
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0257 (J)	NA	NA	NA	NA
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	0.0154 (J)	NA	NA	NA	NA
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	—	0.252	—	—	—	0.0592 (J)	—	—	—	—	NA	NA	NA	NA
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	—	—	—	0.000394 (J)	0.0355 (J)	—	0.0248	—	—	0.114	NA	NA	NA	NA
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	—	—	—	0.000443 (J)	—	—	0.162 (J)	—	—	0.0127 (J)	NA	NA	NA	NA
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	—	—	—	—	—	—	0.007	—	—	0.0344 (J)	NA	NA	NA	NA
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	—	—	—	—	—	—	0.00882	—	—	0.0244 (J)	NA	NA	NA	NA
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0173 (J)	NA	NA	NA	NA
MD21-09-9860	21-25752	3.8000–4.8000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	—	—	—	—	—	—	—	—	—	0.0112 (J)	NA	NA	NA	NA
RE21-06-68640	21-25758	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68646	21-25761	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68648	21-25762	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68652	21-25764	1.5000–2.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68653	21-25765	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.026 (J)	NA	NA	NA	NA
RE21-06-68654	21-25765	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68655	21-25766	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68656	21-25766	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68657	21-25767	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0207 (J)	NA	NA	NA	NA
RE21-06-68658	21-25767	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68659	21-25768	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0183 (J)	NA	NA	NA	NA
RE21-06-68660	21-25768	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68661	21-25769	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68662	21-25769	1.5000–2.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-06-68663	21-25770	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	—	NA	NA	NA	NA
RE21-06-68665	21-25771	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	NA	NA	0.0227 (J)	NA	NA	NA	NA
RE21-09-2642	21-604461	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2643	21-604461	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2644	21-604461	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
RE21-09-2645	21-604462	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2646	21-604462	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2648	21-604463	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2649	21-604463	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2650	21-604463	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2651	21-604464	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2652	21-604464	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2655	21-604465	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2656	21-604465	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2662	21-604467	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2665	21-604468	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2669	21-604470	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2672	21-604471	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2673	21-604471	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2674	21-604471	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2675	21-604472	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2676	21-604472	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2677	21-604472	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2680	21-604473	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2681	21-604474	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2682	21-604474	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2683	21-604474	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2685	21-604475	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2686	21-604475	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2687	21-604476	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2699	21-604480	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2700	21-604480	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2701	21-604480	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2702	21-604481	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2703	21-604481	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
RE21-09-2704	21-604481	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2705	21-604482	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2706	21-604482	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2708	21-604483	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2709	21-604483	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2710	21-604483	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2711	21-604484	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2712	21-604484	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2713	21-604485	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2714	21-604485	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2721	21-604489	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9864	21-605366	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9865	21-605366	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9867	21-605367	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9868	21-605367	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9869	21-605368	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9870	21-605368	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10518	21-605368	3.0000–3.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9872	21-605369	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9873	21-605369	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9876	21-605370	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9877	21-605370	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9879	21-605371	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9884	21-605372	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9885	21-605373	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9886	21-605373	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9888	21-605374	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9891	21-605375	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9892	21-605375	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9893	21-605375	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-9895	21-605376	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9896	21-605376	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9897	21-605377	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9900	21-605378	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9901	21-605378	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9902	21-605378	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9903	21-605378	3.0000–3.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9904	21-605379	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9905	21-605379	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9906	21-605379	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9907	21-605380	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9909	21-605380	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10519	21-605532	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10521	21-605533	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9415	21-605617	10.0000–10.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9416	21-605618	10.0000–10.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9417	21-605619	10.0000–10.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9418	21-605620	4.7500–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10409	21-605698	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10410	21-605699	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10411	21-605700	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10412	21-605701	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10413	21-605702	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10414	21-605703	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10415	21-605704	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10418	21-605707	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10419	21-605708	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10420	21-605709	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10421	21-605710	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10422	21-605711	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10423	21-605712	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10424	21-605713	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10425	21-605714	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10426	21-605715	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10427	21-605716	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10428	21-605717	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10429	21-605718	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10430	21-605719	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10431	21-605720	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10432	21-605721	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10433	21-605722	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10434	21-605723	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10435	21-605724	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10438	21-605727	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10439	21-605728	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10440	21-605729	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10443	21-605732	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10445	21-605734	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10446	21-605735	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10448	21-605737	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10449	21-605738	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10450	21-605739	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10451	21-605740	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10452	21-605741	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10453	21-605742	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10454	21-605743	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10455	21-605744	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10456	21-605745	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10457	21-605746	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10458	21-605747	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10459	21-605748	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10460	21-605749	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10462	21-605751	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10463	21-605752	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10464	21-605753	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10465	21-605754	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10466	21-605755	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10467	21-605756	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1940	21-605759	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10475	21-605764	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10476	21-605765	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10768	21-605766	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10479	21-605768	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10480	21-605769	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10481	21-605770	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10482	21-605771	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13221	21-605772	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10487	21-605776	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10488	21-605777	2.1600–2.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13202	21-605777	2.1600–2.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10510	21-607149	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10511	21-607150	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10512	21-607151	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10514	21-607153	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10528	21-607687	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10529	21-607688	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10530	21-607689	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10531	21-607690	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10532	21-607691	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10533	21-607692	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10534	21-607693	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10535	21-607694	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10536	21-607695	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10540	21-607699	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10541	21-607700	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10546	21-607705	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10547	21-607706	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10548	21-607707	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10550	21-607709	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13220	21-607710	3.1600–3.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10552	21-607711	1.6600–1.7600	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10553	21-607712	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10554	21-607713	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10555	21-607714	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10556	21-607715	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10559	21-607718	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10560	21-607719	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10563	21-607722	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10564	21-607723	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10565	21-607724	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10566	21-607725	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10567	21-607726	4.1600–4.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10568	21-607727	10.1600–10.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10569	21-607728	4.1600–4.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10570	21-607729	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10571	21-607730	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10572	21-607731	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10574	21-607733	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13199	21-607738	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10582	21-607741	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10583	21-607742	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1948	21-607744	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10586	21-607745	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10587	21-607746	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10588	21-607747	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10589	21-607748	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10590	21-607749	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10591	21-607750	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10592	21-607751	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10594	21-607753	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13210	21-607754	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13211	21-607756	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1947	21-607763	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10605	21-607764	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10606	21-607765	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10607	21-607766	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10608	21-607767	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10609	21-607768	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10610	21-607769	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10611	21-607770	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10612	21-607771	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10613	21-607772	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10614	21-607773	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10615	21-607774	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10616	21-607775	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10617	21-607776	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10618	21-607777	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10620	21-607779	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10621	21-607780	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10622	21-607781	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1946	21-607782	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10625	21-607784	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10628	21-607787	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10629	21-607788	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13204	21-607790	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10633	21-607792	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10636	21-607795	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10637	21-607796	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10638	21-607797	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10639	21-607798	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10640	21-607799	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10641	21-607800	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10642	21-607801	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10643	21-607802	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10644	21-607803	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10645	21-607804	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13215	21-607812	5.6600–5.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10654	21-607813	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10655	21-607814	4.6600–4.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10656	21-607815	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10657	21-607816	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10658	21-607817	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10659	21-607818	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10660	21-607819	4.6600–4.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10661	21-607820	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10663	21-607822	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13214	21-607824	5.6600–5.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10666	21-607825	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10667	21-607826	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10668	21-607827	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10669	21-607828	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10670	21-607829	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10671	21-607830	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10672	21-607831	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10673	21-607832	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10674	21-607833	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10675	21-607834	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10676	21-607835	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10677	21-607836	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10678	21-607837	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10679	21-607838	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10680	21-607839	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10681	21-607840	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10682	21-607841	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10683	21-607842	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10684	21-607843	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10695	21-607844	0.6600–75.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10696	21-607845	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10697	21-607846	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10698	21-607847	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10699	21-607848	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10700	21-607849	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10701	21-607850	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10702	21-607851	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10703	21-607852	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10704	21-607853	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13207	21-607855	1.1600–1.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10707	21-607856	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10708	21-607857	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10709	21-607858	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10710	21-607859	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10711	21-607860	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10712	21-607861	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10713	21-607862	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10714	21-607863	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10715	21-607864	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10716	21-607865	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10717	21-607866	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10718	21-607867	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10719	21-607868	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10721	21-607870	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10722	21-607871	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10723	21-607872	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10724	21-607873	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10725	21-607874	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10726	21-607875	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10727	21-607876	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10730	21-607879	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10737	21-607886	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10738	21-607887	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13217	21-607888	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10740	21-607889	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10741	21-607890	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10742	21-607891	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10744	21-607893	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10745	21-607894	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10746	21-607895	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10748	21-607897	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10749	21-607898	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10752	21-607901	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzyl Alcohol	Bis(2-ethylhexyl)phthalate	Butylbenzene[sec-]	Chlorobenzene	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dichloroethene[1,1-]	Ethylbenzene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**6100**[a]	**347**	**110**[e]	**508**	**621**	**6110**	**32.2**	**618**	**69.7**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**62000**[a]	**1370**	**2200**[e]	**2140**	**2340**	**68400**	**180**	**2220**	**385**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**31000**[b]	**4760**	**18000**[g]	**1580**	**20600**	**23800**	**3780**	**1830**	**6630**	**8910**	**na**	**na**	**na**	**na**
MD21-09-10753	21-607902	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10755	21-607904	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10756	21-607905	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10757	21-607906	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10758	21-607907	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10759	21-607908	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10760	21-607909	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10761	21-607910	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10762	21-607911	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10765	21-607912	4.0000–4.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10769	21-607918	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10771	21-607920	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10772	21-607921	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10774	21-607923	1.0000–1.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13197	21-608084	5.1600–5.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13219	21-608087	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13201	21-608088	2.1600–2.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13205	21-608092	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13208	21-608095	1.1600–1.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13209	21-608096	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13216	21-608103	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13218	21-608105	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1941	21-608835	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1942	21-608836	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1943	21-608837	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1945	21-608839	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1949	21-608843	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1951	21-608845	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1953	21-608847	3.1600–3.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
RE21-06-68436	21-25704	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68440	21-25706	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68441	21-25706	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.00654	—	0.000935 (J)	0.00253
RE21-06-68442	21-25706	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68443	21-25707	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68444	21-25707	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.0038	—	0.000512 (J)	0.00135 (J)
RE21-06-68445	21-25707	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.00329	—	0.000462 (J)	0.00114 (J)
RE21-06-68446	21-25708	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68447	21-25708	0.5000–1.0000	SOIL	NA	0.0219	—	NA	NA	NA	—	0.013 (J)	—	—	0.00194	—	—	0.000961 (J)
RE21-06-68448	21-25708	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.00366	—	—	0.00104 (J)
RE21-06-68449	21-25709	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68450	21-25709	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	0.00178	—	—	—	0.000405 (J)
RE21-06-68451	21-25709	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68452	21-25710	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68453	21-25710	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.000469 (J)	—	—	—
RE21-06-68454	21-25710	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.000595 (J)	—	—	0.000454 (J)
RE21-06-68458	21-25712	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68459	21-25712	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68460	21-25712	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68461	21-25713	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68462	21-25713	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68463	21-25713	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68464	21-25714	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68465	21-25714	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68466	21-25714	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68467	21-25715	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.113 (J+)	NA	NA	NA	NA	NA	NA
RE21-06-68468	21-25715	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
RE21-06-68469	21-25715	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68470	21-25716	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0452	0.0941	NA	NA	NA	NA	NA	NA
RE21-06-68471	21-25716	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68474	21-25717	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	0.000489 (J)	—	—
RE21-06-68475	21-25717	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68476	21-25718	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68478	21-25718	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68479	21-25719	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0251 (J)	0.087	NA	NA	NA	NA	NA	NA
RE21-06-68480	21-25719	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68481	21-25719	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68482	21-25720	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.019 (J)	0.0365	NA	NA	NA	NA	NA	NA
RE21-06-68483	21-25720	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68484	21-25720	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	0.0399	0.0561	—	—	—	—	—	—
RE21-06-68502	21-25722	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68503	21-25722	0.5000–1.0000	SOIL	NA	—	0.00296 (J)	NA	NA	NA	—	—	0.000538 (J)	—	—	—	—	—
RE21-06-68504	21-25722	1.5000–2.0000	QBT3	NA	—	0.00301 (J)	NA	NA	NA	—	0.0191 (J)	0.000631 (J)	—	—	—	—	—
RE21-06-68507	21-25723	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	0.045	—	—	—	0.000842 (J)	—	—
RE21-06-68508	21-25723	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	0.0413	0.000373 (J)	—	—	—	—	—
RE21-06-68511	21-25724	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	0.000404 (J)	—	—	—	—	—
RE21-06-68512	21-25724	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	0.0758	—	—	—	—	—	—
RE21-06-68514	21-25725	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0438 (J)	0.119	NA	NA	NA	NA	NA	NA
RE21-06-68515	21-25725	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	—	0.000326 (J)	—	—	—	—	—
RE21-06-72611	21-25725	3.0000–3.5000	SOIL	4.38E-07	0.0217	—	1.97E-05	0.00000331 (J)	2.71E-07	—	—	—	—	—	—	—	—
RE21-06-68518	21-25726	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.0146 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68519	21-25726	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68521	21-25727	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0163 (J)	0.0284 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68522	21-25727	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	0.000598 (J)	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
RE21-06-68523	21-25727	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68524	21-25728	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.0433 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68525	21-25728	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	0.0013 (J)	—	—
RE21-06-68526	21-25728	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	0.000494 (J)	—	—
RE21-06-68527	21-25729	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.0173 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68528	21-25729	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	0.000345 (J)	—	—
RE21-06-68530	21-25730	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.0216 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68532	21-25730	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68533	21-25730	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68534	21-25731	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.0111 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68536	21-25731	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	0.0331 (J)	0.0247 (J)	—	—	—	—	—	—
RE21-06-68537	21-25731	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68548	21-25732	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0115 (J)	0.0229 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68549	21-25732	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68551	21-25733	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.132 (J)	0.753	NA	NA	NA	NA	NA	NA
RE21-06-68552	21-25733	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68553	21-25733	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68554	21-25734	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	0.0266 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68555	21-25734	0.5000–1.0000	SOIL	NA	—	0.0132	NA	NA	NA	—	—	—	—	—	0.00381	0.00199	0.00682
RE21-06-68556	21-25734	1.5000–2.0000	QBT3	NA	—	0.0106	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68557	21-25735	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68558	21-25735	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68559	21-25735	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68560	21-25736	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68562	21-25736	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0122 (J)	0.0244 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	0.0123 (J)	—	—	—	—	—	—
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	0.14 (J)	—	—	—	—	—	—
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0126 (J)	0.0331 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	NA	—	—	NA	NA	NA	—	0.0204 (J)	—	—	—	—	—	—
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	0.0144 (J)	—	—	—	—	—	—
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	NA	—	0.00735	NA	NA	NA	—	—	—	—	0.000321 (J)	0.00323	—	—
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	NA	—	—	NA	NA	NA	0.102	0.0888	—	—	0.00587	0.0383	—	—
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	NA	0.00085 (J)	—	NA	NA	NA	—	—	—	—	0.0159	0.0496	—	—
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	NA	0.00047 (J)	—	NA	NA	NA	—	0.0318 (J)	—	—	0.00467	0.012	—	—
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	NA	0.000524 (J)	—	NA	NA	NA	—	0.0194 (J)	—	—	0.00396	0.0106	—	—
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	NA	NA	NA	NA	NA	NA	—	0.0198 (J)	NA	NA	NA	NA	NA	NA
MD21-09-9860	21-25752	3.8000–4.8000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68640	21-25758	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68646	21-25761	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68648	21-25762	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.000673 (J)	—	—	—
RE21-06-68652	21-25764	1.5000–2.0000	SOIL	NA	—	—	NA	NA	NA	—	—	—	—	0.000679 (J)	—	—	—
RE21-06-68653	21-25765	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0125 (J)	0.0201 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68654	21-25765	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68655	21-25766	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68656	21-25766	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68657	21-25767	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0131 (J)	—	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
RE21-06-68658	21-25767	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68659	21-25768	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0105 (J)	0.027 (J)	NA	NA	NA	NA	NA	NA
RE21-06-68660	21-25768	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	0.000344 (J)	—	—	—
RE21-06-68661	21-25769	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68662	21-25769	1.5000–2.0000	QBT3	NA	—	—	NA	NA	NA	—	—	—	—	—	—	—	—
RE21-06-68663	21-25770	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-06-68665	21-25771	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.0118 (J)	0.0318 (J)	NA	NA	NA	NA	NA	NA
RE21-09-2642	21-604461	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2643	21-604461	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2644	21-604461	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2645	21-604462	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2646	21-604462	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2648	21-604463	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2649	21-604463	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2650	21-604463	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2651	21-604464	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2652	21-604464	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2655	21-604465	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2656	21-604465	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2662	21-604467	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2665	21-604468	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2669	21-604470	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2672	21-604471	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2673	21-604471	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2674	21-604471	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2675	21-604472	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2676	21-604472	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2677	21-604472	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
RE21-09-2680	21-604473	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2681	21-604474	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2682	21-604474	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2683	21-604474	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2685	21-604475	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2686	21-604475	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2687	21-604476	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2699	21-604480	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2700	21-604480	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2701	21-604480	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2702	21-604481	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2703	21-604481	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2704	21-604481	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2705	21-604482	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2706	21-604482	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2708	21-604483	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2709	21-604483	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2710	21-604483	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2711	21-604484	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2712	21-604484	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2713	21-604485	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2714	21-604485	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-2721	21-604489	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9864	21-605366	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9865	21-605366	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9867	21-605367	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9868	21-605367	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9869	21-605368	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-9870	21-605368	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10518	21-605368	3.0000–3.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9872	21-605369	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9873	21-605369	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9876	21-605370	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9877	21-605370	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9879	21-605371	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9884	21-605372	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9885	21-605373	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9886	21-605373	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9888	21-605374	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9891	21-605375	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9892	21-605375	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9893	21-605375	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9895	21-605376	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9896	21-605376	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9897	21-605377	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9900	21-605378	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9901	21-605378	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9902	21-605378	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9903	21-605378	3.0000–3.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9904	21-605379	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9905	21-605379	0.5000–1.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9906	21-605379	1.5000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9907	21-605380	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9909	21-605380	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10519	21-605532	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10521	21-605533	0.5000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9415	21-605617	10.0000–10.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9416	21-605618	10.0000–10.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9417	21-605619	10.0000–10.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9418	21-605620	4.7500–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10409	21-605698	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10410	21-605699	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10411	21-605700	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10412	21-605701	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10413	21-605702	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10414	21-605703	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10415	21-605704	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10418	21-605707	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10419	21-605708	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10420	21-605709	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10421	21-605710	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10422	21-605711	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10423	21-605712	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10424	21-605713	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10425	21-605714	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10426	21-605715	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10427	21-605716	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10428	21-605717	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10429	21-605718	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10430	21-605719	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10431	21-605720	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10432	21-605721	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10433	21-605722	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10434	21-605723	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10435	21-605724	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10438	21-605727	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10439	21-605728	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10440	21-605729	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10443	21-605732	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10445	21-605734	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10446	21-605735	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10448	21-605737	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10449	21-605738	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10450	21-605739	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10451	21-605740	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10452	21-605741	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10453	21-605742	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10454	21-605743	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10455	21-605744	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10456	21-605745	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10457	21-605746	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10458	21-605747	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10459	21-605748	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10460	21-605749	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10462	21-605751	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10463	21-605752	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10464	21-605753	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10465	21-605754	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10466	21-605755	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10467	21-605756	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1940	21-605759	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10475	21-605764	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10476	21-605765	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10768	21-605766	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10479	21-605768	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10480	21-605769	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10481	21-605770	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10482	21-605771	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13221	21-605772	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10487	21-605776	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10488	21-605777	2.1600–2.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13202	21-605777	2.1600–2.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10510	21-607149	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10511	21-607150	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10512	21-607151	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10514	21-607153	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10528	21-607687	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10529	21-607688	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10530	21-607689	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10531	21-607690	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10532	21-607691	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10533	21-607692	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10534	21-607693	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10535	21-607694	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10536	21-607695	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10540	21-607699	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10541	21-607700	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10546	21-607705	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10547	21-607706	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10548	21-607707	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10550	21-607709	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13220	21-607710	3.1600–3.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10552	21-607711	1.6600–1.7600	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10553	21-607712	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10554	21-607713	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10555	21-607714	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10556	21-607715	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10559	21-607718	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10560	21-607719	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10563	21-607722	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10564	21-607723	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10565	21-607724	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10566	21-607725	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10567	21-607726	4.1600–4.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10568	21-607727	10.1600–10.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10569	21-607728	4.1600–4.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10570	21-607729	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10571	21-607730	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10572	21-607731	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10574	21-607733	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13199	21-607738	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10582	21-607741	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10583	21-607742	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1948	21-607744	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10586	21-607745	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10587	21-607746	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10588	21-607747	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10589	21-607748	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10590	21-607749	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10591	21-607750	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10592	21-607751	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10594	21-607753	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13210	21-607754	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13211	21-607756	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1947	21-607763	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10605	21-607764	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10606	21-607765	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10607	21-607766	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10608	21-607767	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10609	21-607768	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10610	21-607769	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10611	21-607770	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10612	21-607771	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10613	21-607772	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10614	21-607773	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10615	21-607774	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10616	21-607775	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10617	21-607776	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10618	21-607777	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10620	21-607779	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10621	21-607780	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10622	21-607781	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1946	21-607782	2.6600–2.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10625	21-607784	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10628	21-607787	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10629	21-607788	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13204	21-607790	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10633	21-607792	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10636	21-607795	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10637	21-607796	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10638	21-607797	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10639	21-607798	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10640	21-607799	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10641	21-607800	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10642	21-607801	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10643	21-607802	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10644	21-607803	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10645	21-607804	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13215	21-607812	5.6600–5.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10654	21-607813	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10655	21-607814	4.6600–4.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10656	21-607815	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10657	21-607816	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10658	21-607817	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10659	21-607818	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10660	21-607819	4.6600–4.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10661	21-607820	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10663	21-607822	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13214	21-607824	5.6600–5.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10666	21-607825	4.6600–4.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10667	21-607826	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10668	21-607827	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10669	21-607828	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10670	21-607829	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10671	21-607830	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10672	21-607831	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10673	21-607832	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10674	21-607833	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10675	21-607834	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10676	21-607835	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10677	21-607836	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10678	21-607837	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10679	21-607838	1.6600–1.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10680	21-607839	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10681	21-607840	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10682	21-607841	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10683	21-607842	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10684	21-607843	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10695	21-607844	0.6600–75.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10696	21-607845	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10697	21-607846	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10698	21-607847	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10699	21-607848	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10700	21-607849	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10701	21-607850	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10702	21-607851	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10703	21-607852	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10704	21-607853	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13207	21-607855	1.1600–1.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10707	21-607856	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10708	21-607857	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10709	21-607858	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10710	21-607859	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10711	21-607860	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10712	21-607861	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10713	21-607862	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10714	21-607863	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10715	21-607864	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10716	21-607865	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10717	21-607866	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10718	21-607867	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10719	21-607868	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10721	21-607870	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10722	21-607871	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10723	21-607872	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10724	21-607873	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10725	21-607874	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10726	21-607875	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10727	21-607876	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10730	21-607879	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10737	21-607886	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10738	21-607887	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13217	21-607888	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10740	21-607889	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10741	21-607890	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10742	21-607891	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-09-10744	21-607893	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10745	21-607894	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10746	21-607895	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10748	21-607897	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10749	21-607898	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10752	21-607901	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10753	21-607902	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10755	21-607904	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10756	21-607905	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10757	21-607906	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10758	21-607907	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10759	21-607908	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10760	21-607909	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10761	21-607910	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10762	21-607911	0.6600–0.7500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10765	21-607912	4.0000–4.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10769	21-607918	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10771	21-607920	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10772	21-607921	1.5000–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-10774	21-607923	1.0000–1.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13197	21-608084	5.1600–5.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13219	21-608087	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13201	21-608088	2.1600–2.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13205	21-608092	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13208	21-608095	1.1600–1.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13209	21-608096	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13216	21-608103	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-13218	21-608105	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1941	21-608835	0.6600–0.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.2-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachloroethene	Toluene	Trichloroethene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**3210**[h]	**199**	**na**	**na**	**na**	**1830**	**1720**	**8970**	**6.99**	**5570**	**45.7**	**9550**	**1090**[i]
Industrial SSL				**na**	**14900**[h]	**1090**	**na**	**na**	**na**	**20500**	**18300**	**51200**	**36.4**	**57900**	**253**	**31500**	**3610**[i]
Construction Worker SSL				**na**	**10300**[h]	**10600**	**na**	**na**	**na**	**7150**	**6680**	**30300**	**338**	**21100**	**4600**	**27500**	**3130**[i]
MD21-10-1942	21-608836	2.6600–2.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1943	21-608837	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1945	21-608839	1.6600–1.7500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1949	21-608843	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1951	21-608845	5.1600–5.2500	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-1953	21-608847	3.1600–3.2500	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: SSLs from NMED (2009, 108070).

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

[a] EPA Regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] — = Not detected.

[d] NA= Not analyzed.

[e] EPA Region 6 2007 SSL (EPA 2007, 099314).

[f] na = Not available.

[g] Construction worker SSL calculated using toxicity value for EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[h] Isopropylbenzene SSL used as surrogate based on structural similarity.

[I] Xylenes SSL used as surrogate based on structural similarity.

Table 6.2-3
Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-003-99 and SWMU 21-024(c)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68436	21-25704	1.5000–2.0000	SOIL	—[c]	—	—	—	—	0.079341	—	—	—
RE21-06-68440	21-25706	0.0000–0.5000	SOIL	—	—	—	0.0758	—	0.321127	—	—	—
RE21-06-68441	21-25706	0.5000–1.0000	SOIL	—	—	—	0.171	—	0.118589	—	—	—
RE21-06-68442	21-25706	1.5000–2.0000	SOIL	—	—	—	0.426	—	0.2063	—	—	—
RE21-06-68443	21-25707	0.0000–0.5000	SOIL	—	—	—	0.536	—	0.181239	—	—	—
RE21-06-68444	21-25707	0.5000–1.0000	SOIL	—	—	—	0.0505	—	0.132321	—	—	—
RE21-06-68445	21-25707	1.5000–2.0000	SOIL	—	—	—	—	—	0.29705	—	—	—
RE21-06-68446	21-25708	0.0000–0.5000	SOIL	0.0665	—	—	0.212	—	0.097382	26.6	2.29	14.4
RE21-06-68447	21-25708	0.5000–1.0000	SOIL	—	—	—	0.201	—	0.082549	6.79	0.497	6.72
RE21-06-68448	21-25708	1.5000–2.0000	SOIL	—	—	—	0.0364	—	0.080527	2.65	0.211	2.74
RE21-06-68449	21-25709	0.0000–0.5000	SOIL	—	—	—	—	—	0.053071	—	—	—
RE21-06-68450	21-25709	0.5000–1.0000	SOIL	—	—	—	—	—	0.033175	—	—	—
RE21-06-68451	21-25709	1.5000–2.0000	SOIL	—	—	—	—	—	0.052043	—	—	—
RE21-06-68452	21-25710	0.0000–0.5000	SOIL	—	—	—	—	—	0.024624	—	—	—
RE21-06-68454	21-25710	1.5000–2.0000	SOIL	—	—	—	—	—	0.067234	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68458	21-25712	0.0000–0.5000	SOIL	—	—	—	—	—	0.087209	—	—	—
RE21-06-68459	21-25712	0.5000–1.0000	SOIL	—	—	—	—	—	0.101592	—	—	—
RE21-06-68460	21-25712	1.5000–2.0000	SOIL	—	—	—	0.207	—	0.153756	—	—	—
RE21-06-68461	21-25713	0.0000–0.5000	SOIL	0.0641	—	—	0.081	—	0.296557	—	—	—
RE21-06-68462	21-25713	0.5000–1.0000	QBT3	0.138	—	—	—	—	0.122101	—	0.103	—
RE21-06-68463	21-25713	1.5000–2.0000	QBT3	—	—	—	—	—	0.16576	—	—	—
RE21-06-68464	21-25714	0.0000–0.5000	SOIL	0.113	—	—	0.266	—	0.220646	—	—	—
RE21-06-68465	21-25714	0.5000–1.0000	SOIL	—	—	—	0.0402	—	0.120489	—	—	—
RE21-06-68466	21-25714	1.5000–2.0000	QBT3	—	—	—	—	—	0.036195	—	—	—
RE21-06-68467	21-25715	0.0000–0.5000	SOIL	0.192	—	—	0.666	—	0.306107	—	—	—
RE21-06-68468	21-25715	0.5000–1.0000	SOIL	0.0662	—	—	0.116	—	0.167294	—	—	—
RE21-06-68469	21-25715	1.5000–2.0000	QBT3	0.0461	—	—	0.0702	—	0.099649	—	—	—
RE21-06-68470	21-25716	0.0000–0.5000	SOIL	0.232	—	0.0246	0.565	—	0.419949	—	—	—
RE21-06-68471	21-25716	0.5000–1.0000	QBT3	0.0955	—	—	0.019	—	0.111754	—	—	—
RE21-06-68472	21-25716	1.5000–2.0000	QBT3	0.0929	—	—	—	—	0.099399	—	—	—
RE21-06-68474	21-25717	0.5000–1.0000	QBT3	0.0666	0.166	—	0.105	—	0.101517	—	—	—
RE21-06-68475	21-25717	1.5000–2.0000	QBT3	—	—	—	0.0242	—	0.019349	—	—	—
RE21-06-68476	21-25718	0.0000–0.5000	SOIL	0.0832	—	—	0.118	—	0.445733	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68477	21-25718	0.5000–1.0000	QBT3	—	—	—	0.202	0.0896 (J-)	0.450444	—	—	—
RE21-06-68478	21-25718	1.5000–2.0000	QBT3	—	—	—	0.321	—	1.69556	—	0.099	—
RE21-06-68479	21-25719	0.0000–0.5000	SOIL	0.11	—	—	0.552	—	0.268696	—	—	—
RE21-06-68480	21-25719	0.5000–1.0000	QBT3	—	NA[d]	—	—	—	0.551549	—	—	—
RE21-06-68481	21-25719	1.5000–2.0000	QBT3	—	—	—	—	—	1.4738	—	—	—
RE21-06-68482	21-25720	0.0000–0.5000	SOIL	0.0704	—	0.038	0.291	—	0.669906	—	—	—
RE21-06-68483	21-25720	0.5000–1.0000	QBT3	—	—	—	—	—	0.406479	—	—	—
RE21-06-68484	21-25720	1.5000–2.0000	QBT3	0.104	0.426	—	0.32	—	0.746333	2.15	0.191	2.21
RE21-06-68502	21-25722	0.0000–0.5000	SOIL	0.217	—	—	1.48 (J)	—	1.58874	—	—	—
RE21-06-68503	21-25722	0.5000–1.0000	SOIL	—	—	—	0.125 (J)	—	0.238539	—	—	—
RE21-06-68504	21-25722	1.5000–2.0000	QBT3	—	0.087	—	0.105 (J)	—	0.146198	—	0.096	—
RE21-06-68507	21-25723	0.5000–1.0000	QBT3	0.102	0.299	—	0.546 (J)	—	0.073995	—	—	—
RE21-06-68508	21-25723	1.5000–2.0000	QBT3	—	—	—	0.0823 (J)	—	0.06063	—	—	—
RE21-06-68511	21-25724	0.5000–1.0000	QBT3	—	0.0679	—	0.0762 (J)	—	0.075513	6.79	0.393	6.78
RE21-06-68512	21-25724	1.5000–2.0000	QBT3	—	—	—	—	—	0.544607	—	—	—
RE21-06-68514	21-25725	0.0000–0.5000	SOIL	0.321	—	—	1.57 (J)	—	0.195438	—	—	—
RE21-06-68515	21-25725	0.5000–1.0000	SOIL	—	—	—	0.0789 (J)	—	0.64224	—	—	—
RE21-06-72611	21-25725	3.0000–3.5000	SOIL	—	—	0.0219	0.0512	—	0.10475	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68518	21-25726	0.0000–0.5000	SOIL	0.0528	—	—	0.4 (J)	—	0.167748	—	—	—
RE21-06-68519	21-25726	0.5000–1.0000	QBT3	—	—	—	0.0372 (J)	—	0.278858	—	—	—
RE21-06-68520	21-25726	1.5000–2.0000	QBT3	—	—	—	0.0149 (J)	—	0.046833	—	—	—
RE21-06-68521	21-25727	0.0000–0.5000	SOIL	0.136	—	—	0.933 (J)	—	0.535111	—	—	—
RE21-06-68522	21-25727	0.5000–1.0000	QBT3	0.0629	0.194	—	0.306 (J)	—	0.147968	—	—	—
RE21-06-68523	21-25727	1.5000–2.0000	QBT3	0.0335	—	—	0.156 (J)	—	0.167339	—	—	—
RE21-06-68524	21-25728	0.0000–0.5000	SOIL	0.219	—	—	1.77 (J)	—	1.25197	—	—	—
RE21-06-68525	21-25728	0.5000–1.0000	QBT3	—	—	—	0.209 (J)	—	0.150471	—	—	—
RE21-06-68526	21-25728	1.5000–2.0000	QBT3	0.0501	0.259	—	0.457 (J)	—	0.211308	—	—	—
RE21-06-68527	21-25729	0.0000–0.5000	SOIL	0.121	—	—	0.606 (J)	—	0.347256	—	—	—
RE21-06-68528	21-25729	0.5000–1.0000	QBT3	—	—	—	0.0322 (J)	—	0.102864	—	—	—
RE21-06-68529	21-25729	1.5000–2.0000	QBT3	—	—	—	0.0295 (J)	—	0.126349	—	—	—
RE21-06-68530	21-25730	0.0000–0.5000	SOIL	0.167	—	—	0.55 (J)	—	0.375458	—	—	—
RE21-06-68532	21-25730	0.5000–1.0000	QBT3	—	0.145	—	0.112 (J)	—	0.054482	—	—	—
RE21-06-68533	21-25730	1.5000–2.0000	QBT3	—	—	—	0.036 (J)	—	0.034718	—	—	—
RE21-06-68534	21-25731	0.0000–0.5000	SOIL	0.097	—	—	0.211 (J)	—	0.266003	—	—	—
RE21-06-68536	21-25731	0.5000–1.0000	QBT3	—	0.149	—	0.258 (J)	—	0.076393	—	—	—
RE21-06-68537	21-25731	1.5000–2.0000	QBT3	—	0.235	—	0.249 (J)	—	0.036648	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68548	21-25732	0.0000–0.5000	SOIL	0.121	—	—	0.395	—	0.102658	—	—	—
RE21-06-68549	21-25732	0.5000–1.0000	QBT3	—	0.168	0.0327	0.323	—	0.064544	—	—	—
RE21-06-68550	21-25732	1.5000–2.0000	QBT3	—	0.342	—	0.282	—	0.037324	—	—	—
RE21-06-68551	21-25733	0.0000–0.5000	SOIL	0.386	—	0.0569	1.96	—	0.172059	14.2	0.717	10.5
RE21-06-68552	21-25733	0.5000–1.0000	QBT3	—	0.0767	—	0.208	—	0.217917	2.93	0.161	2.23
RE21-06-68553	21-25733	1.5000–2.0000	QBT3	—	—	—	0.211	—	0.209949	1.99	0.121	—
RE21-06-68554	21-25734	0.0000–0.5000	SOIL	0.115	—	—	0.32	—	0.170743	—	—	—
RE21-06-68555	21-25734	0.5000–1.0000	SOIL	0.0505	0.216	—	0.24	—	0.094201	—	—	—
RE21-06-68556	21-25734	1.5000–2.0000	QBT3	—	0.224	—	0.325	—	0.061455	—	—	—
RE21-06-68557	21-25735	0.0000–0.5000	SOIL	—	—	—	—	—	0.195118	—	—	—
RE21-06-68558	21-25735	0.5000–1.0000	QBT3	—	—	—	—	—	0.107043	—	—	—
RE21-06-68559	21-25735	1.5000–2.0000	QBT3	—	—	—	—	—	0.056197	—	—	—
RE21-06-68560	21-25736	0.0000–0.5000	SOIL	—	—	—	—	—	0.05604	—	—	—
RE21-06-68561	21-25736	0.5000–1.0000	QBT3	—	—	—	0.575	—	0.218188	—	—	—
RE21-06-68562	21-25736	1.5000–2.0000	QBT3	—	—	—	0.2	—	0.171219	—	—	—
RE21-06-68563	21-25737	0.0000–0.5000	SOIL	0.121	—	—	0.263	—	0.408909	—	—	—
RE21-06-68564	21-25737	0.5000–1.0000	QBT3	—	0.0781	—	0.0557	—	0.167674	—	—	—
RE21-06-68565	21-25737	1.5000–2.0000	QBT3	—	—	—	—	—	0.070106	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68567	21-25738	0.5000–1.0000	QBT3	—	—	—	—	—	0.050122	—	—	—
RE21-06-68568	21-25738	1.5000–2.0000	QBT3	—	—	—	—	—	0.096696	—	—	—
RE21-06-68569	21-25739	0.0000–0.5000	QBT3	—	—	—	—	—	0.034922	—	—	—
RE21-06-68570	21-25739	0.5000–1.0000	QBT3	—	—	—	—	—	0.041487	—	—	—
RE21-06-68571	21-25739	1.5000–2.0000	QBT3	—	—	—	—	—	0.053891	—	—	—
RE21-06-68572	21-25740	0.0000–0.5000	SOIL	0.0253	—	—	—	—	0.016861	—	—	—
RE21-06-68573	21-25740	0.5000–1.0000	SOIL	—	0.246	—	0.171	—	0.039743	—	—	—
RE21-06-68574	21-25740	1.5000–2.0000	SOIL	—	—	—	0.0272	—	0.075729	—	—	—
RE21-06-68575	21-25741	0.0000–0.5000	SOIL	0.0753	—	—	0.0924	—	0.030898	—	—	—
RE21-06-68576	21-25741	0.5000–1.0000	SOIL	0.0479	0.297	—	0.192	—	0.039427	—	—	—
RE21-06-68577	21-25741	1.5000–2.0000	SOIL	—	0.129	—	0.142	—	0.066183	—	—	—
MD21-07-74338	21-25748	14.0000–15.0000	QBT3	0.0832	—	—	0.445	—	0.388525	4.13	0.26	3.67
MD21-07-74339	21-25750	2.5000–3.0000	SOIL	—	—	—	0.0818	—	0.07564	—	—	—
MD21-07-74340	21-25750	4.0000–4.5000	SOIL	—	—	—	0.0902	—	0.04995	—	—	—
MD21-07-74341	21-25751	4.0000–4.5000	QBT3	—	—	—	0.221	—	0.066059	6.74	0.457	4.85
MD21-07-74342	21-25751	6.0000–6.5000	QBT3	—	—	—	0.15	—	0.062683	4.46	0.259	3.24
MD21-07-74343	21-25752	2.3300–3.3300	SOIL	—	—	—	0.105	—	0.106594	—	—	—
MD21-07-74344	21-25752	3.8300–4.8300	QBT3	—	—	—	—	—	0.079217	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
MD21-07-74345	21-25753	2.3300–3.3300	SOIL	—	—	—	0.0606	—	0.064959	—	—	—
MD21-07-74346	21-25753	3.8300–4.8300	QBT3	—	—	—	—	—	0.105738	—	—	—
RE21-06-68640	21-25758	1.5000–2.0000	QBT3	—	—	—	0.0637	—	0.163596	—	—	—
RE21-06-68646	21-25761	1.5000–2.0000	QBT3	—	0.128	—	0.268	—	0.072077	—	—	—
RE21-06-68648	21-25762	1.5000–2.0000	SOIL	—	—	—	0.0551	—	0.162277	—	—	—
RE21-06-68652	21-25764	1.5000–2.0000	SOIL	—	0.145	—	0.101	—	0.350467	—	—	—
RE21-06-68653	21-25765	0.0000–0.5000	SOIL	0.173	—	0.0424	3.53	—	0.033358	—	—	—
RE21-06-68654	21-25765	1.5000–2.0000	QBT3	—	—	—	—	—	0.108257	—	—	—
RE21-06-68655	21-25766	0.0000–0.5000	SOIL	0.128	—	—	3.22	—	0.04765	—	0.213	—
RE21-06-68656	21-25766	1.5000–2.0000	QBT3	—	—	—	0.112	—	0.052326	—	0.108	—
RE21-06-68657	21-25767	0.0000–0.5000	SOIL	0.0944	1.81	0.0294	0.754	—	0.13739	—	—	—
RE21-06-68658	21-25767	1.5000–2.0000	QBT3	—	—	—	—	—	0.033728	—	—	—
RE21-06-68659	21-25768	0.0000–0.5000	SOIL	0.121	—	—	2.14	—	0.057139	—	—	—
RE21-06-68660	21-25768	1.5000–2.0000	QBT3	—	0.231	—	0.295	—	0.045381	—	—	—
RE21-06-68661	21-25769	0.0000–0.5000	SOIL	—	—	0.035	0.332	—	—	—	—	—
RE21-06-68662	21-25769	1.5000–2.0000	QBT3	—	—	—	0.0457	—	0.019989	—	—	—
RE21-06-68663	21-25770	0.0000–0.5000	SOIL	—	—	—	0.194	—	0.040005	—	—	—
RE21-06-68665	21-25771	0.0000–0.5000	SOIL	—	1.84	—	1	—	0.024764	—	—	—

Table 6.2-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-06-68666	21-25771	1.5000–2.0000	QBT3	—	0.12	—	0.0852	—	0.015057	—	—	—

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.3-1
Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-006(c)-99

Sample ID	Location ID	Depth (ft)	Media	Antimony	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Zinc
QBT3 Background Value				**0.5**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**6.58**	**na[a]**	**na**	**0.3**	**63.5**
SOIL Background Value				**0.83**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**48.8**
Residential SSL				**31.3**	**15600**	**77.9**	**na**	**219[b]**	**3130**	**1560**	**400**	**10700**	**23[c]**	**1560**	**125000**	**54.8**	**391**	**23500**
Industrial SSL				**454**	**224000**	**1120**	**na**	**2920[b]**	**45400**	**22700**	**800**	**145000**	**310[c]**	**22700**	**1820000**	**795**	**5680**	**341000**
Construction Worker SSL				**124**	**4350**	**309**	**na**	**449[b]**	**12400**	**6190**	**800**	**463**	**92.9[d]**	**6190**	**496000**	**217**	**1550**	**92900**
RE21-07-1584	21-600388	0.0000–0.5000	SOIL	—[e]	—	—	—	—	—	5.21 (U)	33.3	—	—	—	57.9	—	1.53 (U)	53.1
RE21-07-1585	21-600388	2.0000–3.0000	QBT3	—	—	—	—	—	—	3.93 (U)	—	—	—	—	—	—	1.5 (U)	—
RE21-07-1586	21-600389	0.0000–0.5000	SOIL	—	—	—	—	—	—	4.59 (U)	—	—	—	—	25	—	—	—
RE21-07-1587	21-600389	2.0000–3.0000	QBT3	—	—	—	—	—	—	4.16 (U)	—	—	—	—	—	—	1.51 (U)	—
RE21-07-1588	21-600390	0.0000–0.5000	SOIL	—	—	—	—	—	—	4.82 (U)	—	—	—	—	66.1	—	1.54 (U)	—
RE21-07-1589	21-600390	2.0000–3.0000	QBT3	—	—	—	—	—	—	5.14 (U)	12.7	—	—	—	—	—	1.62 (U)	—
RE21-07-1590	21-600391	0.0000–0.5000	SOIL	—	—	0.498 (U)	—	—	—	4.07 (U)	—	—	—	—	27.1	0.0345	—	—
RE21-07-1591	21-600391	2.0000–3.0000	QBT3	—	—	—	—	—	—	3.31 (U)	—	—	—	—	15.4	—	1.54 (U)	—
RE21-07-1592	21-600392	0.0000–0.5000	SOIL	—	—	0.507 (U)	—	—	—	8.42 (U)	—	—	—	—	41.2	—	—	—
RE21-07-1593	21-600392	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.48 (U)	—
RE21-07-1614	21-600403	0.0000–0.5000	SOIL	—	—	0.489 (U)	—	—	—	—	34.4	—	—	—	1.7	—	—	—
RE21-07-1615	21-600403	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.00131 (J)	1.18 (J)	—
RE21-07-1616	21-600403	5.0000–6.0000	QBT3	—	—	—	—	11.1	—	—	—	—	—	—	—	0.00308	1.48 (U)	—
RE21-07-5758	21-601199	3.0000–4.0000	SOIL	1.33	—	—	11900 (J-)	—	19.2 (J)	—	—	—	0.2	—	0.844 (J)	—	—	56.3
RE21-07-5759	21-601199	8.0000–9.0000	QBT3	1.7	—	—	13700 (J-)	—	—	—	—	—	—	—	1.42	—	1.65 (U)	—
RE21-07-5760	21-601199	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	1.48	—	0.621 (J)	—
RE21-07-5761	21-601199	18.0000–19.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6 (U)	—
RE21-07-5762	21-601199	23.0000–24.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.62 (U)	—
RE21-07-5763	21-601200	3.0000–4.0000	QBT3	—	—	—	—	—	16.2 (J)	—	16.4	—	—	—	—	—	1.71 (U)	—
RE21-07-5764	21-601200	8.0000–9.0000	QBT3	—	—	—	—	—	163 (J)	—	15.9	—	—	—	—	—	1.71 (U)	—
RE21-07-5765	21-601200	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.64 (U)	—
RE21-07-5766	21-601200	18.0000–19.0000	QBT3	—	—	—	—	—	5.69 (J)	—	—	—	—	—	—	—	1.63 (U)	—
RE21-07-5767	21-601200	23.0000–24.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.62 (U)	—
RE21-07-5768	21-601201	3.0000–4.0000	QBT3	—	66.6	—	—	—	—	—	—	—	—	—	—	—	1.13 (J)	—

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Zinc
QBT3 Background Value				**0.5**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**6.58**	**na**[a]	**na**	**0.3**	**63.5**
SOIL Background Value				**0.83**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**48.8**
Residential SSL				**31.3**	**15600**	**77.9**	**na**	**219**[b]	**3130**	**1560**	**400**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**23500**
Industrial SSL				**454**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**341000**
Construction Worker SSL				**124**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**92900**
RE21-07-5769	21-601201	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.4 (J)	—
RE21-07-5770	21-601201	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.812 (J)	—
RE21-07-5771	21-601201	18.0000–19.0000	QBT3	—	58	—	2920 (J+)	—	—	1.65	20.2	637 (J+)	—	—	—	—	1.15 (J)	96.5
RE21-07-5772	21-601201	23.0000–24.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.11 (J)	—
RE21-07-5773	21-601202	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.967 (J)	—
RE21-07-5774	21-601202	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.832 (J)	—
RE21-07-5775	21-601202	22.0000–23.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	0.651 (J-)	—	0.835 (J)	—
RE21-07-5776	21-601202	27.0000–28.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	0.7 (J-)	—	0.959 (J)	—
RE21-07-5777	21-601202	32.0000–33.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	0.692 (J-)	—	1.29 (J)	—
RE21-07-5778	21-601203	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.09 (J)	78.7
RE21-07-5779	21-601203	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.978 (J)	—
RE21-07-5780	21-601203	22.0000–23.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.949 (J)	—
RE21-07-5781	21-601203	27.0000–28.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.943 (J)	—
RE21-07-5782	21-601203	32.0000–33.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.775 (J)	—
RE21-07-5783	21-601204	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.1 (J)	—
RE21-07-5784	21-601204	17.0000–18.0000	QBT3	—	—	—	2550	—	—	—	—	—	—	—	—	—	1.5 (U)	—
RE21-07-5785	21-601204	22.0000–23.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.27 (J)	—
RE21-07-5786	21-601204	27.0000–28.0000	QBT3	—	—	—	—	—	—	—	18.5	—	—	—	—	—	1.31 (J)	—
RE21-07-5787	21-601204	32.0000–33.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	0.925 (J)	—
RE21-07-5805	21-601209	3.0000–4.0000	SOIL	—	—	1.39	—	—	—	—	—	—	—	—	1.27 (J-)	—	3.55	1390
RE21-07-5806	21-601209	4.0000–5.0000	QBT3	—	—	—	—	7.78	—	—	—	—	—	—	0.766 (J-)	—	2.61	69
RE21-07-5807	21-601210	3.0000–4.0000	SOIL	—	—	0.57 (U)	—	—	—	—	—	—	—	—	0.679 (J-)	—	2.79	—
RE21-07-5808	21-601210	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	0.89 (J-)	—	3.1	—
RE21-07-5809	21-601211	2.0000–3.0000	SOIL	NA[f]	—	0.561 (U)	—	—	—	—	—	—	—	—	—	—	1.71	—
RE21-07-5810	21-601211	3.0000–4.0000	QBT3	NA	—	—	—	9.67	—	—	—	—	—	—	—	—	0.815 (J)	69.4
RE21-07-5811	21-601212	7.0000–8.0000	QBT3	NA	46.1	—	—	11.5	—	—	—	—	—	7.83	2.06	—	1.76 (J)	—
RE21-07-5812	21-601212	8.0000–9.0000	QBT3	NA	—	—	2880	13.6	—	—	—	—	—	—	1.57	—	1.56 (J)	—
RE21-07-5813	21-601213	12.0000–13.0000	QBT3	NA	—	—	—	13.1	—	—	—	—	—	—	—	—	1.15 (J)	—
RE21-07-5814	21-601213	13.0000–14.0000	QBT3	NA	—	—	—	14.9	—	—	—	—	—	—	—	—	1.06 (J)	—
RE21-07-5817	21-601215	6.0000–7.0000	QBT3	NA	—	—	—	16.5	—	—	—	—	—	—	—	—	1.21 (J)	—

Table 6.3-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Zinc
QBT3 Background Value				**0.5**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**6.58**	**na**[a]	**na**	**0.3**	**63.5**
SOIL Background Value				**0.83**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**48.8**
Residential SSL				**31.3**	**15600**	**77.9**	**na**	**219**[b]	**3130**	**1560**	**400**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**23500**
Industrial SSL				**454**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**341000**
Construction Worker SSL				**124**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**92900**
RE21-07-5818	21-601215	8.0000–9.0000	QBT3	NA	—	—	—	17	—	—	—	—	—	—	—	—	1.26 (J)	—
MD21-09-8774	21-605256	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	NA	NA	NA
MD21-09-8779	21-605260	3.0000–4.0000	QBT3	NA	NA	NA	NA	NA	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

Table 6.3-2
Summary of Organic Chemicals Detected at Consolidated Unit 21-006(c)-99

Sample ID	Location ID	Depth (ft)	Media	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]
Residential SSL				**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**	**2290**	**na**[b]	**na**	**na**	**na**
Industrial SSL				**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**2340**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**20600**	**8910**	**na**	**na**	**na**	**na**
RE21-07-1584	21-600388	0.0000–0.5000	SOIL	—[c]	0.98	0.948	1.81	2.81 (J)	0.635 (J)	8.73	1.5	2.92	NA[d]	NA	NA	NA
RE21-07-1586	21-600389	0.0000–0.5000	SOIL	—	—	—	0.333 (J)	—	—	—	—	0.532 (J)	NA	NA	NA	NA
RE21-07-1588	21-600390	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	0.421 (J)	NA	NA	NA	NA
RE21-07-1646	21-600392	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.19E-05	5.52E-05	5.17E-06	0.000000289 (J)
RE21-07-1614	21-600403	0.0000–0.5000	SOIL	—	—	—	0.0249 (J)	—	—	0.079 (J)	—	0.0364	NA	NA	NA	NA
RE21-07-1615	21-600403	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-5758	21-601199	3.0000–4.0000	SOIL	—	—	—	—	—	—	—	—	0.0244 (J)	NA	NA	NA	NA
RE21-07-5759	21-601199	8.0000–9.0000	QBT3	0.00966 (J)	—	—	—	—	—	—	0.0371 (J)	0.0955	NA	NA	NA	NA
RE21-07-5807	21-601210	3.0000–4.0000	SOIL	—	—	0.0116 (J)	0.0156 (J)	—	0.0114 (J)	—	0.0184 (J)	0.0192 (J)	NA	NA	NA	NA
RE21-07-5812	21-601212	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	0.0176 (J)	NA	NA	NA	NA

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]
Residential SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**6.21**	**199**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**23.4**	**1090**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**213**	**10600**	**na**	**na**
RE21-07-1584	21-600388	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.25 (J)	NA	NA	NA
RE21-07-1586	21-600389	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-1588	21-600390	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-1646	21-600392	0.0000–0.5000	SOIL	1.51E-05	0.0000003 (J)	0.000000857 (J)	0.000000893 (J)	7.81E-06	0.000000251 (J)	0.000000246 (J)	0.000000268 (J)	4.11E-06	NA	NA	0.000241	1.59E-05
RE21-07-1614	21-600403	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-1615	21-600403	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	0.00223 (J)	NA	NA
RE21-07-5758	21-601199	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-5759	21-601199	8.0000–9.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-5807	21-601210	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-5812	21-601212	8.0000–9.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA

Table 6.3-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Tetrachloroethene	Toluene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**6.99**	**5570**	**9550**	**1090**[e]
Industrial SSL				**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**36.4**	**57900**	**31500**	**3610**[e]
Construction Worker SSL				**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**338**	**21100**	**27500**	**3130**[e]
RE21-07-1584	21-600388	0.0000–0.5000	SOIL	NA	NA	NA	NA	1.38	2.26	NA	NA	NA	NA	NA	NA
RE21-07-1586	21-600389	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.201 (J)	0.42 (J)	NA	NA	NA	NA	NA	NA
RE21-07-1588	21-600390	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	0.359 (J)	NA	NA	NA	NA	NA	NA
RE21-07-1646	21-600392	0.0000–0.5000	SOIL	1.81E-07	0.0000000964 (J)	0.00000019 (J)	1.98E-06	NA	NA	0.000000212 (J)	7.21E-07	NA	NA	NA	NA
RE21-07-1614	21-600403	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0146 (J)	0.0292 (J)	NA	NA	NA	NA	NA	NA
RE21-07-1615	21-600403	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	—	—	—	—
RE21-07-5758	21-601199	3.0000–4.0000	SOIL	NA	NA	NA	NA	—	0.0237 (J)	NA	NA	0.00626	0.000533 (J)	0.000481 (J)	0.000566 (J)
RE21-07-5759	21-601199	8.0000–9.0000	QBT3	NA	NA	NA	NA	0.0363 (J)	0.0973	NA	NA	—	—	—	—
RE21-07-5807	21-601210	3.0000–4.0000	SOIL	NA	NA	NA	NA	—	0.0171 (J)	NA	NA	—	—	—	—
RE21-07-5812	21-601212	8.0000–9.0000	QBT3	NA	NA	NA	NA	—	0.0154 (J)	NA	NA	—	—	—	—

Source: SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] Pyrene SSLs used as a surrogate based on structural similarity.
[b] na = Not available.
[c] — = Not detected.
[d] NA= Not analyzed.
[e] SSLs for xylenes used as a surrogate based on structural similarity.

Table 6.3-3
Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-006(c)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-1584	21-600388	0.0000–0.5000	SOIL	0.236	1.69	0.0423 (J)	3.5 (J)	—[c]	—	3.39	0.23	2.33
RE21-07-1585	21-600388	2.0000–3.0000	QBT3	—	—	—	0.0486 (J)	—	0.004289	—	—	—
RE21-07-1586	21-600389	0.0000–0.5000	SOIL	0.483	—	0.0297 (J)	1.39 (J)	—	—	—	—	—
RE21-07-1587	21-600389	2.0000–3.0000	QBT3	—	—	—	0.0271 (J)	—	—	—	—	—
RE21-07-1588	21-600390	0.0000–0.5000	SOIL	0.0684	—	—	0.451 (J)	—	—	—	—	—
RE21-07-1589	21-600390	2.0000–3.0000	QBT3	—	—	—	0.0286 (J)	—	—	—	—	—
RE21-07-1590	21-600391	0.0000–0.5000	SOIL	—	—	—	0.274 (J)	—	—	—	—	—
RE21-07-1592	21-600392	0.0000–0.5000	SOIL	0.0385	—	0.162 (J)	15.8 (J)	—	—	—	—	—
RE21-07-1614	21-600403	0.0000–0.5000	SOIL	0.11	—	0.0762	9.45	—	—	—	—	—
RE21-07-1615	21-600403	2.0000–3.0000	QBT3	—	—	—	0.0332	—	0.009239	—	—	—
RE21-07-1616	21-600403	5.0000–6.0000	QBT3	—	—	0.03	0.05	—	0.004844	—	—	—
RE21-07-5758	21-601199	3.0000–4.0000	SOIL	5.17	1.98	0.586	69.3	0.39	0.144419	18.8	0.793	—
RE21-07-5759	21-601199	8.0000–9.0000	QBT3	1.25	0.476	0.116	13.5	—	0.626337	5.63	0.222	—
RE21-07-5760	21-601199	13.0000–14.0000	QBT3	—	—	—	—	—	0.701043	—	—	—
RE21-07-5761	21-601199	18.0000–19.0000	QBT3	—	—	—	0.109	—	0.177852	—	—	—
RE21-07-5762	21-601199	23.0000–24.0000	QBT3	—	—	—	—	—	0.168947	—	—	—
RE21-07-5763	21-601200	3.0000–4.0000	QBT3	—	—	—	—	—	0.468431	—	—	—
RE21-07-5764	21-601200	8.0000–9.0000	QBT3	—	—	—	0.0354	—	0.491187	—	—	—
RE21-07-5765	21-601200	13.0000–14.0000	QBT3	—	—	—	—	—	0.16711	—	—	—
RE21-07-5766	21-601200	18.0000–19.0000	QBT3	—	—	—	—	—	0.181844	—	—	—
RE21-07-5767	21-601200	23.0000–24.0000	QBT3	—	—	—	—	—	0.144081	—	—	—
RE21-07-5768	21-601201	3.0000–4.0000	QBT3	—	—	—	0.0314	—	0.106306	—	0.0937	—
RE21-07-5769	21-601201	8.0000–9.0000	QBT3	—	—	—	—	—	0.059803	—	0.112	—
RE21-07-5770	21-601201	13.0000–14.0000	QBT3	—	—	—	—	—	0.073604	—	—	—
RE21-07-5771	21-601201	18.0000–19.0000	QBT3	—	—	—	—	—	0.153249	—	—	—
RE21-07-5772	21-601201	23.0000–24.0000	QBT3	—	—	—	0.0322	—	0.087152	—	—	—
RE21-07-5773	21-601202	12.0000–13.0000	QBT3	—	—	—	0.222	—	0.026502	—	—	—
RE21-07-5774	21-601202	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	0.105	—

Table 6.3-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-5776	21-601202	27.0000–28.0000	QBT3	—	NA[d]	—	—	—	0.012876	—	—	—
RE21-07-5778	21-601203	12.0000–13.0000	QBT3	6.42	—	0.655	212	—	—	—	—	—
RE21-07-5779	21-601203	17.0000–18.0000	QBT3	2.04	—	0.605	90.5	—	—	—	—	—
RE21-07-5780	21-601203	22.0000–23.0000	QBT3	0.0452	—	—	2.09	—	—	—	—	—
RE21-07-5781	21-601203	27.0000–28.0000	QBT3	—	—	—	0.794	—	—	—	—	—
RE21-07-5782	21-601203	32.0000–33.0000	QBT3	—	—	—	0.252	—	—	—	—	—
RE21-07-5783	21-601204	12.0000–13.0000	QBT3	—	—	—	0.0511	—	0.013152	—	—	—
RE21-07-5786	21-601204	27.0000–28.0000	QBT3	—	—	—	0.0765	—	—	—	—	—
RE21-07-5805	21-601209	3.0000–4.0000	SOIL	—	—	—	0.138	—	—	—	—	—
RE21-07-5807	21-601210	3.0000–4.0000	SOIL	0.485	—	0.0703	10.1	—	—	—	—	—
RE21-07-5808	21-601210	4.0000–5.0000	QBT3	—	—	—	0.0282	—	—	—	—	—
RE21-07-5809	21-601211	2.0000–3.0000	SOIL	0.0405	—	—	1.02	—	—	—	—	—
RE21-07-5810	21-601211	3.0000–4.0000	QBT3	0.0878	—	—	0.815	—	—	—	—	—
MD21-09-8773	21-601211	8.0000–9.0000	SOIL	0.805	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5811	21-601212	7.0000–8.0000	QBT3	—	—	—	0.146	—	—	—	0.0917	—
RE21-07-5812	21-601212	8.0000–9.0000	QBT3	—	—	—	0.0484	—	—	—	—	—
RE21-07-5813	21-601213	12.0000–13.0000	QBT3	4.28	—	0.754	180	—	—	—	—	—
RE21-07-5814	21-601213	13.0000–14.0000	QBT3	5.95	—	0.901	231	—	—	—	—	—
RE21-07-5817	21-601215	6.0000–7.0000	QBT3	0.312	—	0.0567	17.3	—	—	—	—	—
RE21-07-5818	21-601215	8.0000–9.0000	QBT3	0.137	—	0.0343	7.79	—	0.019511	—	—	—
MD21-09-8776	21-605258	0.0000–0.5000	SOIL	NA	NA	0.046	0.219	NA	NA	—	—	—
MD21-09-8777	21-605259	3.0000–4.0000	SOIL	1.82	1.99	0.321	21.2	0.49	0.625411 (J)	9.1	0.456	—
MD21-09-8778	21-605259	8.0000–9.0000	SOIL	1.78	1.3	0.236	19.9	0.377	0.600217 (J)	6.64	0.323	—

Table 6.3-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
MD21-09-8779	21-605260	3.0000–4.0000	QBT3	NA	NA	0.099	30.4	NA	1.49154 (J)	—	—	—
MD21-09-8780	21-605260	8.0000–9.0000	QBT3	NA	NA	—	6.58	NA	0.999383 (J)	—	—	—
MD21-09-8781	21-605261	3.0000–4.0000	SOIL	NA	NA	0.256	9.46	NA	NA	—	—	—
MD21-09-8782	21-605261	8.0000–9.0000	QBT3	NA	NA	0.08	0.807	NA	NA	—	0.091	—
MD21-09-12454	21-608018	3.0000–4.0000	QBT3	NA	NA	—	0.927	NA	NA	NA	NA	NA
MD21-10-4659	21-609835	3.0000–4.0000	QBT3	NA	NA	—	0.098	NA	NA	NA	NA	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.4-1
Summary of Inorganic Chemicals above BVs at SWMU 21-009

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cyanide (Total)	Lead	Nickel	Nitrate	Perchlorate	Selenium	Zinc
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**0.5**	**11.2**	**6.58**	**na**[a]	**na**	**0.3**	**63.5**
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**0.5**	**22.3**	**15.4**	**na**	**na**	**1.52**	**48.8**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**1560**	**400**	**1560**	**125000**	**54.8**	**391**	**23500**
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**22700**	**800**	**22700**	**1820000**	**795**	**5680**	**341000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**6190**	**800**	**6190**	**496000**	**217**	**1550**	**92900**
RE21-06-68252	21-25636	0.0000–0.5000	SOIL	—[c]	—	—	0.536 (U)	—	—	—	—	—	8.4	—	11.2	49.8
RE21-06-68253	21-25636	1.5000–2.0000	SOIL	—	—	—	0.535 (U)	—	—	—	—	—	8.56	0.000579 (J)	9.69	59.8
RE21-06-68254	21-25637	0.0000–0.5000	SOIL	—	—	—	0.542 (U)	—	—	—	—	—	5.76	—	12.2	—
RE21-06-68255	21-25637	1.5000–2.0000	SOIL	—	—	—	0.552 (U)	—	—	—	—	17.1	1.52	—	10.7	—
RE21-06-68256	21-25638	0.0000–0.5000	SOIL	—	—	—	0.535 (U)	—	—	—	—	—	8.44	—	10.5	—
RE21-06-68257	21-25638	1.5000–2.0000	QBT3	—	—	75.3 (J+)	—	2980	15.4	—	—	—	2.02	—	5.76	—
RE21-06-68258	21-25639	0.0000–0.5000	SOIL	—	—	—	0.556 (U)	—	—	—	—	—	4.07	—	11.9	—
RE21-06-68259	21-25639	1.5000–2.0000	SOIL	—	—	—	0.562 (U)	—	—	—	—	—	2.91	—	9.6	—
RE21-06-68260	21-25640	0.0000–0.5000	SOIL	—	—	—	0.534 (U)	—	—	—	—	—	7.99	—	7.96	—
RE21-06-68261	21-25640	1.5000–2.0000	SOIL	—	—	—	0.531 (U)	—	24.7	—	—	—	19.3 (J—)	—	2.11	—
RE21-06-68262	21-25641	0.0000–0.5000	SOIL	—	—	—	0.532 (U)	—	—	—	38.7	—	4.51	0.000659 (J)	11	113
RE21-06-68263	21-25641	1.5000–2.0000	SOIL	—	—	—	0.523 (U)	—	—	—	—	—	3.31	—	11.8	—
RE21-06-68264	21-25642	0.0000–0.5000	SOIL	—	—	—	0.537 (U)	9400	—	—	—	—	1.94 (J—)	—	9.32	—
RE21-06-68265	21-25642	1.5000–2.0000	SOIL	—	—	—	0.549 (U)	—	—	0.542 (J-)	—	—	1.4 (J-)	—	10.9	—
RE21-06-68266	21-25643	0.0000–0.5000	SOIL	—	—	—	0.521 (U)	—	—	0.709 (J-)	—	—	4.01 (J-)	—	9.96	—
RE21-06-68267	21-25643	1.5000–2.0000	QBT3	8740	2.83	49.3 (J+)	—	—	9.51	—	—	—	1.52 (J-)	—	6.89	—

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] Chromium VI SSL used.
[b] na = Not available.
[c] — = Not detected or not detected above BV.

Table 6.4-2
Summary of Organic Chemicals Detected at SWMU 21-009

Sample ID	Location ID	Depth (ft)	Media	Anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chloroform	Dichloroethene[1,1-]	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)
Residential SSL				**17200**	**0.621**	**6.21**	**62.1**	**5.72**	**618**	**2290**	**na**[a]	**na**
Industrial SSL				**183000**	**2.34**	**23.4**	**234**	**31.9**	**2220**	**24400**	**na**	**na**
Construction Worker SSL				**66800**	**21.3**	**213**	**2060**	**671**	**1830**	**8910**	**na**	**na**
RE21-06-68252	21-25636	0.0000–0.5000	SOIL	—[b]	—	—	—	NA[c]	NA	0.0312 (J)	NA	NA
RE21-06-68253	21-25636	1.5000–2.0000	SOIL	—	—	—	—	—	0.000891 (J)	—	NA	NA
RE21-06-68254	21-25637	0.0000–0.5000	SOIL	—	—	—	—	NA	NA	—	NA	NA
RE21-06-68255	21-25637	1.5000–2.0000	SOIL	—	—	—	—	—	0.000614 (J)	—	NA	NA
RE21-06-68260	21-25640	0.0000–0.5000	SOIL	—	0.0686 (J)	0.16 (J)	0.0573 (J)	NA	NA	0.103	NA	NA
RE21-06-68261	21-25640	1.5000–2.0000	SOIL	—	—	—	—	0.00119	—	—	0.000011	2.29E-05
RE21-06-68264	21-25642	0.0000–0.5000	SOIL	—	—	—	—	NA	NA	0.0353 (J)	NA	NA
RE21-06-68265	21-25642	1.5000–2.0000	SOIL	0.0149 (J)	—	—	—	—	—	—	NA	NA

Table 6.4-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin[1,2,3,4,7,8-]	Hexachlorodibenzodioxin[1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)
Residential SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-06-68252	21-25636	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68253	21-25636	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68254	21-25637	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68255	21-25637	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68260	21-25640	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68261	21-25640	1.5000–2.0000	SOIL	0.00000155 (J)	0.00000401 (J)	0.000000347 (J)	0.000000674 (J)	0.000000552 (J)	3.76E-06	0.000000107 (J)	0.000000145 (J)	1.82E-06
RE21-06-68264	21-25642	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68265	21-25642	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.4-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofurans (Totals)	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Tetrachloroethene
Residential SSL				**na**	**na**	**na**	**na**	**na**	**1720**	**0.000374**	**na**	**6.99**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**18300**	**0.00147**	**na**	**36.4**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**6680**	**0.0127**	**na**	**338**
RE21-06-68252	21-25636	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0238 (J)	NA	NA	NA
RE21-06-68253	21-25636	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	—	NA	NA	0.000683 (J)
RE21-06-68254	21-25637	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0149 (J)	NA	NA	NA
RE21-06-68255	21-25637	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-06-68260	21-25640	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.162	NA	NA	NA
RE21-06-68261	21-25640	1.5000–2.0000	SOIL	0.000087	0.00000366 (J)	0.000000177 (J)	3.21E-07	7.68E-07	0.0145 (J)	0.000000147 (J)	3.14E-07	—
RE21-06-68264	21-25642	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0305 (J)	NA	NA	NA
RE21-06-68265	21-25642	1.5000–2.0000	SOIL	NA	NA	NA	NA	NA	—	NA	NA	—

Source: SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] — = Not detected.
[c] NA = Not analyzed.

Table 6.4-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-009

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Plutonium-239/240	Tritium
QBT3 Background Value				**na**[a]	**na**	**na**
SOIL Background Value				**0.013**[b]	**0.054**[b]	**na**
Residential SAL				**30**	**33**	**750**
Industrial SAL				**180**	**210**	**440000**
Construction Worker SAL				**34**	**36**	**320000**
RE21-06-68252	21-25636	0.0000-0.5000	SOIL	—[c]	0.131	0.033634
RE21-06-68253	21-25636	1.5000-2.0000	SOIL	0.0472	0.23	0.02847
RE21-06-68254	21-25637	0.0000-0.5000	SOIL	—	0.131	0.033314
RE21-06-68255	21-25637	1.5000-2.0000	SOIL	—	—	0.051328
RE21-06-68256	21-25638	0.0000-0.5000	SOIL	—	0.166	0.036191
RE21-06-68257	21-25638	1.5000-2.0000	QBT3	—	0.0257	0.015175
RE21-06-68258	21-25639	0.0000-0.5000	SOIL	—	—	0.049929
RE21-06-68259	21-25639	1.5000-2.0000	SOIL	—	—	0.060663
RE21-06-68260	21-25640	0.0000-0.5000	SOIL	0.0488	1.15	0.02914
RE21-06-68261	21-25640	1.5000-2.0000	SOIL	—	0.423	—
RE21-06-68262	21-25641	0.0000-0.5000	SOIL	0.108	0.304	0.024135
RE21-06-68263	21-25641	1.5000-2.0000	SOIL	—	0.233	0.035239
RE21-06-68264	21-25642	0.0000-0.5000	SOIL	0.0381	0.11	0.056946
RE21-06-68265	21-25642	1.5000-2.0000	SOIL	—	0.0216	0.060562
RE21-06-68266	21-25643	0.0000-0.5000	SOIL	—	0.211	0.034258
RE21-06-68267	21-25643	1.5000-2.0000	QBT3	0.31	0.0368	0.029296
RE21-09-3535	21-604497	0.0000-0.5000	SOIL	0.042	NA[d]	NA
RE21-09-3537	21-604499	0.0000-0.5000	SOIL	NA	0.212	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.5-1
Summary of Inorganic Chemicals above BVs at SWMU 21-012(b)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**	**800**	**619**[d]
MD21-07-74366	21-25778	0.0000–0.5000	SOIL	—[e]	NA[f]	—	—	—	—	—	—	—	35.3	—	—	—	NA
MD21-07-74367	21-25778	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	34.7	—	—	—	NA
MD21-07-74369	21-25779	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	32.2	—	—	—	NA
MD21-07-74370	21-25779	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	44.1	—	—	—	NA
MD21-07-74372	21-25780	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	23.8	—	—	—	NA
MD21-07-74373	21-25780	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	22.6	—	—	—	NA
MD21-07-74375	21-25781	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	22.4	—	—	—	NA
MD21-07-74376	21-25781	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	39.5	—	—	—	NA
MD21-07-74378	21-25782	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	22.4	—	—	—	NA
MD21-07-74379	21-25782	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	15.8	—	—	—	NA
MD21-07-74381	21-25783	0.0000–0.5000	SOIL	—	NA	—	—	—	0.401 (J)	—	—	—	127	—	—	42.7	NA
MD21-07-74382	21-25783	2.0000–2.5000	SOIL	—	NA	—	—	—	0.423 (J)	—	—	—	124	—	—	50.9	NA
MD21-07-74384	21-25784	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	17.9	1.56	—	23	NA
MD21-07-74385	21-25784	2.0000–2.5000	SOIL	—	NA	—	—	—	0.524 (U)	—	—	—	—	—	—	—	NA
MD21-07-74387	21-25785	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	19.9	—	—	—	NA
MD21-07-74388	21-25785	2.0000–2.5000	SOIL	—	NA	—	—	—	0.529 (U)	—	—	—	—	—	—	—	NA
MD21-07-74390	21-25786	0.0000–0.5000	SOIL	—	NA	—	—	—	0.712	7350	—	—	218	—	—	69.5	NA
MD21-07-74391	21-25786	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	80.8	—	—	29.3	NA
MD21-07-74393	21-25787	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	134	—	—	23.4	NA
MD21-07-74394	21-25787	2.0000–2.5000	SOIL	—	NA	—	—	—	1.4 (J)	—	—	—	1320	NA	36700 (J-)	108	NA
MD21-07-74396	21-25788	0.0000–0.5000	SOIL	—	—	—	—	—	0.423 (J)	—	—	—	103	—	—	29.2	10.5 (J+)
MD21-07-74397	21-25788	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	150	—	—	—	9 (J+)
MD21-07-74399	21-25789	0.0000–0.5000	SOIL	—	—	—	—	—	0.534 (U)	—	—	—	34.2	—	—	—	7.89 (J+)
MD21-07-74400	21-25789	2.0000–2.5000	SOIL	—	—	—	—	—	0.51 (U)	—	—	—	24.4	—	—	—	8.74 (J+)
MD21-07-74402	21-25790	0.0000–0.5000	SOIL	—	—	—	—	—	0.586 (U)	—	—	—	20.8	—	—	—	7.17 (J+)
MD21-07-74403	21-25790	2.0000–2.5000	SOIL	—	—	—	—	—	0.566 (U)	—	—	—	—	—	—	—	13.5 (J+)

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**	**800**	**619**[d]
MD21-07-74405	21-25791	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	134	—	—	—	9.33 (J+)
MD21-07-74406	21-25791	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	93.8	—	—	—	7.76 (J+)
MD21-07-74408	21-25792	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	43.4	—	—	—	7.58 (J+)
MD21-07-74409	21-25792	2.0000–2.5000	SOIL	—	—	—	—	—	0.522 (U)	—	—	—	19.1	—	—	—	9.89 (J+)
MD21-07-74411	21-25793	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	130	—	—	—	10.8 (J+)
MD21-07-74412	21-25793	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	92.9	—	—	—	10.7 (J+)
MD21-07-74414	21-25794	0.0000–0.5000	SOIL	—	NA	—	—	—	0.589 (U)	—	—	—	—	—	—	—	5.9
MD21-07-74415	21-25794	2.0000–2.5000	SOIL	—	NA	—	—	—	0.556 (U)	—	—	—	—	—	—	—	11.1
MD21-07-74418	21-25795	0.0000–0.5000	SOIL	30800 (J+)	NA	—	—	—	0.608 (U)	—	—	—	31.7	—	22500	—	27
MD21-07-74419	21-25795	2.0000–2.5000	SOIL	—	NA	—	—	—	0.556 (U)	—	—	—	14.9	—	—	—	15.8
MD21-07-74416	21-25796	0.0000–0.5000	SOIL	—	NA	—	—	—	0.543 (U)	—	—	—	17.8	—	—	—	7.5
MD21-07-74417	21-25796	2.0000–2.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—	—	4.2
MD21-07-74436	21-25797	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	82.1	—	—	23.5 (J)	NA
MD21-07-74437	21-25797	2.0000–3.0000	QBT3	29800 (J+)	—	5.51	222	2.01	—	3540	19.1	5.06	156	—	22600	23.4	NA
MD21-07-74438	21-25797	5.0000–6.0000	QBT3	12300 (J+)	—	6.58	177	—	—	37400	7.57	—	47.1	—	—	12.8	NA
RE21-09-3642	21-25797	10.0000–11.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-07-74439	21-25798	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	202	—	—	32	12 (J+)
MD21-07-74440	21-25798	2.0000–3.0000	QBT3	9440 (J+)	—	3.32	58.7	—	—	—	7.54	—	28.8	—	—	—	10.4 (J+)
MD21-07-74441	21-25798	5.0000–6.0000	QBT3	—	—	3.07	46.1	—	—	—	8.36	—	46.6	—	—	—	9.37 (J+)
MD21-07-74445	21-25800	2.3300–3.3360	QBT3	11500	—	4.32	95 (J-)	—	—	—	9.38	3.6 (J)	107 (J-)	—	15800	20.3	4.9 (J+)
MD21-07-74446	21-25800	4.3300–5.3300	QBT3	—	—	—	—	—	—	4090	51.7	—	40.1 (J-)	—	—	—	6.8 (J+)
MD21-07-74447	21-25801	2.3300–3.3300	QBT3	10700	—	3.09	58.6 (J-)	—	—	—	8.25	—	16 (J-)	—	—	—	3.4 (J+)
MD21-07-74448	21-25801	4.3300–5.3300	QBT3	—	—	—	—	—	—	—	—	—	7.71 (J-)	—	—	—	5 (J+)
MD21-07-74449	21-25802	2.0000–3.0000	SOIL	—	—	—	—	—	0.532 (U)	—	—	—	20.8 (J-)	—	—	—	9 (J+)
MD21-07-74450	21-25802	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5 (J+)
MD21-07-74451	21-25803	2.3300–3.3300	SOIL	—	—	—	—	—	0.6 (U)	NA	—	—	—	—	22000	—	12.5
MD21-07-74452	21-25803	4.3300–5.3300	QBT3	—	—	—	65.5 (J-)	—	—	NA	—	—	5.43	—	—	—	5.68
MD21-07-74453	21-25804	2.0000–3.0000	SOIL	—	—	—	—	—	0.539 (U)	—	—	—	—	—	—	—	14.7 (J+)
MD21-07-74454	21-25804	4.0000–5.0000	QBT3	—	—	2.82	—	—	—	—	—	—	5.81 (J-)	—	—	—	7.5 (J+)

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**	**800**	**619**[d]
MD21-07-74455	21-25805	2.6700–3.6700	SOIL	—	—	—	—	—	0.588 (U)	—	—	—	51.5 (J)	—	—	—	9.4 (J+)
MD21-07-74456	21-25805	4.6700–5.6700	QBT3	—	—	—	—	—	—	—	—	—	5.06 (J)	—	—	—	8.2 (J+)
MD21-07-74457	21-25806	2.0000–3.0000	QBT3	—	0.507 (U)	—	—	—	—	2270	12.4	—	13.4	—	—	—	9.13 (J-)
MD21-07-74458	21-25806	4.0000–5.0000	QBT3	—	—	—	—	—	—	4870	25.5	—	4.84	—	—	—	20.1 (J-)
MD21-07-74459	21-25807	2.5000–3.5000	QBT3	8000 (J-)	—	2.9	68.3	—	—	3690	7.64	—	78.2	—	—	28.6	10.7 (J-)
MD21-07-74460	21-25807	4.5000–5.5000	QBT3	—	—	—	—	—	—	—	—	—	15.4	—	—	—	7.13 (J-)
MD21-07-74461	21-25808	2.5000–3.5000	QBT3	—	—	3.28	—	—	—	—	8.8	—	—	—	—	—	4.37 (J-)
MD21-07-74462	21-25808	4.5000–5.5000	QBT3	—	—	3.58	56.2	—	—	—	—	—	68.7	—	—	—	10 (J-)
MD21-07-74463	21-25809	2.0000–3.0000	QBT3	16200	—	3.77	134 (J-)	—	—	13700 (J)	10.4	—	25.5	—	—	—	10.5 (J+)
MD21-07-74464	21-25809	4.0000–5.0000	QBT3	13400	—	—	114 (J-)	—	—	14700 (J)	9.76	—	15.3	—	—	—	27.6 (J+)
MD21-07-74433	21-25810	0.0000–0.5000	SOIL	—	—	—	—	—	0.523 (U)	10800 (J)	—	—	32.5	—	—	—	18 (J+)
MD21-07-74434	21-25810	2.0000–3.0000	QBT3	15600 (J+)	—	3.09	83.2	—	—	5900 (J)	9.59	—	26.4	—	—	12.2	20.7 (J+)
MD21-07-74435	21-25810	5.0000–6.0000	QBT3	—	—	2.85	98.7	—	—	39300 (J)	7.7	—	11	—	—	—	10.2 (J+)
RE21-09-3644	21-25810	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-07-74467	21-25811	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	21.1	—	47	—	—	—	7.07 (J-)
MD21-07-74468	21-25811	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	61.1	—	7.7	—	—	—	6.54 (J-)
MD21-07-74469	21-25812	2.0000–3.0000	QBT3	16400	—	3.98	165 (J-)	—	—	3840 (J)	8.86	—	9.35	—	—	—	20.5 (J+)
MD21-07-74470	21-25812	4.0000–5.0000	QBT3	9220	—	3.12	97 (J-)	—	—	3430 (J)	—	—	5.35	—	—	—	15.6 (J+)
MD21-07-74471	21-25813	3.0000–4.0000	QBT3	—	—	2.94	—	—	—	4410 (J)	11.5	—	19.4	—	—	—	5.76 (J+)
MD21-07-74472	21-25813	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	20	—	10.1	—	—	—	6.69 (J+)
MD21-07-74473	21-25814	1.6000–2.6000	QBT3	—	—	—	—	—	—	—	17.5	—	10.2	—	—	—	7.55 (J-)
MD21-07-74474	21-25814	3.5000–4.5000	QBT3	—	—	—	—	—	—	—	23.6	—	—	—	—	—	5.91 (J-)
MD21-07-74475	21-25815	2.0000–3.0000	QBT3	13900	—	2.88	116 (J-)	—	—	2880 (J)	7.88	—	6.31	—	—	—	14.2 (J+)
MD21-07-74476	21-25815	4.0000–5.0000	QBT3	10600	—	2.83	100 (J-)	—	—	2450 (J)	—	—	8.28	—	—	—	11.3 (J+)
MD21-07-74478	21-25816	4.0000–5.0000	QBT3	14400 (J-)	—	3.21	88.3	—	—	4740	90	—	28.7	—	—	—	17.4 (J-)
MD21-07-74477	21-25816	6.0000–7.0000	QBT3	14000 (J-)	—	2.98	84.5	—	—	4250	17.6	—	22.5	—	—	—	21.4 (J-)
MD21-07-74479	21-25817	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	7.61	—	5.37	—	—	—	4.37
MD21-07-74480	21-25817	4.5000–5.5000	QBT3	—	—	4.01	97.5	—	—	3480	23.9	—	—	—	—	—	4.24
RE21-07-76274	21-27671	55.0000–56.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	3.49

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**	**800**	**619**[d]
RE21-07-76275	21-27671	60.0000–61.0000	QBT3	—	—	—	—	—	—	4670 (J+)	—	—	—	—	—	—	3.47
RE21-07-76276	21-27671	65.0000–66.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	9.24
RE21-07-76277	21-27671	70.0000–71.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	3.96
RE21-07-76278	21-27671	75.0000–76.0000	QBT3	—	—	—	—	—	—	—	—	—	—	2.01	—	—	2.92
RE21-07-76280	21-27672	5.0000–6.0000	QBT3	—	—	4.71	54.9 (J+)	—	—	6130 (J+)	—	—	—	—	—	—	4.44
RE21-07-76281	21-27672	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	15.9	2.9
RE21-07-76282	21-27672	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	2 (J)
RE21-07-76283	21-27672	20.0000–21.0000	QBT3	—	—	—	—	—	—	2640 (J+)	7.36	—	—	—	—	—	2.9
RE21-07-76284	21-27672	25.0000–26.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	4.89
RE21-07-76286	21-27673	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	5.87
RE21-07-76287	21-27673	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	0.733	—	—	3.92
RE21-07-76288	21-27673	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.95 (J)
RE21-07-76289	21-27673	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	23	4.15
RE21-07-76290	21-27673	25.0000–26.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	5.8
RE21-07-76292	21-27674	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	4.83
RE21-07-76293	21-27674	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	2.25
RE21-07-76294	21-27674	18.0000–19.0000	QBT3	—	—	—	—	—	—	—	—	—	—	10.2	—	—	18.4
RE21-07-76295	21-27674	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	2.79
RE21-07-76296	21-27674	25.0000–26.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	2.96
RE21-09-3635	21-604528	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-3636	21-604529	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	110 (J-)	NA	NA	24	NA

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Strontium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**2770**	**na**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**915**	**na**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**na**	**46900**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**na**	**681000**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**na**	**186000**	**929**	**1550**	**92900**
MD21-07-74366	21-25778	0.0000–0.5000	SOIL	—	—	2.53	NA	NA	6.69	0.00343 (J-)	1.59 (U)	—	23.1	—	—	182
MD21-07-74367	21-25778	2.0000–2.5000	SOIL	—	—	2.96	NA	NA	2.68	0.000993 (J-)	1.6 (U)	—	22.8	—	—	163
MD21-07-74369	21-25779	0.0000–0.5000	SOIL	—	—	4.03	NA	NA	5.41	0.00119 (J-)	1.63 (U)	—	22.1	—	—	209
MD21-07-74370	21-25779	2.0000–2.5000	SOIL	—	—	2.82	NA	NA	2.24	0.000818 (J-)	—	1350	18.6	—	—	127
MD21-07-74372	21-25780	0.0000–0.5000	SOIL	—	—	—	NA	NA	1.67	0.000897 (J-)	—	—	17.8	—	—	57.3
MD21-07-74373	21-25780	2.0000–2.5000	SOIL	—	—	—	NA	NA	1.19	—	1.61 (U)	—	19.1	—	—	—
MD21-07-74375	21-25781	0.0000–0.5000	SOIL	—	—	0.126	NA	NA	—	0.000934 (J-)	1.64 (U)	—	17.6	—	—	59.5
MD21-07-74376	21-25781	2.0000–2.5000	SOIL	—	—	0.137	NA	NA	—	0.000537 (J-)	1.55 (U)	—	22	—	—	57.9
MD21-07-74378	21-25782	0.0000–0.5000	SOIL	—	—	0.149	NA	NA	1.57	0.00112 (J-)	1.64 (U)	—	16.9	—	—	—
MD21-07-74379	21-25782	2.0000–2.5000	SOIL	—	—	—	NA	NA	1.39	0.000854 (J-)	1.7 (U)	—	23.5	—	—	—
MD21-07-74381	21-25783	0.0000–0.5000	SOIL	—	—	0.433	NA	NA	1.48	0.00397 (J-)	—	—	44.8	3.33	—	90.4
MD21-07-74382	21-25783	2.0000–2.5000	SOIL	—	—	0.251	NA	NA	2.03	0.00143 (J-)	1.58 (U)	—	43.3	2.5	—	85.6
MD21-07-74384	21-25784	0.0000–0.5000	SOIL	—	—	—	NA	NA	12.9	—	—	—	25	3.74	—	—
MD21-07-74385	21-25784	2.0000–2.5000	SOIL	—	—	—	NA	NA	6.55	0.000599 (J-)	1.57 (U)	—	7.64	—	—	—
MD21-07-74387	21-25785	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	0.00102 (J-)	1.66 (U)	—	11	—	—	—
MD21-07-74388	21-25785	2.0000–2.5000	SOIL	—	—	—	NA	NA	—	—	1.59 (U)	—	9.02	—	—	—
MD21-07-74390	21-25786	0.0000–0.5000	SOIL	—	—	0.157	NA	NA	—	—	—	—	101	8.01	—	132
MD21-07-74391	21-25786	2.0000–2.5000	SOIL	—	—	0.135	NA	NA	—	0.000881 (J-)	1.7 (U)	2370	45.2	3.38	—	64
MD21-07-74393	21-25787	0.0000–0.5000	SOIL	—	—	0.137	NA	NA	0.803 (J)	0.00171 (J-)	1.6 (U)	—	22.3	—	—	120
MD21-07-74394	21-25787	2.0000–2.5000	SOIL	—	—	1.22	NA	NA	1.33	—	7.49 (U)	—	25.2	2.77	—	354
MD21-07-74396	21-25788	0.0000–0.5000	SOIL	—	—	—	0.88	—	3.43 (J-)	0.00361	1.62 (U)	—	31.8	1.88	—	314
MD21-07-74397	21-25788	2.0000–2.5000	SOIL	—	—	0.164	0.949	—	2.49 (J-)	0.00143 (J)	1.64 (U)	—	34.4	—	—	142
MD21-07-74399	21-25789	0.0000–0.5000	SOIL	—	—	—	0.903	—	—	—	1.6 (U)	—	12.2	—	—	—
MD21-07-74400	21-25789	2.0000–2.5000	SOIL	—	—	—	1.43	—	—	—	1.53 (U)	—	13.2	—	—	—
MD21-07-74402	21-25790	0.0000–0.5000	SOIL	—	—	—	1.04	—	0.818 (J-)	0.000669 (J)	—	—	11.6	—	—	—
MD21-07-74403	21-25790	2.0000–2.5000	SOIL	—	—	—	1.76	—	—	0.000624 (J)	1.7 (U)	—	18.5	—	—	—
MD21-07-74405	21-25791	0.0000–0.5000	SOIL	—	—	0.136	1.02	—	1.69 (J-)	0.00151 (J)	1.71 (U)	—	31.7	2.24	—	72.2
MD21-07-74406	21-25791	2.0000–2.5000	SOIL	—	—	—	1.16	—	1.32 (J-)	0.000705 (J)	1.67 (U)	—	20.5	—	—	—
MD21-07-74408	21-25792	0.0000–0.5000	SOIL	—	—	—	0.669	—	1.39 (J-)	0.0012 (J)	—	—	23.3	—	—	—

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Strontium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**2770**	**na**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**915**	**na**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**na**	**46900**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**na**	**681000**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**na**	**186000**	**929**	**1550**	**92900**
MD21-07-74409	21-25792	2.0000–2.5000	SOIL	—	—	—	0.896	—	0.995 (J-)	0.000595 (J)	—	—	16.9	—	—	—
MD21-07-74411	21-25793	0.0000–0.5000	SOIL	—	—	—	0.587	—	1.19 (J-)	0.000729 (J)	—	—	36.7	2.08	—	70.5
MD21-07-74412	21-25793	2.0000–2.5000	SOIL	—	—	—	0.595	—	0.798 (J-)	—	1.53 (U)	—	26	2.23	—	57.8
MD21-07-74414	21-25794	0.0000–0.5000	SOIL	—	—	—	2.15	—	1.37	—	—	—	9.55	—	—	—
MD21-07-74415	21-25794	2.0000–2.5000	SOIL	—	—	—	3.81	—	0.759 (J)	—	1.67 (U)	—	6.82	—	—	—
MD21-07-74418	21-25795	0.0000–0.5000	SOIL	—	—	—	0.881	—	1.24	—	1.65 (J)	—	29.7	—	—	76.5
MD21-07-74419	21-25795	2.0000–2.5000	SOIL	—	—	—	1.5	—	0.901 (J)	—	1.67 (U)	—	12.2	—	—	—
MD21-07-74416	21-25796	0.0000–0.5000	SOIL	—	—	—	0.597	—	1.32	—	—	—	11.5	—	—	—
MD21-07-74417	21-25796	2.0000–2.5000	QBT3	—	—	—	0.371	—	0.668 (J)	—	1.48 (U)	—	2.2	—	—	—
MD21-07-74436	21-25797	0.0000–0.5000	SOIL	—	—	—	NA	—	3.05	0.000834 (J-)	—	—	24.2	—	—	269
MD21-07-74437	21-25797	2.0000–3.0000	QBT3	4110	—	0.114	NA	11.6	0.85 (J)	0.00124 (J-)	1.29 (J)	—	35.4	—	29.4	102
MD21-07-74438	21-25797	5.0000–6.0000	QBT3	3260	—	—	NA	9.79	1.53	0.00161 (J-)	1.76 (U)	—	93.6	—	22.7	—
RE21-09-3642	21-25797	10.0000–11.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	67	NA	NA	NA
MD21-07-74439	21-25798	0.0000–0.5000	SOIL	—	—	0.163 (J+)	1.25 (J)	—	0.918 (J)	0.00151 (J)	—	—	29.9 (J)	—	—	147 (J+)
MD21-07-74440	21-25798	2.0000–3.0000	QBT3	—	—	—	1.59 (J)	—	0.851 (J)	0.00154 (J)	1.62 (U)	—	9.8 (J)	—	—	—
MD21-07-74441	21-25798	5.0000–6.0000	QBT3	—	—	—	2.26 (J)	—	0.704 (J)	0.000985 (J)	1.61 (U)	—	8.26 (J)	—	—	—
MD21-07-74445	21-25800	2.3300–3.3360	QBT3	—	551 (J)	9.68	1.44	—	5.12	—	0.983 (J)	—	20.8	—	—	76.2 (J-)
MD21-07-74446	21-25800	4.3300–5.3300	QBT3	—	—	2.53	1.18	—	1.82	—	1.49 (U)	—	17.9	—	—	—
MD21-07-74447	21-25801	2.3300–3.3300	QBT3	—	—	—	0.427	—	0.678 (J)	—	1.59 (U)	—	14.9	—	—	—
MD21-07-74448	21-25801	4.3300–5.3300	QBT3	—	—	—	0.347	—	—	—	1.48 (U)	—	6.66	—	—	—
MD21-07-74449	21-25802	2.0000–3.0000	SOIL	—	—	—	0.419	—	—	—	—	—	9.97	—	—	—
MD21-07-74450	21-25802	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	1.48 (U)	—	1.56	—	—	—
MD21-07-74451	21-25803	2.3300–3.3300	SOIL	—	—	—	0.75	—	—	—	2.01	—	20.5	—	—	—
MD21-07-74452	21-25803	4.3300–5.3300	QBT3	—	—	—	1.68	—	0.615 (J)	—	1.77 (U)	—	14.4	—	—	—
MD21-07-74453	21-25804	2.0000–3.0000	SOIL	—	—	—	0.562	—	—	—	—	—	13.5	—	—	—
MD21-07-74454	21-25804	4.0000–5.0000	QBT3	—	—	—	0.469	—	0.509 (J)	—	1.47 (U)	—	10.1	—	—	—
MD21-07-74455	21-25805	2.6700–3.6700	SOIL	—	—	—	0.746	—	—	—	1.76 (U)	—	21.2	—	—	—
MD21-07-74456	21-25805	4.6700–5.6700	QBT3	—	—	—	0.966	—	—	—	1.76 (U)	—	8.91	—	—	—
MD21-07-74457	21-25806	2.0000–3.0000	QBT3	—	—	—	1.2	—	—	—	1.83 (U)	—	19.6	3.31	—	—

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Strontium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**2770**	**na**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**915**	**na**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**na**	**46900**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**na**	**681000**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**na**	**186000**	**929**	**1550**	**92900**
MD21-07-74458	21-25806	4.0000–5.0000	QBT3	—	—	—	0.48	—	—	—	1.74 (U)	—	27.1	5.54	—	—
MD21-07-74459	21-25807	2.5000–3.5000	QBT3	—	—	—	0.974	—	1.31	—	1.83 (U)	—	43	—	—	—
MD21-07-74460	21-25807	4.5000–5.5000	QBT3	—	—	—	1.67	—	1.47	—	1.73 (U)	—	10.8	—	—	—
MD21-07-74461	21-25808	2.5000–3.5000	QBT3	—	—	—	1.07	—	0.934 (J)	—	1.68 (U)	—	5.31	—	—	—
MD21-07-74462	21-25808	4.5000–5.5000	QBT3	—	—	—	0.564	—	0.726 (J)	—	1.79 (U)	—	24.7	—	19.3	615
MD21-07-74463	21-25809	2.0000–3.0000	QBT3	3640	NA	—	0.589	—	2.03	—	1.19 (J)	—	73.9 (J-)	4.16	26.5	120 (J-)
MD21-07-74464	21-25809	4.0000–5.0000	QBT3	3700	NA	—	0.954	—	2	0.000633 (J)	1.2 (J)	—	73.5 (J-)	5.53	26.8	111 (J-)
MD21-07-74433	21-25810	0.0000–0.5000	SOIL	—	—	0.435 (J+)	1.37 (J)	—	2.2	0.00122 (J)	—	—	59.2 (J)	2.06 (J+)	—	188 (J+)
MD21-07-74434	21-25810	2.0000–3.0000	QBT3	2540	—	1.3 (J+)	0.697 (J)	—	1.91	0.000976 (J)	1.1 (J)	—	33.1 (J)	3.29 (J+)	18.4	170 (J+)
MD21-07-74435	21-25810	5.0000–6.0000	QBT3	2360	—	0.359 (J+)	1.02 (J)	—	3.72	—	1.66 (U)	—	86.9 (J)	—	—	—
RE21-09-3644	21-25810	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	33	NA	NA	NA
MD21-07-74467	21-25811	3.0000–4.0000	QBT3	—	—	—	1.27	—	3.91	—	0.665 (J)	—	17.8	—	—	—
MD21-07-74468	21-25811	5.0000–6.0000	QBT3	—	—	—	1.06	—	2.55	—	1.63 (U)	—	12.2	—	—	—
MD21-07-74469	21-25812	2.0000–3.0000	QBT3	2230	NA	—	0.496	—	2.55	—	1.79 (U)	—	32.3 (J-)	—	—	—
MD21-07-74470	21-25812	4.0000–5.0000	QBT3	—	NA	—	0.748	—	2.4	—	0.883 (J)	—	23.5 (J-)	—	—	—
MD21-07-74471	21-25813	3.0000–4.0000	QBT3	—	NA	—	1.88	—	2.67	—	0.853 (J)	—	29.1 (J-)	—	—	—
MD21-07-74472	21-25813	5.0000–6.0000	QBT3	—	NA	—	1.88	—	2.34	—	0.645 (J)	—	14.8 (J-)	—	—	—
MD21-07-74473	21-25814	1.6000–2.6000	QBT3	—	—	—	1.15	—	0.589 (J)	—	1.77 (U)	—	7.7	—	—	—
MD21-07-74474	21-25814	3.5000–4.5000	QBT3	—	—	—	1.71	—	0.944 (J)	—	1.64 (U)	—	1.24	—	—	—
MD21-07-74475	21-25815	2.0000–3.0000	QBT3	1900	NA	—	0.726	—	1.99	—	0.965 (J)	—	27.9 (J-)	—	—	—
MD21-07-74476	21-25815	4.0000–5.0000	QBT3	—	NA	—	0.952	—	2.66	—	1.1 (J)	—	25.4 (J-)	—	—	—
MD21-07-74478	21-25816	4.0000–5.0000	QBT3	2660	—	—	0.986	11	1.48	—	0.738 (J)	—	34.2	—	—	—
MD21-07-74477	21-25816	6.0000–7.0000	QBT3	2470	—	—	1.14	10.1	1.54	—	1.78 (U)	—	31.8	—	—	—
MD21-07-74479	21-25817	2.5000–3.5000	QBT3	—	—	—	0.367	—	12.7 (J-)	—	1.6 (U)	—	11.5	—	—	—
MD21-07-74480	21-25817	4.5000–5.5000	QBT3	—	—	—	0.601	—	19.5 (J-)	—	1.63 (U)	—	13.5	—	—	—
RE21-07-76274	21-27671	55.0000–56.0000	QBT3	—	—	—	0.28	—	1.36 (J-)	—	0.781 (J)	—	14.4 (J)	—	—	—
RE21-07-76275	21-27671	60.0000–61.0000	QBT3	—	—	—	0.396	—	1.47 (J-)	—	1.63 (U)	—	14.4 (J)	—	—	—
RE21-07-76276	21-27671	65.0000–66.0000	QBT3	—	—	—	0.334	—	1.23 (J-)	—	0.829 (J)	—	0.748 (J)	—	—	—
RE21-07-76277	21-27671	70.0000–71.0000	QBT3	—	—	—	0.25	—	1.44 (J-)	—	1.55 (U)	—	1.07 (J)	—	—	—

Table 6.5-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Strontium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**2770**	**na**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**915**	**na**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**na**	**46900**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**na**	**681000**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**na**	**186000**	**929**	**1550**	**92900**
RE21-07-76278	21-27671	75.0000–76.0000	QBT3	—	—	—	0.251	—	1.53 (J-)	—	1.56 (U)	—	0.472 (J)	—	—	—
RE21-07-76280	21-27672	5.0000–6.0000	QBT3	—	—	—	0.931	—	34.2 (J-)	0.000684 (J)	0.715 (J)	—	36.9 (J)	—	—	—
RE21-07-76281	21-27672	10.0000–11.0000	QBT3	—	—	—	1.32	—	9.29 (J-)	—	1.6 (U)	—	7.26 (J)	—	—	131
RE21-07-76282	21-27672	15.0000–16.0000	QBT3	—	—	—	0.938	—	4.08 (J-)	—	1.63 (U)	—	4.68 (J)	—	—	—
RE21-07-76283	21-27672	20.0000–21.0000	QBT3	—	—	—	0.628	—	1.52 (J-)	—	1.62 (U)	—	8.36 (J)	—	—	—
RE21-07-76284	21-27672	25.0000–26.0000	QBT3	—	—	—	0.664	—	1.53 (J-)	—	1.6 (U)	—	4.28 (J)	—	—	—
RE21-07-76286	21-27673	5.0000–6.0000	QBT3	—	—	—	1.62	—	1.98	—	1.69 (U)	—	4.82	—	—	—
RE21-07-76287	21-27673	10.0000–11.0000	QBT3	—	—	—	2.34	—	1.94 (J-)	—	1.62 (U)	—	2.07	—	—	—
RE21-07-76288	21-27673	15.0000–16.0000	QBT3	—	—	—	0.478	—	2.11 (J-)	—	0.604 (J)	—	1.53	—	—	—
RE21-07-76289	21-27673	20.0000–21.0000	QBT3	—	—	—	0.353	—	1.7 (J-)	—	0.603 (J)	—	2.02	—	—	—
RE21-07-76290	21-27673	25.0000–26.0000	QBT3	—	—	—	0.481	—	1.34 (J-)	—	1.58 (U)	—	1.14	—	—	—
RE21-07-76292	21-27674	5.0000–6.0000	QBT3	—	—	—	2.53	—	2.18 (J-)	—	1.6 (U)	—	3.05	—	—	—
RE21-07-76293	21-27674	10.0000–11.0000	QBT3	—	—	—	0.738	—	1.77 (J-)	—	0.97 (J)	—	2.26	—	—	—
RE21-07-76294	21-27674	18.0000–19.0000	QBT3	—	—	—	0.5	—	1.46 (J-)	—	1.64 (U)	—	21.1	—	—	—
RE21-07-76295	21-27674	20.0000–21.0000	QBT3	—	—	—	0.581	—	1.37 (J-)	—	0.587 (J)	—	1.1	—	—	—
RE21-07-76296	21-27674	25.0000–26.0000	QBT3	—	—	—	0.182	—	1.21 (J-)	—	1.62 (U)	—	2.2	—	—	—
RE21-09-3635	21-604528	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	120
RE21-09-3636	21-604529	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	27	NA	NA	95

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.5-2
Summary of Organic Chemicals Detected at SWMU 21-012(b)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1260	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzoic Acid	Chloroform	Chrysene	Dichlorobenzene[1,4-]	Fluoranthene	Isopropyltoluene[4-]
Residential SSL				**67500**	**2.22**	**6.21**	**6.21**	**240000**[a]	**5.72**	**621**	**32.2**	**2290**	**3210**[c]
Industrial SSL				**851000**	**8.26**	**23.4**	**23.4**	**2500000**[a]	**31.9**	**2340**	**180**	**24400**	**14900**[c]
Construction Worker SSL				**263000**	**75.8**	**213**	**213**	**952000**[b]	**671**	**20600**	**3780**	**8910**	**10300**[c]
MD21-07-74367	21-25778	2.0000–2.5000	SOIL	—[d]	NA[e]	—	—	—	—	—	—	0.0157 (J)	—
MD21-07-74370	21-25779	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	0.0129 (J)	—
MD21-07-74372	21-25780	0.0000–0.5000	SOIL	NA	NA	—	—	—	NA	—	—	0.0186 (J)	NA
MD21-07-74373	21-25780	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	0.0133 (J)	—
MD21-07-74376	21-25781	2.0000–2.5000	SOIL	—	NA	—	—	0.629 (J)	—	—	—	—	0.00153
MD21-07-74379	21-25782	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74381	21-25783	0.0000–0.5000	SOIL	NA	NA	—	—	—	NA	—	—	—	NA
MD21-07-74382	21-25783	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	0.000623 (J)
MD21-07-74385	21-25784	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74387	21-25785	0.0000–0.5000	SOIL	NA	NA	0.024 (J)	—	—	NA	0.0306 (J)	—	0.0522	NA
MD21-07-74388	21-25785	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74391	21-25786	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74393	21-25787	0.0000–0.5000	SOIL	NA	NA	—	—	—	NA	—	—	0.0164 (J)	NA
MD21-07-74394	21-25787	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74396	21-25788	0.0000–0.5000	SOIL	NA	NA	—	—	—	NA	—	—	0.0137 (J)	NA
MD21-07-74400	21-25789	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74403	21-25790	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	0.000503 (J)
MD21-07-74405	21-25791	0.0000–0.5000	SOIL	NA	NA	—	—	—	NA	—	—	0.0138 (J)	NA
MD21-07-74409	21-25792	2.0000–2.5000	SOIL	0.0226	NA	—	—	—	—	—	—	—	—
MD21-07-74412	21-25793	2.0000–2.5000	SOIL	—	NA	—	—	—	—	—	—	—	—
MD21-07-74437	21-25797	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-07-74439	21-25798	0.0000–0.5000	SOIL	NA	—	—	—	—	NA	—	—	—	NA
MD21-07-74441	21-25798	5.0000–6.0000	QBT3	0.00889	—	—	—	—	—	—	—	—	—
MD21-07-74455	21-25805	2.6700–3.6700	SOIL	—	NA	—	—	—	0.000365 (J)	—	0.00042 (J)	—	—
MD21-07-74456	21-25805	4.6700–5.6700	QBT3	0.0639	NA	—	—	—	0.000256 (J)	—	—	—	—
MD21-07-74457	21-25806	2.0000–3.0000	QBT3	—	NA	—	—	—	—	—	—	—	—
MD21-07-74458	21-25806	4.0000–5.0000	QBT3	—	NA	—	—	—	—	—	—	—	—
MD21-07-74459	21-25807	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-07-74461	21-25808	2.5000–3.5000	QBT3	0.00618	—	—	—	—	—	—	—	—	—
MD21-07-74462	21-25808	4.5000–5.5000	QBT3	—	—	—	—	—	—	—	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1260	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzoic Acid	Chloroform	Chrysene	Dichlorobenzene[1,4-]	Fluoranthene	Isopropyltoluene[4-]
Residential SSL				**67500**	**2.22**	**6.21**	**6.21**	**240000**[a]	**5.72**	**621**	**32.2**	**2290**	**3210**[c]
Industrial SSL				**851000**	**8.26**	**23.4**	**23.4**	**2500000**[a]	**31.9**	**2340**	**180**	**24400**	**14900**[c]
Construction Worker SSL				**263000**	**75.8**	**213**	**213**	**952000**[b]	**671**	**20600**	**3780**	**8910**	**10300**[c]
MD21-07-74463	21-25809	2.0000–3.0000	QBT3	—	NA	—	—	NA	—	—	—	—	—
MD21-07-74464	21-25809	4.0000–5.0000	QBT3	—	NA	—	—	NA	—	—	—	—	—
MD21-07-74433	21-25810	0.0000–0.5000	SOIL	NA	—	—	0.0161 (J)	—	NA	—	—	0.0155 (J)	NA
MD21-07-74434	21-25810	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-07-74435	21-25810	5.0000–6.0000	QBT3	0.00319 (J)	—	—	—	—	—	—	—	—	—
MD21-07-74467	21-25811	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-07-74468	21-25811	5.0000–6.0000	QBT3	—	—	—	—	—	0.000235 (J)	—	—	—	—
MD21-07-74469	21-25812	2.0000–3.0000	QBT3	—	NA	—	—	NA	—	—	—	—	—
MD21-07-74470	21-25812	4.0000–5.0000	QBT3	0.00398 (J)	NA	—	—	NA	—	—	—	—	—
MD21-07-74471	21-25813	3.0000–4.0000	QBT3	—	NA	—	—	NA	0.000219 (J)	—	—	—	—
MD21-07-74472	21-25813	5.0000–6.0000	QBT3	—	NA	—	—	NA	—	—	—	—	—
MD21-07-74473	21-25814	1.6000–2.6000	QBT3	—	0.0015 (J)	—	—	—	—	—	—	—	—
MD21-07-74474	21-25814	3.5000–4.5000	QBT3	0.0036 (J)	—	—	—	—	—	—	—	—	—
MD21-07-74475	21-25815	2.0000–3.0000	QBT3	—	NA	—	—	NA	—	—	—	—	—
MD21-07-74476	21-25815	4.0000–5.0000	QBT3	—	NA	—	—	NA	—	—	—	—	—
MD21-07-74478	21-25816	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-07-74477	21-25816	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-07-74479	21-25817	2.5000–3.5000	QBT3	0.00496 (J)	NA	—	—	—	—	—	—	—	—
MD21-07-74480	21-25817	4.5000–5.5000	QBT3	0.014	NA	—	—	—	—	—	—	—	—
RE21-07-76274	21-27671	55.0000–56.0000	QBT3	0.00304 (J)	NA	—	—	—	—	—	—	—	—
RE21-07-76277	21-27671	70.0000–71.0000	QBT3	0.0049 (J)	—	—	—	—	—	—	—	—	—
RE21-07-76278	21-27671	75.0000–76.0000	QBT3	0.00344 (J)	NA	—	—	—	—	—	—	—	—
RE21-07-76280	21-27672	5.0000–6.0000	QBT3	0.00346 (J)	NA	—	—	—	—	—	—	—	—
RE21-07-76281	21-27672	10.0000–11.0000	QBT3	0.00351 (J-)	NA	—	—	—	—	—	—	—	—
RE21-07-76282	21-27672	15.0000–16.0000	QBT3	0.0072	NA	—	—	—	—	—	—	—	—
RE21-07-76283	21-27672	20.0000–21.0000	QBT3	—	NA	—	—	—	—	—	—	—	—
RE21-07-76284	21-27672	25.0000–26.0000	QBT3	0.0036 (J)	NA	—	—	—	—	—	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[2-]	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trichloroethene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**310**[a]	**na**[f]	**1830**	**1720**	**5570**	**45.7**	**62**[a]	**1090**[g]
Industrial SSL				**1090**	**4100**[a]	**na**	**20500**	**18300**	**57900**	**253**	**260**[a]	**3610**[g]
Construction Worker SSL				**10600**	**1240**[b]	**na**	**7150**	**6680**	**21100**	**4600**	**688**[b]	**3130**[g]
MD21-07-74367	21-25778	2.0000–2.5000	SOIL	—	—	NA	—	0.0167 (J)	0.00343	—	—	—
MD21-07-74370	21-25779	2.0000–2.5000	SOIL	—	—	NA	—	0.0154 (J)	0.00613	—	—	—
MD21-07-74372	21-25780	0.0000–0.5000	SOIL	NA	—	NA	—	0.0184 (J)	NA	NA	NA	NA
MD21-07-74373	21-25780	2.0000–2.5000	SOIL	—	—	NA	—	0.019 (J)	0.00239	—	—	—
MD21-07-74376	21-25781	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00901	—	—	—
MD21-07-74379	21-25782	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00526	—	—	—
MD21-07-74381	21-25783	0.0000–0.5000	SOIL	NA	—	NA	—	0.0149 (J)	NA	NA	NA	NA
MD21-07-74382	21-25783	2.0000–2.5000	SOIL	—	—	NA	—	—	0.0101	—	—	—
MD21-07-74385	21-25784	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00374	—	—	—
MD21-07-74387	21-25785	0.0000–0.5000	SOIL	NA	—	NA	0.0264 (J)	0.0596	NA	NA	NA	NA
MD21-07-74388	21-25785	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00202	—	—	—
MD21-07-74391	21-25786	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00263	—	—	—
MD21-07-74393	21-25787	0.0000–0.5000	SOIL	NA	—	NA	—	0.0199 (J)	NA	NA	NA	NA
MD21-07-74394	21-25787	2.0000–2.5000	SOIL	—	—	NA	—	0.0267 (J)	0.0219 (J+)	—	—	—
MD21-07-74396	21-25788	0.0000–0.5000	SOIL	NA	—	NA	—	0.0134 (J)	NA	NA	NA	NA
MD21-07-74400	21-25789	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00291	—	—	—
MD21-07-74403	21-25790	2.0000–2.5000	SOIL	—	—	NA	—	—	0.0291	0.000322 (J)	—	—
MD21-07-74405	21-25791	0.0000–0.5000	SOIL	NA	—	NA	—	0.0141 (J)	NA	NA	NA	NA
MD21-07-74409	21-25792	2.0000–2.5000	SOIL	—	—	NA	—	—	0.00564	—	—	—
MD21-07-74412	21-25793	2.0000–2.5000	SOIL	—	—	NA	—	—	0.0325	—	—	—
MD21-07-74437	21-25797	2.0000–3.0000	QBT3	—	—	NA	—	—	0.000687 (J)	—	—	—
MD21-07-74439	21-25798	0.0000–0.5000	SOIL	NA	—	NA	—	0.0176 (J)	NA	NA	NA	NA
MD21-07-74441	21-25798	5.0000–6.0000	QBT3	—	—	NA	—	—	—	—	—	—
MD21-07-74455	21-25805	2.6700–3.6700	SOIL	0.00476 (J)	—	NA	—	—	—	—	—	0.000553 (J)
MD21-07-74456	21-25805	4.6700–5.6700	QBT3	0.00315 (J)	—	NA	—	—	—	—	—	—
MD21-07-74457	21-25806	2.0000–3.0000	QBT3	—	—	NA	—	—	—	—	0.000281 (J)	—
MD21-07-74458	21-25806	4.0000–5.0000	QBT3	—	—	NA	—	—	0.000749 (J)	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[2-]	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trichloroethene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**310**[a]	**na**[f]	**1830**	**1720**	**5570**	**45.7**	**62**[a]	**1090**[g]
Industrial SSL				**1090**	**4100**[a]	**na**	**20500**	**18300**	**57900**	**253**	**260**[a]	**3610**[g]
Construction Worker SSL				**10600**	**1240**[b]	**na**	**7150**	**6680**	**21100**	**4600**	**688**[b]	**3130**[g]
MD21-07-74459	21-25807	2.5000–3.5000	QBT3	—	—	NA	—	—	0.000838 (J)	—	0.000262 (J)	0.000374 (J)
MD21-07-74461	21-25808	2.5000–3.5000	QBT3	—	—	NA	—	—	0.000363 (J)	—	—	—
MD21-07-74462	21-25808	4.5000–5.5000	QBT3	—	—	NA	—	—	0.000868 (J)	—	—	—
MD21-07-74463	21-25809	2.0000–3.0000	QBT3	—	—	NA	—	—	0.00258	—	—	—
MD21-07-74464	21-25809	4.0000–5.0000	QBT3	—	—	NA	—	—	0.0024	—	—	—
MD21-07-74433	21-25810	0.0000–0.5000	SOIL	NA	—	NA	0.016 (J)	0.015 (J)	NA	NA	NA	NA
MD21-07-74434	21-25810	2.0000–3.0000	QBT3	—	—	NA	—	—	0.000485 (J)	—	—	—
MD21-07-74435	21-25810	5.0000–6.0000	QBT3	—	—	NA	—	—	0.000401 (J)	—	—	—
MD21-07-74467	21-25811	3.0000–4.0000	QBT3	—	—	NA	—	—	0.000967 (J)	—	—	—
MD21-07-74468	21-25811	5.0000–6.0000	QBT3	—	—	NA	—	—	0.0043	—	—	—
MD21-07-74469	21-25812	2.0000–3.0000	QBT3	—	—	NA	—	—	0.00681	—	—	0.000539 (J)
MD21-07-74470	21-25812	4.0000–5.0000	QBT3	—	—	NA	—	—	0.0013	—	—	—
MD21-07-74471	21-25813	3.0000–4.0000	QBT3	—	—	NA	—	—	0.000645 (J)	—	—	—
MD21-07-74472	21-25813	5.0000–6.0000	QBT3	—	—	NA	—	—	0.00119	—	—	—
MD21-07-74473	21-25814	1.6000–2.6000	QBT3	—	—	NA	—	—	—	—	—	—
MD21-07-74474	21-25814	3.5000–4.5000	QBT3	—	—	NA	—	—	0.000821 (J)	—	—	—
MD21-07-74475	21-25815	2.0000–3.0000	QBT3	—	—	NA	—	—	0.00103 (J)	—	—	—
MD21-07-74476	21-25815	4.0000–5.0000	QBT3	—	—	NA	—	—	0.00183	—	—	—
MD21-07-74478	21-25816	4.0000–5.0000	QBT3	—	—	NA	—	—	0.000534 (J)	—	—	—
MD21-07-74477	21-25816	6.0000–7.0000	QBT3	—	—	NA	—	—	0.00071 (J)	—	—	—
MD21-07-74479	21-25817	2.5000–3.5000	QBT3	—	—	NA	—	—	—	—	—	—
MD21-07-74480	21-25817	4.5000–5.5000	QBT3	—	—	NA	—	—	—	—	—	—
RE21-07-76274	21-27671	55.0000–56.0000	QBT3	—	—	NA	—	—	—	—	—	—
RE21-07-76277	21-27671	70.0000–71.0000	QBT3	—	—	0.00000034 (J)	—	—	—	—	—	—
RE21-07-76278	21-27671	75.0000–76.0000	QBT3	—	—	NA	—	—	—	—	—	—

Table 6.5-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[2-]	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trichloroethene	Trimethylbenzene[1,2,4-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**310**[a]	**na**[f]	**1830**	**1720**	**5570**	**45.7**	**62**[a]	**1090**[g]
Industrial SSL				**1090**	**4100**[a]	**na**	**20500**	**18300**	**57900**	**253**	**260**[a]	**3610**[g]
Construction Worker SSL				**10600**	**1240**[b]	**na**	**7150**	**6680**	**21100**	**4600**	**688**[b]	**3130**[g]
RE21-07-76280	21-27672	5.0000–6.0000	QBT3	—	—	NA	—	—	—	—	—	—
RE21-07-76281	21-27672	10.0000–11.0000	QBT3	—	—	NA	—	—	—	—	—	—
RE21-07-76282	21-27672	15.0000–16.0000	QBT3	—	0.0152 (J)	NA	0.0127 (J)	—	—	—	—	—
RE21-07-76283	21-27672	20.0000–21.0000	QBT3	0.00284 (J)	—	NA	—	—	—	—	0.000243 (J)	—
RE21-07-76284	21-27672	25.0000–26.0000	QBT3	—	—	NA	—	—	—	—	—	—

Source: SSLs from NMED (2009, 108070).

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

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

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Isopropylbenzene used as surrogate based on structural similarity.

[d] — = Not detected.

[e] NA= Not analyzed.

[f] na = Not available.

[g] SSL for xylenes used a surrogate based on structural similarity.

Table 6.5-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-012(b)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-07-74366	21-25778	0.0000–0.5000	SOIL	0.143	NA[c]	—[d]	0.0289	1.02	0.054905	—	—	—
MD21-07-74367	21-25778	2.0000–2.5000	SOIL	0.0346	—	0.338	—	0.265	0.035415	—	—	—
MD21-07-74369	21-25779	0.0000–0.5000	SOIL	0.0759	NA	—	—	1.49	0.058444	—	—	—
MD21-07-74370	21-25779	2.0000–2.5000	SOIL	—	NA	—	—	0.147	0.184762	—	—	—
MD21-07-74372	21-25780	0.0000–0.5000	SOIL	0.169	—	—	—	0.751	0.043636	—	—	—
MD21-07-74373	21-25780	2.0000–2.5000	SOIL	0.0801	NA	0.523	—	1.48	0.035331	—	—	—
MD21-07-74375	21-25781	0.0000–0.5000	SOIL	0.177	—	—	—	1.5	0.049333	—	—	—
MD21-07-74376	21-25781	2.0000–2.5000	SOIL	0.0727	NA	0.173	—	0.784	0.030757	—	—	—
MD21-07-74378	21-25782	0.0000–0.5000	SOIL	0.15	—	—	0.0235	1.33	0.045624	—	—	—
MD21-07-74379	21-25782	2.0000–2.5000	SOIL	0.0426	NA	0.206	—	0.463	0.069231	—	—	—
MD21-07-74381	21-25783	0.0000–0.5000	SOIL	0.127	NA	—	—	0.941	0.06464	—	—	2.37
MD21-07-74382	21-25783	2.0000–2.5000	SOIL	0.0504	—	0.341	—	1.54	0.041207	—	—	—
MD21-07-74384	21-25784	0.0000–0.5000	SOIL	0.521	—	2.2	0.0971	2	0.040985	—	—	—
MD21-07-74385	21-25784	2.0000–2.5000	SOIL	0.0444	—	0.319	—	0.519	0.05664	—	—	—
MD21-07-74387	21-25785	0.0000–0.5000	SOIL	0.129	NA	—	—	1.25	0.042546	—	—	—
MD21-07-74388	21-25785	2.0000–2.5000	SOIL	—	NA	—	—	0.124	0.046022	—	—	—
MD21-07-74390	21-25786	0.0000–0.5000	SOIL	0.0236	NA	—	—	0.525	0.050242	3.39	—	2.68

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-07-74391	21-25786	2.0000–2.5000	SOIL	—	—	—	—	0.0712	0.11969	—	—	—
MD21-07-74393	21-25787	0.0000–0.5000	SOIL	0.129	—	—	—	0.331	0.043615	—	—	—
MD21-07-74394	21-25787	2.0000–2.5000	SOIL	0.044	—	0.201	—	0.608	0.047656	—	—	—
MD21-07-74396	21-25788	0.0000–0.5000	SOIL	0.103	NA	—	—	0.218 (J)	0.039	—	—	—
MD21-07-74397	21-25788	2.0000–2.5000	SOIL	0.0558	—	0.228	—	0.132 (J)	0.028604	—	—	—
MD21-07-74399	21-25789	0.0000–0.5000	SOIL	0.0992	NA	—	—	0.701 (J)	—	—	—	—
MD21-07-74400	21-25789	2.0000–2.5000	SOIL	—	—	—	—	0.887 (J)	0.025751	—	—	—
MD21-07-74402	21-25790	0.0000–0.5000	SOIL	0.0486	0.128	—	—	0.332 (J)	0.070667	—	—	—
MD21-07-74403	21-25790	2.0000–2.5000	SOIL	—	—	—	—	0.0924 (J)	0.053455	—	—	—
MD21-07-74405	21-25791	0.0000–0.5000	SOIL	—	NA	—	—	0.163 (J)	0.037805	—	—	—
MD21-07-74406	21-25791	2.0000–2.5000	SOIL	0.0559	NA	0.144	—	0.186 (J)	—	—	—	—
MD21-07-74408	21-25792	0.0000–0.5000	SOIL	0.0758	NA	—	—	0.217 (J)	0.045818	—	—	—
MD21-07-74409	21-25792	2.0000–2.5000	SOIL	—	NA	—	—	0.0367 (J)	0.033698	—	—	—
MD21-07-74411	21-25793	0.0000–0.5000	SOIL	0.0426	NA	—	—	0.492 (J)	0.034911	—	—	—
MD21-07-74412	21-25793	2.0000–2.5000	SOIL	—	—	0.326	—	0.351 (J)	0.031111	—	—	—
MD21-07-74414	21-25794	0.0000–0.5000	SOIL	0.0927	NA	—	—	0.265	0.040364	—	—	—
MD21-07-74415	21-25794	2.0000–2.5000	SOIL	—	NA	—	—	0.129	0.039667	—	—	—
MD21-07-74418	21-25795	0.0000–0.5000	SOIL	—	NA	—	—	0.213	0.055989	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-07-74419	21-25795	2.0000–2.5000	SOIL	—	NA	—	—	0.0407	0.070364	—	—	—
MD21-07-74416	21-25796	0.0000–0.5000	SOIL	—	NA	—	—	0.341	0.026112	—	—	—
MD21-07-74417	21-25796	2.0000–2.5000	QBT3	—	NA	—	—	—	0.018632	—	—	—
MD21-07-74436	21-25797	0.0000–0.5000	SOIL	0.206	—	—	—	0.462	0.0684706 (J-)	—	—	—
MD21-07-74437	21-25797	2.0000–3.0000	QBT3	—	—	—	—	0.0818	0.171938 (J-)	—	—	—
MD21-07-74438	21-25797	5.0000–6.0000	QBT3	—	NA	0.135	0.0575	0.0661	0.181765 (J-)	—	—	—
RE21-09-3642	21-25797	10.0000–11.0000	SOIL	NA	NA	NA	—	0.068	NA	NA	NA	NA
MD21-07-74439	21-25798	0.0000–0.5000	SOIL	0.299	—	—	—	0.797	0.07181	—	—	—
MD21-07-74440	21-25798	2.0000–3.0000	QBT3	—	NA	—	—	—	0.135556	—	—	—
MD21-07-74441	21-25798	5.0000–6.0000	QBT3	—	NA	—	—	0.0506	0.05946	—	—	—
MD21-07-74445	21-25800	2.3300–3.3360	QBT3	—	NA	—	—	—	0.054278	—	—	—
MD21-07-74446	21-25800	4.3300–5.3300	QBT3	—	NA	—	—	—	0.037961	—	—	—
MD21-07-74447	21-25801	2.3300–3.3300	QBT3	—	NA	—	—	0.093	0.036973	—	—	—
MD21-07-74448	21-25801	4.3300–5.3300	QBT3	—	—	—	—	0.0526	0.025954	—	—	—
MD21-07-74449	21-25802	2.0000–3.0000	SOIL	—	NA	—	—	0.0739	0.061303	—	—	—
MD21-07-74450	21-25802	4.0000–5.0000	QBT3	—	—	—	—	—	0.046218	—	—	—
MD21-07-74451	21-25803	2.3300–3.3300	SOIL	—	—	—	—	0.0448	0.128	—	—	—
MD21-07-74452	21-25803	4.3300–5.3300	QBT3	—	NA	—	—	—	0.080122	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-07-74453	21-25804	2.0000–3.0000	SOIL	—	—	—	0.107	0.158	0.050714	—	—	—
MD21-07-74454	21-25804	4.0000–5.0000	QBT3	—	—	—	0.301	0.0304	0.034581	—	—	—
MD21-07-74455	21-25805	2.6700–3.6700	SOIL	—	NA	—	—	0.0761	—	—	—	—
MD21-07-74456	21-25805	4.6700–5.6700	QBT3	—	—	—	—	—	0.070902	—	—	—
MD21-07-74457	21-25806	2.0000–3.0000	QBT3	—	NA	—	—	—	0.060641	2.23	0.125	1.95
MD21-07-74458	21-25806	4.0000–5.0000	QBT3	—	NA	—	—	—	—	—	0.0922	—
MD21-07-74459	21-25807	2.5000–3.5000	QBT3	—	—	—	—	—	0.124024	2.03	0.112	—
MD21-07-74460	21-25807	4.5000–5.5000	QBT3	—	NA	—	—	—	0.12	—	—	—
MD21-07-74461	21-25808	2.5000–3.5000	QBT3	—	NA	—	—	—	0.087706	—	0.1	—
MD21-07-74462	21-25808	4.5000–5.5000	QBT3	—	NA	—	—	—	0.087494	—	—	—
MD21-07-74463	21-25809	2.0000–3.0000	QBT3	—	NA	—	—	—	0.117157	2.32	0.119	2.18
MD21-07-74464	21-25809	4.0000–5.0000	QBT3	—	—	—	—	—	0.086442	2.86	0.182	3.08
MD21-07-74433	21-25810	0.0000–0.5000	SOIL	—	—	—	—	0.414	0.05784	—	—	—
MD21-07-74434	21-25810	2.0000–3.0000	QBT3	—	NA	0.133	—	0.367	0.039212	2.06	0.0978	2.08
MD21-07-74435	21-25810	5.0000–6.0000	QBT3	—	NA	—	—	0.0894	0.027315	—	—	—
MD21-07-74467	21-25811	3.0000–4.0000	QBT3	—	NA	—	—	—	0.09418	—	—	—
MD21-07-74468	21-25811	5.0000–6.0000	QBT3	—	NA	—	—	—	0.158889	—	—	—
MD21-07-74469	21-25812	2.0000–3.0000	QBT3	—	NA	—	—	—	0.1895	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-07-74470	21-25812	4.0000–5.0000	QBT3	—	NA	—	—	—	0.197651	—	—	—
MD21-07-74471	21-25813	3.0000–4.0000	QBT3	6.41	—	—	0.144	0.287	0.033424	—	—	—
MD21-07-74472	21-25813	5.0000–6.0000	QBT3	2.38	NA	—	0.0474	0.149	0.050536	—	—	—
MD21-07-74473	21-25814	1.6000–2.6000	QBT3	—	NA	—	—	—	0.109506	—	0.111	—
MD21-07-74474	21-25814	3.5000–4.5000	QBT3	—	NA	—	—	—	0.091879	—	—	—
MD21-07-74475	21-25815	2.0000–3.0000	QBT3	—	NA	—	—	0.0469	0.170614	—	—	—
MD21-07-74476	21-25815	4.0000–5.0000	QBT3	—	NA	—	—	—	0.136765	—	—	—
MD21-07-74478	21-25816	4.0000–5.0000	QBT3	—	—	—	—	—	0.109524	—	—	—
MD21-07-74477	21-25816	6.0000–7.0000	QBT3	—	NA	—	—	—	0.223902	—	—	—
MD21-07-74479	21-25817	2.5000–3.5000	QBT3	0.581	—	—	—	0.11	0.041466	—	—	—
MD21-07-74480	21-25817	4.5000–5.5000	QBT3	0.144	—	—	—	—	0.06526	—	—	—
RE21-07-76274	21-27671	55.0000–56.0000	QBT3	—	NA	—	—	—	0.030231	—	—	—
RE21-07-76275	21-27671	60.0000–61.0000	QBT3	—	NA	—	—	—	0.033452	—	—	—
RE21-07-76276	21-27671	65.0000–66.0000	QBT3	—	—	—	—	—	0.034517	—	—	—
RE21-07-76277	21-27671	70.0000–71.0000	QBT3	—	NA	—	—	—	0.041255	—	—	—
RE21-07-76278	21-27671	75.0000–76.0000	QBT3	—	NA	—	—	—	0.036916	—	—	—
RE21-07-76280	21-27672	5.0000–6.0000	QBT3	—	—	—	—	—	0.09491	—	—	—
RE21-07-76281	21-27672	10.0000–11.0000	QBT3	—	—	—	—	—	0.071626	—	—	—

Table 6.5-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-76282	21-27672	15.0000–16.0000	QBT3	—	—	—	—	—	0.038025	—	—	—
RE21-07-76283	21-27672	20.0000–21.0000	QBT3	—	—	—	—	—	0.062714	—	—	—
RE21-07-76284	21-27672	25.0000–26.0000	QBT3	—	NA	—	—	—	0.064005	—	—	—
RE21-07-76286	21-27673	5.0000–6.0000	QBT3	—	—	—	—	—	0.10806	—	—	—
RE21-07-76287	21-27673	10.0000–11.0000	QBT3	—	—	—	—	—	0.076006	—	—	—
RE21-07-76288	21-27673	15.0000–16.0000	QBT3	—	—	—	—	—	0.052368	—	0.1	—
RE21-07-76289	21-27673	20.0000–21.0000	QBT3	—	NA	—	—	—	0.029821	—	—	—
RE21-07-76292	21-27674	5.0000–6.0000	QBT3	—	—	—	—	—	0.076719	—	—	—
RE21-07-76293	21-27674	10.0000–11.0000	QBT3	—	—	—	—	—	0.03102	—	—	—
RE21-07-76294	21-27674	18.0000–19.0000	QBT3	—	NA	—	—	—	0.033054	—	—	—
RE21-07-76295	21-27674	20.0000–21.0000	QBT3	—	NA	—	—	—	0.025399	—	—	—
RE21-07-76296	21-27674	25.0000–26.0000	QBT3	—	NA	—	—	—	0.033293	—	—	—

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] NA = Not analyzed.

[d] — = Not detected or not detected above BV/FV.

Table 6.6-1
Summary of Inorganic Chemicals above BVs at SWMU 21-013(c)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68282	21-25647	0.0000–0.5000	SOIL	—[e]	—	—	—	—	—	—	—	—	—	—
RE21-06-68283	21-25647	2.5000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68284	21-25648	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	26.2
RE21-06-68285	21-25648	2.5000–3.0000	SOIL	—	—	—	—	—	9230	—	—	—	—	—
RE21-06-68287	21-25649	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68288	21-25649	2.5000–3.0000	QBT3	14800 (J+)	—	95	—	—	2570	23.8	—	—	—	—
RE21-06-68289	21-25650	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	8.72	—	—	—
RE21-06-68290	21-25650	2.5000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68292	21-25651	0.0000–0.5000	SOIL	—	—	—	—	0.527 (U)	—	—	—	—	—	—
RE21-06-68293	21-25651	2.5000–3.0000	SOIL	—	—	—	—	2.73 (U)	6240	—	—	—	—	—
RE21-06-68294	21-25652	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68295	21-25652	2.5000–3.0000	QBT3	—	—	—	—	—	3750	—	—	—	—	—
RE21-06-68297	21-25653	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68298	21-25653	2.5000–3.0000	QBT3	7850 (J+)	—	58.8	—	—	—	—	—	—	—	—
RE21-06-68299	21-25654	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68300	21-25654	2.5000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68302	21-25655	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68303	21-25655	2.5000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68304	21-25656	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68305	21-25656	0.5000–1.0000	QBT3	—	—	—	—	—	—	7.68	—	—	—	—
RE21-06-68312	21-25657	0.0000–0.5000	SOIL	—	—	—	—	2.5 (U)	—	—	—	—	—	—
RE21-06-68313	21-25657	2.5000–3.0000	QBT3	8490	4.38	68.6	—	—	2790	—	—	5.09	—	11.7
RE21-06-68314	21-25658	0.0000–0.5000	SOIL	—	—	—	—	2.49 (U)	—	—	—	—	—	—
RE21-06-68315	21-25658	2.5000–3.0000	QBT3	—	3.94	—	—	—	—	—	—	—	—	—

Table 6.6-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
RE21-06-68316	21-25659	0.0000–0.5000	SOIL	—	—	—	—	0.525 (U)	—	—	—	—	—	—
RE21-06-68317	21-25659	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68318	21-25660	0.0000–0.5000	SOIL	—	—	—	—	2.45 (U)	—	—	—	—	—	—
RE21-06-68319	21-25660	2.5000–3.0000	QBT3	8350	4.69	108	—	—	6030	—	—	—	—	—
RE21-06-68320	21-25661	0.0000–0.5000	SOIL	—	—	—	—	2.53 (U)	—	—	—	—	—	—
RE21-06-68321	21-25661	2.5000–3.0000	QBT3	—	3.18	—	—	—	—	—	—	—	—	—
RE21-06-68322	21-25662	0.0000–0.5000	SOIL	29300	—	—	—	2.59 (U)	—	—	—	—	—	—
RE21-06-68323	21-25662	2.5000–3.0000	QBT3	—	3.1	—	—	—	—	—	—	—	—	—
RE21-06-68324	21-25663	0.0000–0.5000	SOIL	—	—	—	—	0.542 (U)	—	—	—	—	—	—
RE21-06-68325	21-25663	2.5000–3.0000	QBT3	17100 (J+)	—	159	—	—	4990	9.78	—	5.86	—	—
RE21-06-68326	21-25664	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68327	21-25664	2.5000–3.0000	QBT3	22100 (J+)	7.05	109	—	—	3990	12.5	—	5.47	15000	26.5
RE21-09-3571	21-25664	8.0000–9.0000	QBT3	NA[f]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68328	21-25665	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68329	21-25665	2.5000–3.0000	SOIL	34800 (J+)	—	—	2.39	—	—	20.1	—	—	21900	—
RE21-06-68330	21-25666	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68331	21-25666	2.5000–3.0000	SOIL	—	—	—	—	0.533 (U)	—	—	—	—	—	—
RE21-06-68332	21-25667	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68333	21-25667	2.5000–3.0000	QBT3	—	—	—	—	—	2930	9.06	—	—	—	—
RE21-06-68334	21-25668	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68335	21-25668	2.5000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68336	21-25669	0.0000–0.5000	SOIL	—	—	—	—	—	10200	—	—	—	—	—
RE21-06-68337	21-25669	2.5000–3.0000	QBT3	—	4.42	—	—	—	—	—	—	—	—	—

Table 6.6-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Thallium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2770**	**1.1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**915**	**0.73**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**na**	**5.16**	**235**	**391**	**23500**
Industrial SSL				**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**na**	**74.9**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**na**	**20.4**	**929**	**1550**	**92900**
RE21-06-68282	21-25647	0.0000–0.5000	SOIL	—	2.49	—	1.19 (J-)	0.00054 (J)	—	—	—	—	—	—
RE21-06-68283	21-25647	2.5000–3.0000	SOIL	—	0.228	—	—	0.00157 (J)	—	—	—	—	—	—
RE21-06-68284	21-25648	0.0000–0.5000	SOIL	—	—	—	2.68 (J-)	0.00145 (J)	1.54 (U)	—	—	—	—	—
RE21-06-68285	21-25648	2.5000–3.0000	SOIL	—	—	—	0.863 (J-)	0.002 (J)	1.58 (U)	—	—	—	—	—
RE21-06-68287	21-25649	0.0000–0.5000	SOIL	—	—	—	4.22 (J-)	0.000606 (J)	1.53 (U)	—	—	—	—	—
RE21-06-68288	21-25649	2.5000–3.0000	QBT3	2590	—	7.06	4.2 (J-)	0.00261	1.6 (U)	—	—	—	—	—
RE21-06-68289	21-25650	0.0000–0.5000	SOIL	—	—	—	1.16 (J-)	0.00218	1.54 (U)	—	—	—	—	—
RE21-06-68290	21-25650	2.5000–3.0000	SOIL	—	—	—	—	0.00336	1.58 (U)	—	—	—	—	—
RE21-06-68292	21-25651	0.0000–0.5000	SOIL	—	—	—	1.75	0.000645 (J)	3.81	—	—	—	—	—
RE21-06-68293	21-25651	2.5000–3.0000	SOIL	—	—	—	0.839 (J)	0.00285	5.21	—	—	—	—	—
RE21-06-68294	21-25652	0.0000–0.5000	SOIL	—	—	—	—	—	1.58 (U)	—	—	—	—	—
RE21-06-68295	21-25652	2.5000–3.0000	QBT3	—	—	—	—	—	1.55 (U)	—	—	—	—	—
RE21-06-68297	21-25653	0.0000–0.5000	SOIL	—	—	—	3.16 (J-)	—	1.54 (U)	—	—	—	—	—
RE21-06-68298	21-25653	2.5000–3.0000	QBT3	—	—	—	—	—	1.5 (U)	—	—	—	—	—
RE21-06-68299	21-25654	0.0000–0.5000	QBT3	—	—	—	—	—	1.55 (U)	—	—	—	—	—
RE21-06-68300	21-25654	2.5000–3.0000	QBT3	—	—	—	—	—	1.54 (U)	—	—	—	—	—
RE21-06-68302	21-25655	0.0000–0.5000	SOIL	—	—	—	0.954 (J-)	—	—	—	—	5.56 (J+)	—	—
RE21-06-68303	21-25655	2.5000–3.0000	QBT3	—	—	—	—	—	1.55 (U)	—	—	—	—	—
RE21-06-68304	21-25656	0.0000–0.5000	SOIL	—	—	—	—	—	1.53 (U)	—	—	—	—	—
RE21-06-68305	21-25656	0.5000–1.0000	QBT3	—	—	—	—	—	1.51 (U)	—	—	—	—	—
RE21-06-68312	21-25657	0.0000–0.5000	SOIL	—	—	—	—	—	5.62	—	—	—	—	—
RE21-06-68313	21-25657	2.5000–3.0000	QBT3	1700	—	6.65	—	—	2.85	—	—	—	—	—
RE21-06-68314	21-25658	0.0000–0.5000	SOIL	—	—	—	0.781 (J-)	NA	4.52	—	—	—	—	—
RE21-06-68315	21-25658	2.5000–3.0000	QBT3	—	—	—	—	—	1.61	—	—	—	—	—
RE21-06-68316	21-25659	0.0000–0.5000	SOIL	—	—	—	—	—	3.83	—	—	—	—	—
RE21-06-68317	21-25659	0.5000–1.0000	QBT3	—	—	—	1.03 (J-)	—	2.72	—	—	—	—	—
RE21-06-68318	21-25660	0.0000–0.5000	SOIL	—	—	—	1.91 (J-)	—	6.14	—	—	—	—	—
RE21-06-68319	21-25660	2.5000–3.0000	QBT3	—	—	—	1.06 (J-)	0.00242	2.04	—	—	—	—	—
RE21-06-68320	21-25661	0.0000–0.5000	SOIL	—	—	—	2.85 (J-)	—	5.99	—	—	—	—	—
RE21-06-68321	21-25661	2.5000–3.0000	QBT3	—	—	—	—	—	1.32 (J)	—	—	—	—	—
RE21-06-68322	21-25662	0.0000–0.5000	SOIL	—	—	—	1.19 (J-)	—	5.84	—	—	—	—	—

Table 6.6-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Thallium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2770**	**1.1**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**915**	**0.73**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**na**	**5.16**	**235**	**391**	**23500**
Industrial SSL				**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**na**	**74.9**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**na**	**20.4**	**929**	**1550**	**92900**
RE21-06-68323	21-25662	2.5000–3.0000	QBT3	—	—	—	—	—	1.77	—	—	—	—	—
RE21-06-68324	21-25663	0.0000–0.5000	SOIL	—	—	—	3.51	—	—	—	—	—	—	—
RE21-06-68325	21-25663	2.5000–3.0000	QBT3	2960	—	—	0.792 (J)	0.000929 (J)	1.55 (U)	—	—	—	—	—
RE21-06-68326	21-25664	0.0000–0.5000	SOIL	—	—	—	5.07	0.00119 (J)	1.59 (U)	—	—	—	—	49.6
RE21-06-68327	21-25664	2.5000–3.0000	QBT3	3580	—	8.93	0.986 (J)	0.00726	0.809 (J)	—	—	—	24.2	—
RE21-09-3571	21-25664	8.0000–9.0000	QBT3	NA	NA	NA	NA	0.0019	NA	NA	NA	NA	NA	NA
RE21-06-68328	21-25665	0.0000–0.5000	SOIL	—	—	—	0.95 (J)	0.000648 (J)	—	—	—	—	—	—
RE21-06-68329	21-25665	2.5000–3.0000	SOIL	5970	0.123	—	0.959 (J)	0.00356	1.7 (U)	1950	—	2.02 (J-)	—	—
RE21-06-68330	21-25666	0.0000–0.5000	SOIL	—	—	—	5.7	—	1.63 (U)	—	—	—	—	—
RE21-06-68331	21-25666	2.5000–3.0000	SOIL	—	—	—	2.57	—	—	—	—	—	—	—
RE21-06-68332	21-25667	0.0000–0.5000	SOIL	—	—	—	3.46	—	1.67 (U)	—	—	—	—	—
RE21-06-68333	21-25667	2.5000–3.0000	QBT3	—	—	—	0.776 (J)	0.000603 (J)	1.53 (U)	—	—	—	—	—
RE21-06-68334	21-25668	0.0000–0.5000	SOIL	—	—	—	1.87 (J-)	—	1.56 (U)	—	—	—	—	—
RE21-06-68335	21-25668	2.5000–3.0000	QBT3	—	—	—	—	—	1.55 (U)	—	—	—	—	—
RE21-06-68336	21-25669	0.0000–0.5000	SOIL	—	—	—	1.32 (J-)	—	—	—	—	—	—	—
RE21-06-68337	21-25669	2.5000–3.0000	QBT3	—	—	—	—	—	1.57 (U)	—	—	—	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.6-2
Summary of Organic Chemicals Detected at SWMU 21-013(c)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Chloroform	Chrysene
Residential SSL				**3440**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]	**347**	**5.72**	**621**
Industrial SSL				**36700**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]	**1370**	**31.9**	**2340**
Construction Worker SSL				**18600**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**2500000**[c]	**4760**	**671**	**20600**
RE21-06-68282	21-25647	0.0000–0.5000	SOIL	—[d]	—	—	—	—	0.0528	0.0907 (J+)	0.044 (J)	—	—	—	NA[e]	0.0479
RE21-06-68283	21-25647	2.5000–3.0000	SOIL	—	0.00703 (J)	—	—	—	0.036	0.053 (J)	—	—	—	—	—	0.0421
RE21-06-68284	21-25648	0.0000–0.5000	SOIL	0.0172 (J)	0.024 (J)	—	—	—	—	0.108 (J)	—	—	—	—	NA	0.0711
RE21-06-68287	21-25649	0.0000–0.5000	SOIL	0.0366	0.0497	—	0.0022 (J)	—	0.145	0.236 (J)	0.12	—	—	—	NA	0.168
RE21-06-68289	21-25650	0.0000–0.5000	SOIL	—	—	—	—	—	—	0.0197 (J)	—	—	—	—	NA	—
RE21-06-68292	21-25651	0.0000–0.5000	SOIL	0.0145 (J)	0.0232 (J)	—	—	—	0.0792	0.133	0.0583	—	—	—	NA	0.0853
RE21-06-68293	21-25651	2.5000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68294	21-25652	0.0000–0.5000	SOIL	—	—	0.0016 (J)	—	—	—	0.0226 (J)	—	—	—	—	NA	—
RE21-06-68297	21-25653	0.0000–0.5000	SOIL	—	—	—	0.0014 (J)	—	0.0182 (J)	0.035 (J)	—	—	—	—	NA	—
RE21-06-68298	21-25653	2.5000–3.0000	QBT3	—	—	—	—	—	—	0.0111 (J)	—	—	—	—	—	—
RE21-06-68302	21-25655	0.0000–0.5000	SOIL	—	0.0195 (J)	0.0036	0.0019 (J)	—	0.0242 (J)	0.0365 (J)	—	—	—	—	NA	—
RE21-06-68304	21-25656	0.0000–0.5000	SOIL	—	—	0.0039	0.0023 (J)	—	—	0.0233 (J)	—	—	—	—	NA	—
RE21-06-68312	21-25657	0.0000–0.5000	SOIL	—	—	—	0.0016 (J)	—	0.024 (J)	0.0528	0.0192 (J)	—	—	—	NA	0.0249 (J)
RE21-06-68314	21-25658	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	0.435 (J)	—	NA	—
RE21-06-68316	21-25659	0.0000–0.5000	SOIL	—	—	—	0.0024 (J)	—	0.0172 (J)	0.0316 (J)	0.0114 (J)	—	0.471 (J)	—	NA	0.0172 (J)
RE21-06-68317	21-25659	0.5000–1.0000	QBT3	—	—	—	—	—	—	—	—	—	0.462 (J)	—	0.000287 (J)	—
RE21-06-68318	21-25660	0.0000-0.5000	SOIL	—	—	—	0.00194 (J)	—	—	0.0125 (J)	—	—	0.435 (J)	—	NA	—
RE21-06-68320	21-25661	0.0000-0.5000	SOIL	—	—	—	0.00132 (J)	—	—	—	—	—	0.432 (J)	0.355	NA	—
RE21-06-68321	21-25661	2.5000-3.0000	QBT3	—	—	—	—	—	—	—	—	—	0.44 (J)	—	—	—
RE21-06-68322	21-25662	0.0000-0.5000	SOIL	—	—	—	—	—	—	—	—	—	0.471 (J)	—	NA	—
RE21-06-68323	21-25662	2.5000-3.0000	QBT3	—	—	—	—	—	—	—	—	—	0.437 (J)	—	—	—

Table 6.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Chloroform	Chrysene
Residential SSL				**3440**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]	**347**	**5.72**	**621**
Industrial SSL				**36700**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]	**1370**	**31.9**	**2340**
Construction Worker SSL				**18600**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**2500000**[c]	**4760**	**671**	**20600**
RE21-06-68324	21-25663	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-06-68326	21-25664	0.0000–0.5000	SOIL	—	0.0227 (J)	0.0062	0.0029 (J)	—	0.0474	—	0.0344 (J)	—	—	—	NA	0.0653
RE21-06-68328	21-25665	0.0000–0.5000	SOIL	—	—	—	0.0014 (J)	—	0.021 (J)	—	—	—	—	—	NA	0.0297 (J)
RE21-06-68330	21-25666	0.0000–0.5000	SOIL	0.0173 (J)	0.0248 (J)	0.0062	0.0041	—	0.0665	—	0.0512 (J)	—	—	—	NA	0.076
RE21-06-68331	21-25666	2.5000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—
RE21-06-68332	21-25667	0.0000–0.5000	SOIL	—	0.0105 (J)	—	—	—	0.0675	0.174	0.0882 (J)	0.0622	—	—	NA	0.0856
RE21-09-3572	21-604500	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	0.14 (J)	—	0.14 (J)	NA	0.12 (J)	NA	—
RE21-09-3573	21-604501	0.0000–0.5000	SOIL	—	—	NA	NA	0.08 (J)	—	0.23 (J)	—	0.18 (J)	NA	—	NA	0.082 (J)

Table 6.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]
Residential SSL				**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-06-68282	21-25647	0.0000–0.5000	SOIL	0.0685	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68283	21-25647	2.5000–3.0000	SOIL	0.0595	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68284	21-25648	0.0000–0.5000	SOIL	0.118	0.013 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68287	21-25649	0.0000–0.5000	SOIL	0.374	0.0214 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68289	21-25650	0.0000–0.5000	SOIL	0.0205 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68292	21-25651	0.0000–0.5000	SOIL	0.144	0.0105 (J)	1.32E-05	2.41E-05	0.0000024 (J)	6.14E-06	0.000000537 (J)	0.000000487 (J)	4.39E-06	0.000000393 (J)	0.000000214 (J)	0.000000225 (J)

Table 6.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]
Residential SSL				**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-06-68293	21-25651	2.5000–3.0000	SOIL	—	—	0.0000012 (J)	2.15E-06	0.000000255 (J)	4.71E-07	—	—	—	0.0000000754 (J)	—	—
RE21-06-68294	21-25652	0.0000–0.5000	SOIL	0.0194 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68297	21-25653	0.0000–0.5000	SOIL	0.0341 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68298	21-25653	2.5000–3.0000	QBT3	0.0117 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68302	21-25655	0.0000–0.5000	SOIL	0.0355	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68304	21-25656	0.0000–0.5000	SOIL	0.0219 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68312	21-25657	0.0000–0.5000	SOIL	0.0545	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68314	21-25658	0.0000–0.5000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68316	21-25659	0.0000–0.5000	SOIL	0.0328 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68317	21-25659	0.5000–1.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68318	21-25660	0.0000–0.5000	SOIL	0.0149 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68320	21-25661	0.0000–0.5000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68321	21-25661	2.5000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68322	21-25662	0.0000–0.5000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68323	21-25662	2.5000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68324	21-25663	0.0000–0.5000	SOIL	0.0205 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68326	21-25664	0.0000–0.5000	SOIL	0.159	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68328	21-25665	0.0000–0.5000	SOIL	0.056	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68330	21-25666	0.0000–0.5000	SOIL	0.182	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68331	21-25666	2.5000–3.0000	SOIL	0.012 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-06-68332	21-25667	0.0000–0.5000	SOIL	0.107	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-3572	21-604500	0.0000–0.5000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-09-3573	21-604501	0.0000–0.5000	SOIL	0.19 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Toluene
Residential SSL				**na**	**6.21**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**
Industrial SSL				**na**	**23.4**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**
Construction Worker SSL				**na**	**213**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**
RE21-06-68282	21-25647	0.0000–0.5000	SOIL	NA	0.0315 (J)	NA	NA	NA	NA	0.0146 (J)	0.0732	NA	NA	NA
RE21-06-68283	21-25647	2.5000–3.0000	SOIL	NA	—	NA	NA	NA	NA	0.03 (J)	0.088	NA	NA	—
RE21-06-68284	21-25648	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0804	0.146	NA	NA	NA
RE21-06-68287	21-25649	0.0000–0.5000	SOIL	NA	0.103	NA	NA	NA	NA	0.253	0.384	NA	NA	NA
RE21-06-68289	21-25650	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0145 (J)	0.0295 (J)	NA	NA	NA
RE21-06-68292	21-25651	0.0000–0.5000	SOIL	4.42E-06	0.0492	0.000112	0.00000521 (J)	0.000000269 (J)	2.52E-06	0.108	0.184 (J)	0.000000256 (J)	4.47E-07	NA
RE21-06-68293	21-25651	2.5000–3.0000	SOIL	7.54E-08	—	1.08E-05	—	—	—	—	—	—	—	—
RE21-06-68294	21-25652	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	0.022 (J)	NA	NA	NA
RE21-06-68297	21-25653	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0173 (J)	0.0419	NA	NA	NA
RE21-06-68298	21-25653	2.5000–3.0000	QBT3	NA	—	NA	NA	NA	NA	—	0.0172 (J)	NA	NA	—
RE21-06-68302	21-25655	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0196 (J)	0.0516	NA	NA	NA
RE21-06-68304	21-25656	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0117 (J)	0.0279 (J)	NA	NA	NA
RE21-06-68312	21-25657	0.0000–0.5000	SOIL	NA	0.017 (J)	NA	NA	NA	NA	0.0267 (J)	0.0478	NA	NA	NA
RE21-06-68314	21-25658	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-06-68316	21-25659	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0213 (J)	0.0449	NA	NA	NA
RE21-06-68317	21-25659	0.5000–1.0000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	—
RE21-06-68318	21-25660	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	0.011 (J)	NA	NA	NA
RE21-06-68320	21-25661	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	0.0133 (J)	NA	NA	NA
RE21-06-68321	21-25661	2.5000–3.0000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	—
RE21-06-68322	21-25662	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-06-68323	21-25662	2.5000–3.0000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	—
RE21-06-68324	21-25663	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.013 (J)	0.0189 (J)	NA	NA	NA
RE21-06-68326	21-25664	0.0000–0.5000	SOIL	NA	0.0296 (J)	NA	NA	NA	NA	0.103	0.161	NA	NA	NA
RE21-06-68328	21-25665	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0231 (J)	0.0551	NA	NA	NA

Table 6.6-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Total)	Toluene
Residential SSL				**na**	**6.21**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**
Industrial SSL				**na**	**23.4**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**
Construction Worker SSL				**na**	**213**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**
RE21-06-68330	21-25666	0.0000–0.5000	SOIL	NA	0.0446	NA	NA	NA	NA	0.119	0.198	NA	NA	NA
RE21-06-68331	21-25666	2.5000–3.0000	SOIL	NA	—	NA	NA	NA	NA	—	0.0125 (J)	NA	NA	—
RE21-06-68332	21-25667	0.0000–0.5000	SOIL	NA	0.071	NA	NA	NA	NA	0.0484	0.108	NA	NA	NA
RE21-09-3572	21-604500	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-09-3573	21-604501	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.11 (J)	0.17 (J)	NA	NA	NA

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

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

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

Table 6.6-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-013(c)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-239/240	Strontium-90	Tritium	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.054**[b]	**1.31**[b]	**na**	**0.2**
Residential SAL				**30**	**5.6**	**33**	**5.7**	**750**	**17**
Industrial SAL				**180**	**23**	**210**	**1900**	**440000**	**87**
Construction Worker SAL				**34**	**18**	**36**	**800**	**320000**	**43**
RE21-06-68282	21-25647	0.0000–0.5000	SOIL	—[c]	—	0.28	—	0.038591	—
RE21-06-68283	21-25647	2.5000–3.0000	SOIL	—	NA [d]	0.125	—	0.106101	—
RE21-06-68284	21-25648	0.0000–0.5000	SOIL	0.0402	—	0.728	—	0.069477	—
RE21-06-68285	21-25648	2.5000–3.0000	SOIL	—	—	—	—	0.076284	—
RE21-06-68287	21-25649	0.0000–0.5000	SOIL	0.025	—	0.0643	—	0.043767	—
RE21-06-68288	21-25649	2.5000–3.0000	QBT3	—	—	—	—	0.170761	—
RE21-06-68289	21-25650	0.0000–0.5000	SOIL	—	—	—	—	0.034682	—
RE21-06-68290	21-25650	2.5000–3.0000	SOIL	—	—	—	—	0.057512	—
RE21-06-68292	21-25651	0.0000–0.5000	SOIL	—	—	—	—	0.016144	—
RE21-06-68293	21-25651	2.5000–3.0000	SOIL	—	—	—	—	0.054454	—
RE21-06-68294	21-25652	0.0000–0.5000	SOIL	—	—	0.0576	—	0.07942	—
RE21-06-68295	21-25652	2.5000–3.0000	QBT3	—	—	—	—	0.016823	—
RE21-06-68297	21-25653	0.0000–0.5000	SOIL	—	—	0.201	—	0.031321	—
RE21-06-68298	21-25653	2.5000–3.0000	QBT3	0.0424	0.33	0.243	—	0.026249	—
RE21-06-68299	21-25654	0.0000–0.5000	QBT3	—	—	—	—	0.032226	—
RE21-06-68300	21-25654	2.5000–3.0000	QBT3	—	—	—	—	0.056415	—
RE21-06-68302	21-25655	0.0000–0.5000	SOIL	—	—	0.144	—	0.201526	—
RE21-06-68303	21-25655	2.5000–3.0000	QBT3	—	—	—	—	0.029591	—
RE21-06-68304	21-25656	0.0000–0.5000	SOIL	0.0857	—	0.549	—	0.062382	—
RE21-06-68305	21-25656	0.5000–1.0000	QBT3	—	—	—	—	0.019789	—
RE21-06-68312	21-25657	0.0000–0.5000	SOIL	—	—	0.0564	—	0.06674	—
RE21-06-68313	21-25657	2.5000–3.0000	QBT3	—	—	—	—	0.089576	—
RE21-06-68314	21-25658	0.0000–0.5000	SOIL	—	—	—	—	0.082905	—
RE21-06-68315	21-25658	2.5000–3.0000	QBT3	—	—	—	—	0.074274	—
RE21-06-68316	21-25659	0.0000–0.5000	SOIL	0.0519	—	0.121	—	0.036467	—

Table 6.6-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-239/240	Strontium-90	Tritium	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.054**[b]	**1.31**[b]	**na**	**0.2**
Residential SAL				**30**	**5.6**	**33**	**5.7**	**750**	**17**
Industrial SAL				**180**	**23**	**210**	**1900**	**440000**	**87**
Construction Worker SAL				**34**	**18**	**36**	**800**	**320000**	**43**
RE21-06-68317	21-25659	0.5000–1.0000	QBT3	—	—	—	—	0.170312	—
RE21-06-68318	21-25660	0.0000–0.5000	SOIL	—	—	0.062	—	0.044052	—
RE21-06-68319	21-25660	2.5000–3.0000	QBT3	—	—	—	—	0.103956	—
RE21-06-68320	21-25661	0.0000–0.5000	SOIL	—	—	—	—	0.068938	—
RE21-06-68321	21-25661	2.5000–3.0000	QBT3	—	—	—	—	0.039251	—
RE21-06-68322	21-25662	0.0000–0.5000	SOIL	—	—	—	—	0.128811	—
RE21-06-68323	21-25662	2.5000–3.0000	QBT3	—	—	—	—	0.055406	—
RE21-06-68324	21-25663	0.0000–0.5000	SOIL	0.051	—	—	—	0.247778	—
RE21-06-68325	21-25663	2.5000–3.0000	QBT3	—	—	—	—	0.092933	—
RE21-06-68326	21-25664	0.0000–0.5000	SOIL	0.0687	—	0.0561	—	0.164735	—
RE21-06-68327	21-25664	2.5000–3.0000	QBT3	—	—	—	—	0.232418	—
RE21-06-68328	21-25665	0.0000–0.5000	SOIL	—	—	0.168	—	0.214642	—
RE21-06-68329	21-25665	2.5000–3.0000	SOIL	—	—	—	—	0.101574	—
RE21-06-68330	21-25666	0.0000–0.5000	SOIL	0.0375	—	0.162	—	0.401572	—
RE21-06-68331	21-25666	2.5000–3.0000	SOIL	—	—	—	—	0.084376	—
RE21-06-68332	21-25667	0.0000–0.5000	SOIL	0.0568	—	0.137	—	0.24847	—
RE21-06-68333	21-25667	2.5000–3.0000	QBT3	—	—	—	—	0.037214	—
RE21-06-68334	21-25668	0.0000–0.5000	SOIL	0.0271	NA	0.129	—	0.110902	—
RE21-06-68335	21-25668	2.5000–3.0000	QBT3	—	—	—	—	0.055483	—
RE21-06-68336	21-25669	0.0000–0.5000	SOIL	0.043	—	0.0742	—	0.17817	—
RE21-06-68337	21-25669	2.5000–3.0000	QBT3	—	—	—	—	0.046326	0.0937
RE21-09-3573	21-604501	0.0000–0.5000	SOIL	NA	NA	0.105	NA	NA	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.7-1
Summary of Inorganic Chemicals above BVs at SWMU 21-022(f)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Calcium	Chromium	Cobalt	Copper	Lead	Manganese	Nitrate	Selenium	Silver	Zinc
QBT3 Background Value				**2.79**	**46**	**2200**	**7.14**	**3.14**	**4.66**	**11.2**	**482**	**na**	**0.3**	**1**	**63.5**
Residential SSL				**3.9**	**15600**	**na**[a]	**219**[b]	**23**[c]	**3130**	**400**	**10700**	**125000**	**391**	**391**	**23500**
Industrial SSL				**17.7**	**224000**	**na**	**2920**[b]	**300**[c]	**45400**	**800**	**145000**	**1820000**	**5680**	**5680**	**341000**
Construction Worker SSL				**65.4**	**4350**	**na**	**449**[b]	**34.9**[d]	**12400**	**800**	**463**	**496000**	**1550**	**1550**	**92900**
RE21-08-8714	21-603138	13.5000–14.5000	QBT3	—[e]	—	—	—	—	4.69	11.6	—	—	2.79	—	—
RE21-08-8715	21-603138	18.5000–19.5000	QBT3	—	—	—	—	—	—	—	—	—	2.58	—	—
RE21-08-8716	21-603138	23.5000–24.5000	QBT3	—	—	—	—	—	—	—	—	—	2.4	—	—
RE21-08-8720	21-603140	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	1.15 (J)	—	131 (J-)
RE21-08-8721	21-603140	9.0000–10.0000	QBT3	—	—	—	9.61 (J)	—	5.67 (J)	—	—	—	0.815 (J)	2.71	—
RE21-08-8722	21-603141	8.5000–9.5000	QBT3	—	—	—	—	—	—	—	—	1.05 (J-)	1.03 (J)	—	161 (J-)
RE21-08-8723	21-603141	10.5000–11.5000	QBT3	—	—	—	—	—	—	—	—	1.09 (J-)	0.713 (J)	—	74.9 (J-)
RE21-08-8724	21-603142	8.5000–9.5000	QBT3	—	54	2690	—	—	—	12.5	—	—	1.06 (J)	—	3840
RE21-08-8725	21-603142	10.5000–11.5000	QBT3	—	—	—	8.03	—	—	—	—	—	1.66 (U)	—	85.2
RE21-08-8726	21-603143	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	—	1.09 (J-)	1.73 (U)	—	354
RE21-08-8727	21-603143	9.5000–10.5000	QBT3	—	—	—	—	—	—	—	—	1.95 (J-)	0.775 (J)	—	86
RE21-08-8728	21-603144	7.5000–8.5000	QBT3	—	—	—	8.28	—	—	—	—	—	1.7 (U)	—	—
RE21-08-8729	21-603144	9.5000–10.5000	QBT3	—	—	—	8.19	—	—	—	—	—	1.75 (U)	—	64.2
RE21-08-8730	21-603145	6.5000–7.5000	QBT3	—	52.8	—	—	5.69	10.6	34.4	1580	—	1 (J)	—	98.7
RE21-08-8731	21-603145	8.5000–9.5000	QBT3	3.18	63.1	—	—	3.47	7.84	33.7	1100	—	1.52 (J)	—	102

Source: SSLs from NMED (2009, 108070).

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

[a] na = Not available.

[b] Chromium VI SSLs used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected.

Table 6.7-2
Summary of Organic Chemicals Detected at SWMU 21-022(f)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene
Residential SSL				**67500**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**621**	**2290**	**6.21**	**na**[b]	**1830**	**1720**
Industrial SSL				**851000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2340**	**24400**	**23.4**	**na**	**20500**	**18300**
Construction Worker SSL				**263000**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**20600**	**8910**	**213**	**na**	**7150**	**6680**
RE21-08-8722	21-603141	8.5000–9.5000	QBT3	0.202 (J)	—[c]	—	—	—	0.012 (J)	—	—	—	NA[d]	—	—
RE21-08-8744	21-603141	8.5000–9.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00000187 (J)	NA	NA
RE21-08-8723	21-603141	10.5000–11.5000	QBT3	0.119 (J)	—	—	—	—	—	—	—	—	NA	—	—
RE21-08-8724	21-603142	8.5000–9.5000	QBT3	—	0.0738	0.0634	0.122	0.0264 (J)	—	0.0741	0.0807	0.0275 (J)	NA	0.0121 (J)	0.0735
RE21-08-8725	21-603142	10.5000–11.5000	QBT3	—	—	—	0.0134 (J)	—	—	—	—	—	NA	—	—
RE21-08-8729	21-603144	9.5000–10.5000	QBT3	—	0.0221 (J)	0.015 (J)	0.0287 (J)	—	—	0.0173 (J)	0.0382 (J)	—	NA	0.0174 (J)	0.0295 (J)

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] na = Not available.

[c] — = Not detected.

[d] NA = Not analyzed.

Table 6.7-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-022(f)

Sample ID	Location ID	Depth (ft)	Media	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**1.98**	**0.09**
Residential SAL				**33**	**750**	**170**	**17**
Industrial SAL				**210**	**440000**	**1500**	**87**
Construction Worker SAL				**36**	**320000**	**220**	**43**
RE21-08-8714	21-603138	13.5000–14.5000	QBT3	—[b]	0.584607	2.03	—
RE21-08-8715	21-603138	18.5000–19.5000	QBT3	—	0.50954	—	—
RE21-08-8716	21-603138	23.5000–24.5000	QBT3	0.0321	0.20678	—	—
RE21-08-8720	21-603140	7.0000–8.0000	QBT3	—	0.203056	—	—
RE21-08-8721	21-603140	9.0000–10.0000	QBT3	—	0.089428	—	—
RE21-08-8722	21-603141	8.5000–9.5000	QBT3	—	4.15195	—	0.0983
RE21-08-8723	21-603141	10.5000–11.5000	QBT3	—	1.48728	—	0.0917
RE21-08-8724	21-603142	8.5000–9.5000	QBT3	—	0.894234	—	—
RE21-08-8725	21-603142	10.5000–11.5000	QBT3	—	0.723855	—	0.189
RE21-08-8726	21-603143	7.5000–8.5000	QBT3	—	0.23625	—	—
RE21-08-8727	21-603143	9.5000–10.5000	QBT3	—	0.834352	—	—
RE21-08-8728	21-603144	7.5000–8.5000	QBT3	—	0.203409	—	—
RE21-08-8729	21-603144	9.5000–10.5000	QBT3	—	0.308263	—	—
RE21-08-8730	21-603145	6.5000–7.5000	QBT3	—	1.34764	—	—
RE21-08-8731	21-603145	8.5000–9.5000	QBT3	—	1.70959	—	—
MD21-09-8724	21-603145	13.5000–14.5000	QBT3	NA[c]	0.273632	NA	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] — = Not detected or not detected above BV/FV.
[c] NA = Not analyzed.

Table 6.8-1
Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-022(h)-99

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**217000**
RE21-07-989	21-600232	0.0000–0.5000	QBT3	—[c]	—	—	—	—	5950 (J+)	—	9.8 (J-)	0.54 (U)	—
RE21-07-990	21-600232	2.0000–3.0000	QBT3	—	—	—	—	—	4150 (J+)	—	5.4 (J-)	0.54 (U)	—
RE21-07-991	21-600233	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	0.53 (U)	—
RE21-07-992	21-600233	2.0000–3.0000	QBT3	—	0.52 (UJ)	—	—	—	—	—	—	0.52 (U)	—
RE21-07-993	21-600234	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	0.51 (U)	—
RE21-07-994	21-600234	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-995	21-600235	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	0.52 (U)	—
RE21-07-996	21-600235	2.0000–3.0000	QBT3	—	0.51 (UJ)	—	—	—	2500 (J+)	—	—	0.51 (U)	—
RE21-07-997	21-600236	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	0.53 (U)	—
RE21-07-998	21-600236	2.0000–3.0000	QBT3	—	0.51 (UJ)	—	—	—	—	—	—	0.51 (U)	—
RE21-07-999	21-600237	0.0000–0.5000	QBT3	—	0.52 (UJ)	—	—	—	—	—	—	0.52 (U)	—
RE21-07-1000	21-600237	2.0000–3.0000	QBT3	—	0.53 (UJ)	—	—	—	—	—	—	0.53 (U)	—
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	NA[d]	—	—
RE21-07-1002	21-600238	2.0000–3.0000	QBT3	—	—	—	67.1	—	—	—	NA	0.57 (UJ)	—
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	—	—	—	—	2.2	—	22.2 (J-)	NA	—	—
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	—	0.62 (UJ)	—	—	—	—	—	NA	—	—
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	NA	—	—
RE21-07-1006	21-600240	2.0000–3.0000	QBT3	9300	—	2.9	136	—	36600 (J-)	9.5 (J-)	NA	—	—
MD21-09-8601	21-600240	4.0000–5.0000	QBT3	NA	NA	NA	100	NA	NA	NA	NA	NA	NA
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	—	—	—	—	6	20100 (J-)	27.3 (J-)	NA	—	—
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	—	0.6 (UJ)	—	—	—	—	11.9 (J-)	NA	0.6 (UJ)	—
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	—	—	—	—	0.73 (J)	—	—	NA	—	—
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	—	—	—	56.6	—	12600 (J-)	—	NA	0.57 (UJ)	—
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	—	—	—	—	1.86 (J)	—	356	249	—	22400
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	—	—	—	—	—	—	22.6	67.7	—	—
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	—	—	—	—	—	—	39.2	17.9	—	—
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	7730	—	—	49.3	—	—	—	—	—	—

Table 6.8-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**217000**
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	10200	—	—	72.4	—	—	14.8	47.7	—	—
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	—	—	—	—	—	—	—	6.03	—	—
RE21-07-5011	21-601059	13.5000–14.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5012	21-601059	15.5000–16.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5013	21-601060	13.5000–14.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5017	21-601062	13.5000–14.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5018	21-601062	18.5000–19.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5019	21-601062	23.5000–24.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5020	21-601063	14.0000–15.0000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5021	21-601063	19.0000–20.0000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-5022	21-601063	24.0000–25.0000	QBT3	—	—	—	—	—	—	—	—	—	—
MD21-09-8841	21-605282	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8842	21-605282	2.0000–3.0000	QBT3	NA	NA	NA	52	NA	NA	NA	NA	NA	NA
MD21-09-8843	21-605282	4.0000–5.0000	QBT3	NA	NA	NA	130	NA	NA	NA	NA	NA	NA
MD21-10-4661	21-605282	9.0000–10.0000	QBT3	NA	NA	NA	110	NA	NA	NA	NA	NA	NA
MD21-09-8844	21-605283	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8845	21-605284	14.0000–15.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8846	21-605284	19.0000–20.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-4664	21-609837	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.8-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**48.8**
Residential SSL				**400**	**na**	**23**[e]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[e]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[f]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**92900**
RE21-07-989	21-600232	0.0000–0.5000	QBT3	11.3	—	—	16.4	—	62.7 (J)	0.012	—	—	—
RE21-07-990	21-600232	2.0000–3.0000	QBT3	—	—	—	6.3	—	37.1 (J)	—	—	—	—
RE21-07-991	21-600233	0.0000–0.5000	QBT3	—	—	—	7.3	—	4.7 (J)	—	—	—	—
RE21-07-992	21-600233	2.0000–3.0000	QBT3	—	—	—	0.31 (J)	—	0.61 (J)	—	0.52 (U)	—	—
RE21-07-993	21-600234	0.0000–0.5000	QBT3	—	—	—	0.77	—	0.96 (J)	—	—	—	—
RE21-07-994	21-600234	2.0000–3.0000	QBT3	—	—	—	0.4 (J)	—	—	—	—	—	—
RE21-07-995	21-600235	0.0000–0.5000	QBT3	12.5	—	—	0.46 (J)	—	2.1 (J)	—	—	—	—
RE21-07-996	21-600235	2.0000–3.0000	QBT3	—	—	—	0.23 (J)	—	3.7 (J)	—	—	—	—
RE21-07-997	21-600236	0.0000–0.5000	QBT3	—	—	—	0.28 (J)	—	3.6 (J)	—	—	—	—
RE21-07-998	21-600236	2.0000–3.0000	QBT3	—	—	—	0.15 (J)	—	—	—	—	—	—
RE21-07-999	21-600237	0.0000–0.5000	QBT3	—	—	—	0.18 (J)	—	0.88 (J)	—	0.52 (U)	—	—
RE21-07-1000	21-600237	2.0000–3.0000	QBT3	—	—	—	0.15 (J)	—	—	—	—	—	—
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	—	—	—	18	—	6.8 (J+)	—	—	—	NA
RE21-07-1002	21-600238	2.0000–3.0000	QBT3	—	—	—	12	—	1.6 (J+)	—	0.38 (U)	—	NA
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	185 (J-)	—	1.24 (J-)	8	—	4.6 (J+)	—	—	1.8	NA
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	11.4 (J-)	—	0.133 (J-)	1.3	—	—	—	—	—	NA
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	23.6 (J-)	—	—	21.3	—	4.2 (J+)	—	—	—	NA
RE21-07-1006	21-600240	2.0000–3.0000	QBT3	—	2070	—	4.9	10.9 (J-)	1.7 (J+)	0.0043 (J+)	0.53 (U)	—	NA
MD21-09-8601	21-600240	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	104 (J-)	—	0.965 (J-)	3.3	—	1.4 (J+)	—	—	1.8	NA
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	—	—	0.25 (J-)	0.83	—	—	—	0.38 (U)	—	NA
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	49.5 (J-)	—	0.274 (J-)	7.2 (J)	—	3.4 (J+)	—	—	—	NA
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	—	—	—	1.8	7.2 (J-)	—	—	0.58 (U)	—	NA
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	3940	—	1.92 (J)	13.9	—	1.52	—	8.11 (U)	47.3	1200
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	33.9	—	0.105 (J)	0.56	—	1.38	—	1.03 (J)	—	86.4
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	21.2	—	0.134 (J)	0.868	6.83	1.42	—	1.13 (J)	6.71	75
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	—	—	—	0.996	—	1.77	—	1.67 (U)	—	—

Table 6.8-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**1**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**48.8**
Residential SSL				**400**	**na**	**23**[e]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[e]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[f]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**92900**
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	—	—	—	1.2	—	1.48	—	1.62 (U)	—	—
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	21.8	—	0.108 (J+)	1.57	—	1.44	—	0.866 (J)	—	104 (J)
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	—	—	—	1.02	—	—	—	1.51 (U)	—	—
RE21-07-5011	21-601059	13.5000–14.5000	QBT3	—	—	—	0.948	—	1.84	—	0.602 (J)	—	—
RE21-07-5012	21-601059	15.5000–16.5000	QBT3	—	—	—	0.828	—	1.25	—	1.6 (U)	—	—
RE21-07-5013	21-601060	13.5000–14.5000	QBT3	—	—	—	1.53	—	1.53	—	1.19 (J)	—	—
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	12.7	—	—	1.38	—	1.47	—	1.6 (U)	—	—
RE21-07-5017	21-601062	13.5000–14.5000	QBT3	—	—	—	1.5	—	1.6	—	0.609 (J)	—	—
RE21-07-5018	21-601062	18.5000–19.5000	QBT3	—	—	—	1.17	—	1.38	—	1.62 (U)	—	—
RE21-07-5019	21-601062	23.5000–24.5000	QBT3	12.4	—	—	1.17	—	1.53	—	1.54 (U)	—	—
RE21-07-5020	21-601063	14.0000–15.0000	QBT3	—	—	—	0.46	—	—	—	2.23	—	—
RE21-07-5021	21-601063	19.0000–20.0000	QBT3	—	—	—	0.5	—	—	—	1.32 (J)	—	—
RE21-07-5022	21-601063	24.0000–25.0000	QBT3	—	—	—	0.345	—	—	—	1.52 (J)	—	—
MD21-09-8841	21-605282	0.0000–0.5000	SOIL	NA	NA	NA	2.7	NA	NA	NA	NA	NA	NA
MD21-09-8842	21-605282	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8843	21-605282	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-4661	21-605282	9.0000–10.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8844	21-605283	0.0000–0.5000	SOIL	NA	NA	NA	0.98 (J)	NA	72	0.015	NA	NA	NA
MD21-09-8845	21-605284	14.0000–15.0000	QBT3	NA	NA	NA	1.2	NA	NA	NA	—	NA	NA
MD21-09-8846	21-605284	19.0000–20.0000	QBT3	NA	NA	NA	1.4	NA	NA	NA	—	NA	NA
MD21-10-4664	21-609837	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	26 (J-)	NA	NA	NA	NA

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

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

[a] na = Not available.

[b] Chromium VI SSLs used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

[e] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table 6.8-2
Summary of Organic Chemicals Detected at Consolidated Unit 21-022(h)-99

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Carbazole
Residential SSL				**3440**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**2600**[b]	**240**[d]
Industrial SSL				**36700**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**9100**[b]	**960**[d]
Construction Worker SSL				**18600**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**47600**[c]	**10800**[e]
RE21-07-989	21-600232	0.0000–0.5000	QBT3	—[f]	—	NA[g]	NA	—	0.21 (J)	0.39 (J)	—	—	—	—	—
RE21-07-990	21-600232	2.0000–3.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-995	21-600235	0.0000–0.5000	QBT3	—	—	NA	NA	—	—	0.074 (J)	—	—	—	—	—
RE21-07-999	21-600237	0.0000–0.5000	QBT3	—	—	NA	NA	—	—	—	—	—	0.14 (J)	—	—
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	0.08 (J)	—	—	—	—	—
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	2	2.3	NA	NA	5.5 (J)	5.9 (J)	7.3 (J)	6.4 (J)	2.7 (J)	7.9 (J)	0.51 (J)	1.5
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	—	—	NA	NA	0.19 (J)	0.2 (J)	0.29 (J)	—	—	0.39 (J)	—	—
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	0.89	1.2	NA	NA	2.6	2.8 (J)	3.5 (J)	2 (J)	1.6 (J)	2.1	—	0.77 (J)
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	—	—	NA	NA	—	—	—	—	—	0.1 (J)	—	—
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	0.14 (J)	0.21 (J)	NA	NA	0.73	0.81 (J)	1.3 (J)	0.54 (J)	0.46 (J)	1.6	0.15 (J)	0.18 (J)
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	—	—	NA	NA	—	—	—	—	—	0.14 (J)	—	—
RE21-07-1121	21-600242	2.0000–3.0000	QBT3	NA	NA	0.0478	0.0211 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	0.635	1.25	NA	NA	2.6	—	3.25	2.62 (J)	1.38	2.61	—	NA
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	0.0324 (J)	0.0579	NA	NA	0.113	—	0.162	0.182 (J)	—	0.41	—	NA
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	0.108	0.154	NA	NA	0.288	—	0.403	0.344 (J)	0.147	0.474	—	NA
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	—	—	NA	NA	0.0191 (J)	—	0.018 (J)	—	—	—	—	NA
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	NA
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	0.0202 (J)	0.0287 (J)	NA	NA	0.0665	0.0711	0.0898	0.0464 (J)	0.042	0.27 (J)	—	NA
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	—	—	NA	NA	0.0152 (J)	—	0.0161 (J)	—	—	0.0963 (J)	—	NA
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	NA

Table 6.8-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chrysene	Di-n-butylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]
Residential SSL				**621**	**6110**	**0.621**	**78**[b]	**2290**	**2290**	**na**[h]	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**2340**	**68400**	**2.34**	**1000**[b]	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**20600**	**23800**	**21.3**	**238**[c]	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-989	21-600232	0.0000–0.5000	QBT3	0.19 (J)	—	—	—	0.52 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-990	21-600232	2.0000–3.0000	QBT3	—	—	—	—	0.089 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-995	21-600235	0.0000–0.5000	QBT3	0.081 (J)	—	—	—	0.25 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-999	21-600237	0.0000–0.5000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	—	—	—	—	0.14 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	6.1 (J)	0.26 (J)	—	1.1	8.4	1.6	NA	NA	NA	NA	NA	NA
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	0.2 (J)	—	—	—	0.48 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	—	—	—	—	0.11 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	2.9	0.35 (J)	0.43 (J)	0.4 (J)	5.7	0.73 (J)	NA	NA	NA	NA	NA	NA
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	0.87	—	0.12 (J)	—	1.9	0.11 (J)	NA	NA	NA	NA	NA	NA
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	—	—	—	—	0.098 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-1121	21-600242	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	1.81E-05	3.18E-05	2.85E-06	0.000000246 (J)	8.72E-06	0.000000214 (J)
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	2.87	—	—	—	7.02	0.544	NA	NA	NA	NA	NA	NA
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	0.122	—	—	—	0.294	0.0291 (J)	NA	NA	NA	NA	NA	NA
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	0.324	—	—	—	0.904	0.0971	NA	NA	NA	NA	NA	NA
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	0.0171 (J)	—	—	—	0.0308 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	—	—	—	—	0.0149 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	0.0781	—	—	—	0.145	0.0161 (J)	NA	NA	NA	NA	NA	NA
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	0.0124 (J)	—	—	—	0.0253 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	—	—	—	—	0.0178 (J)	—	NA	NA	NA	NA	NA	NA

Table 6.8-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[2-]
Residential SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**6.21**	**3210**	**199**	**310**[b]
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**23.4**	**14900**	**1090**	**4100**[b]
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**213**	**10300**	**10600**	**4100**[c]
RE21-07-989	21-600232	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-07-990	21-600232	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-995	21-600235	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-07-999	21-600237	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	5 (J)	NA	NA	0.51 (J)
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	1.6 (J)	NA	NA	0.16 (J)
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	—	NA	NA	—
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	0.0019 (J)	—	—
RE21-07-1121	21-600242	2.0000–3.0000	QBT3	0.000000922 (J)	0.000000488 (J)	5.49E-06	0.00000041 (J)	0.000000252 (J)	0.000000105 (J)	0.000000265 (J)	4.12E-06	NA	NA	NA	NA
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	2.2 (J)	NA	NA	0.107 (J)
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	0.146 (J)	—	0.0033 (J)	—
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	0.288 (J)	—	0.00263 (J)	0.0296 (J)
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	—	—	—	—

Table 6.8-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)
Residential SSL				**45**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**
Industrial SSL				**252**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**
Construction Worker SSL				**702**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**
RE21-07-989	21-600232	0.0000–0.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	0.25 (J)	0.45 (J)	NA	NA
RE21-07-990	21-600232	2.0000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-995	21-600235	0.0000–0.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	0.15 (J)	NA	NA
RE21-07-999	21-600237	0.0000–0.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	—	0.11 (J)	NA	NA
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	1.7	NA	NA	NA	NA	NA	NA	NA	9.8	19	NA	NA
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	0.31 (J)	0.62 (J)	NA	NA
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	—	0.1 (J)	NA	NA
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	0.45 (J)	NA	NA	NA	NA	NA	NA	NA	5.1	9.3	NA	NA
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	1.2	2.2	NA	NA
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA
RE21-07-1121	21-600242	2.0000–3.0000	QBT3	NA	0.000132	6.63E-06	0.000000136 (J)	1.36E-07	0.000000108 (J)	0.000000335 (J)	2.56E-06	NA	NA	0.000000353 (J)	2.28E-06
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	0.275 (J)	NA	NA	NA	NA	NA	NA	NA	5.4	6.99	NA	NA
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	0.242	0.27	NA	NA
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	0.0878	NA	NA	NA	NA	NA	NA	NA	0.841	0.838	NA	NA

Table 6.8-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)
Residential SSL				**45**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**
Industrial SSL				**252**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**
Construction Worker SSL				**702**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	0.0282 (J)	0.0368 (J)	NA	NA
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	0.0159 (J)	NA	NA
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	0.0168 (J)	NA	NA	NA	NA	NA	NA	NA	0.131	0.154	NA	NA
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	0.0185 (J)	0.0284 (J)	NA	NA
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	—	0.0116 (J)	NA	NA

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

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

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] EPA Region 6 (EPA 2007, 099314).

[e] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[f] — = Not detected.

[g] NA = Not analyzed.

[h] na = Not available.

Table 6.8-3
Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-022(h)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**43**
RE21-07-989	21-600232	0.0000–0.5000	QBT3	0.618	0.557	1.94	3.02 (J)	0.37	—[c]	—
RE21-07-990	21-600232	2.0000–3.0000	QBT3	0.176	0.327	1.12	1.54 (J)	—	—	0.103
RE21-07-991	21-600233	0.0000–0.5000	QBT3	0.053	0.423	0.32	0.336 (J)	—	—	—
RE21-07-993	21-600234	0.0000–0.5000	QBT3	—	0.376	—	0.454 (J)	—	—	—
RE21-07-994	21-600234	2.0000–3.0000	QBT3	—	—	—	—	0.247	—	—
RE21-07-995	21-600235	0.0000–0.5000	QBT3	—	0.37	—	0.196 (J)	—	—	—
RE21-07-997	21-600236	0.0000–0.5000	QBT3	—	0.161	—	0.248 (J)	—	—	—
RE21-07-999	21-600237	0.0000–0.5000	QBT3	—	0.149	—	0.068 (J)	—	—	—
RE21-07-1000	21-600237	2.0000–3.0000	QBT3	—	—	—	0.065 (J-)	—	—	—
RE21-07-1001	21-600238	0.0000–0.5000	SOIL	0.401	—	0.885	14.3 (J)	—	—	—
RE21-07-1002	21-600238	2.0000–3.0000	QBT3	0.053	—	0.533	0.887 (J)	—	—	—
RE21-07-1003	21-600239	0.0000–0.5000	SOIL	4.57	—	42.2	25 (J)	—	—	—
RE21-07-1004	21-600239	2.0000–3.0000	QBT3	1.01	—	1.96	2.62 (J)	—	—	—
RE21-07-1005	21-600240	0.0000–0.5000	SOIL	0.367	—	0.413	4.53 (J)	—	—	—
RE21-07-1006	21-600240	2.0000–3.0000	QBT3	—	—	—	0.176 (J)	—	—	—
RE21-07-1007	21-600241	0.0000–0.5000	SOIL	4.64	—	19.2	78.1 (J)	—	—	—
RE21-07-1008	21-600241	2.0000–3.0000	QBT3	0.247	—	0.949	2.1 (J)	—	—	—
RE21-07-1009	21-600242	0.0000–0.5000	SOIL	1.06	—	6.4	14.8 (J)	—	—	—
RE21-07-1010	21-600242	2.0000–3.0000	QBT3	—	—	0.38	0.181 (J)	—	—	—
RE21-07-1015	21-600245	0.0000–0.5000	SOIL	1.85	—	7.13	8.08	—	0.034374	—
RE21-07-1016	21-600245	2.0000–3.0000	QBT3	0.223	—	0.965	1.05	—	—	—
RE21-07-1017	21-600245	5.0000–6.0000	QBT3	0.0497	—	0.454	0.505	—	—	—
RE21-07-5007	21-601057	8.5000–9.5000	QBT3	—	—	—	0.543	—	0.054451	—
RE21-07-5008	21-601057	10.5000–11.5000	QBT3	—	—	—	0.0658	—	0.046655	—
RE21-07-5009	21-601058	1.5000–2.5000	QBT3	0.181	—	1.98	0.363	—	—	—
RE21-07-5010	21-601058	3.5000–4.5000	QBT3	—	—	0.414	0.131	—	—	0.128
RE21-07-5011	21-601059	13.5000–14.5000	QBT3	—	—	—	—	—	0.049201	—
RE21-07-5012	21-601059	15.5000–16.5000	QBT3	—	—	—	—	—	0.03597	—
RE21-07-5013	21-601060	13.5000–14.5000	QBT3	—	—	—	0.0907	—	0.049657	—
RE21-07-5014	21-601060	15.5000–16.5000	QBT3	—	—	—	0.0915	—	0.057528	—
RE21-07-5017	21-601062	13.5000–14.5000	QBT3	—	—	—	0.0547	—	0.044395	—
RE21-07-5018	21-601062	18.5000–19.5000	QBT3	—	—	—	0.122	—	0.05202	—
RE21-07-5019	21-601062	23.5000–24.5000	QBT3	—	—	—	—	—	0.035923	—
RE21-07-5020	21-601063	14.0000–15.0000	QBT3	—	—	—	0.127	—	0.045761	—

Table 6.8-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**43**
RE21-07-5021	21-601063	19.0000–20.0000	QBT3	—	—	—	—	—	0.0367	—
RE21-07-5022	21-601063	24.0000–25.0000	QBT3	—	—	—	—	—	0.049978	—
MD21-09-8845	21-605284	14.0000–15.0000	QBT3	—	—	—	—	—	0.037036	NA[d]
MD21-09-8846	21-605284	19.0000–20.0000	QBT3	—	—	—	0.043	—	—	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.9-1
Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-023(a)-99

Sample ID	Location ID	Depth (ft)	Media	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron
QBT3 Background Value				**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**
SOIL Background Value				**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**
Residential SSL				**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**
Industrial SSL				**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**
Construction Worker SSL				**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	0.948 (J-)	—[e]	88 (J+)	—	26500 (J+)	—	—	—	—
RE21-07-5212	21-601106	4.0000–5.0000	QBT3	—	—	—	—	—	8.67	—	—	—
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	—	—	—	0.552 (U)	—	—	—	—	—
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	—	—	55 (J+)	—	—	—	—	—	—
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	—	—	62.9 (J+)	—	2660 (J+)	—	—	—	—
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	—	—	47.5 (J+)	—	—	—	—	—	—
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5220	21-601110	4.0000–5.0000	QBT3	—	—	—	—	—	7.86	—	—	—
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	5.4	—
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	—	—	—	—	6880 (J+)	48.8	—	—	—
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	—	—	—	—	—	—	—	—	—
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	—	—	—	—	17000 (J+)	—	—	—	—
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	—	—	334	—	42700 (J+)	—	—	—	—
RE21-07-5231	21-601116	2.5000–3.5000	QBT3	NA	3.02	66.9 (J+)	—	—	—	—	—	—
RE21-07-5232	21-601116	4.5000–5.5000	QBT3	NA	3.89	—	—	3330	—	—	—	—
RE21-07-5233	21-601117	2.5000–3.5000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-5234	21-601117	4.5000–5.5000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	NA	5.21	—	—	8150	—	—	—	—
RE21-07-5236	21-601118	4.0000–5.0000	QBT3	NA	4.76	—	—	6050	—	—	—	—
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	NA	4.95	128 (J)	—	7500	—	—	6.68	14800
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	NA	5.26	122 (J)	—	9470	—	—	19	—
RE21-07-5239	21-601120	2.0000–3.0000	SOIL	NA	—	—	0.6 (U)	—	—	—	—	—
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	NA	—	—	0.604 (U)	—	—	—	—	—
RE21-07-5241	21-601121	2.0000–3.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-5242	21-601121	4.0000–5.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-5243	21-601122	2.0000–3.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-5244	21-601122	4.0000–5.0000	QBT3	NA	—	—	—	—	—	—	—	—

Table 6.9-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron
QBT3 Background Value				**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**
SOIL Background Value				**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**
Residential SSL				**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**
Industrial SSL				**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**
Construction Worker SSL				**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**
RE21-07-5245	21-601123	5.5000–6.5000	QBT3	—	3.52	—	—	2550	—	—	—	—
RE21-07-5246	21-601123	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5247	21-601124	5.5000–6.5000	QBT3	—	3.82	60.7	—	3000	—	—	—	—
RE21-07-5248	21-601124	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5249	21-601125	5.0000–6.0000	QBT3	—	—	58.6	—	25000	—	—	5.29	—
RE21-07-5250	21-601125	7.0000–8.0000	QBT3	—	—	—	—	6070	—	—	—	—
RE21-07-5251	21-601126	7.0000–8.0000	QBT3	—	5.2	—	—	—	—	—	—	—
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	—	3.15	75.5	—	2960	—	—	4.86	—
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	—	—	—	0.568 (U)	10300	—	—	—	—
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	—	—	—	0.51 (U)	—	—	—	—	—
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	—	3.05	—	—	2300 (J+)	9.86	—	—	—
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5258	21-601129	6.0000–7.0000	QBT3	NA[f]	—	—	—	—	—	—	—	—
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	NA	3.31	—	—	3930	—	—	—	—
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	NA	3.5	—	—	7080	—	—	—	—
RE21-07-5261	21-601130	4.0000–5.0000	QBT3	NA	2.99	—	—	—	—	—	—	—
RE21-07-5262	21-601130	9.0000–10.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-5263	21-601130	14.0000–15.0000	QBT3	NA	3.27	84.4 (J+)	—	—	—	8.07	—	—
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	—	—	—	0.526 (U)	9960	—	—	—	—
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	—	—	—	0.507 (U)	—	—	—	—	—
RE21-08-7056	21-603011	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7058	21-603012	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7059	21-603012	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7060	21-603013	5.2500–6.2500	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7061	21-603013	7.2500–8.2500	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7062	21-603014	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7063	21-603014	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-08-7064	21-603015	3.5000–4.5000	QBT3	NA	4.84	72.8	—	6650	—	—	—	—
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	NA	2.86	—	—	—	—	—	—	—

Table 6.9-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Vanadium
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**17**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**39.6**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	1270	1930 (J+)	—	0.115	—	2.3	—	1.17 (J)	—
RE21-07-5212	21-601106	4.0000–5.0000	QBT3	—	—	—	—	—	7.82	—	1.67 (U)	—
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	44	—	—	0.109	—	2.62	—	—	—
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	21.9	—	—	—	—	2.38	—	0.619 (J)	—
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	14.6	—	—	—	—	1.84	—	0.582 (J)	—
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	13.9	—	—	—	—	2.77	—	1.48 (J)	—
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	15.6 (J)	—	—	—	—	2.37	—	1.79 (U)	—
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	19.8	—	—	—	—	1.91	—	1.78 (U)	—
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	—	—	—	0.129	—	1.64	—	0.756 (J)	—
RE21-07-5220	21-601110	4.0000–5.0000	QBT3	—	—	—	—	—	1.75	—	1.71 (U)	—
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.43 (J)	—
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	13.3	—	714	—	6.64 (J)	1.31	—	2.22	—
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	—	—	—	—	—	1.43	—	5.26	—
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	—	—	—	0.255	—	—	0.000708 (J)	5.24	—
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	—	—	—	—	15.8 (J)	1.36	—	9.26	—
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	—	—	—	—	15.7 (J)	1.43	—	22.5	—
RE21-07-5231	21-601116	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	5.17	—
RE21-07-5232	21-601116	4.5000–5.5000	QBT3	—	—	—	0.163	—	—	—	4.77	—
RE21-07-5233	21-601117	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	3.35	—
RE21-07-5234	21-601117	4.5000–5.5000	QBT3	—	—	—	—	—	—	—	4.47	—
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	—	—	—	—	—	1.21 (J-)	—	6.26	—
RE21-07-5236	21-601118	4.0000–5.0000	QBT3	—	—	—	—	—	1.26 (J-)	—	6.29	—
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	33.3 (J)	—	—	0.253	6.76	2.79 (J-)	0.00306	10.7	—
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	35.6 (J)	—	—	2.16	—	11.6 (J-)	0.00649	9.11	—
RE21-07-5239	21-601120	2.0000–3.0000	SOIL	—	—	—	—	—	1.65 (J-)	—	7.59	—
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	—	—	—	—	—	1.44 (J-)	0.00069 (J)	12.4	—
RE21-07-5241	21-601121	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	3.27	—
RE21-07-5242	21-601121	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	3.94	—
RE21-07-5243	21-601122	2.0000–3.0000	QBT3	—	—	—	—	—	1.15 (J-)	—	2.34	—
RE21-07-5244	21-601122	4.0000–5.0000	QBT3	—	—	—	—	—	1.25 (J-)	—	3.45	—
RE21-07-5245	21-601123	5.5000–6.5000	QBT3	—	—	—	—	—	—	—	0.691 (J)	—

Table 6.9-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Vanadium
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**17**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**39.6**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**
RE21-07-5246	21-601123	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	1.57 (U)	—
RE21-07-5247	21-601124	5.5000–6.5000	QBT3	—	—	—	—	—	—	—	1.7 (U)	—
RE21-07-5248	21-601124	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	1.73 (U)	—
RE21-07-5249	21-601125	5.0000–6.0000	QBT3	—	2320	—	—	—	—	—	0.625 (J)	—
RE21-07-5250	21-601125	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	1.74 (U)	—
RE21-07-5251	21-601126	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	1.69 (U)	22.5 (J)
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	—	—	—	—	—	—	—	1.6 (U)	—
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	—	—	—	—	—	—	0.000866 (J)	1.7 (U)	—
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	—	—	—	—	—	—	0.000639 (J)	1.53 (U)	—
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	939	—	—	—	—	1.62	—	2.46	—
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	—	—	—	—	—	1.37	—	1.92	—
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	—	—	—	—	—	1.16	—	1.56 (J)	—
RE21-07-5258	21-601129	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	3.44	—
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	—	—	—	0.108	—	1.04 (J)	—	4.78	—
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	—	—	—	0.136	—	—	—	6.78	—
RE21-07-5261	21-601130	4.0000–5.0000	QBT3	—	—	—	0.168	—	—	—	4.74	—
RE21-07-5262	21-601130	9.0000–10.0000	QBT3	—	—	—	—	—	—	0.000772 (J)	4.88	—
RE21-07-5263	21-601130	14.0000–15.0000	QBT3	17.7	—	843	—	—	—	—	6.01	—
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	—	—	—	—	—	—	—	1.58 (U)	—
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	—	—	—	—	—	—	0.000534 (J)	—	—
RE21-08-7056	21-603011	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	1.59 (U)	—
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	1.5 (U)	—
RE21-08-7058	21-603012	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	1.61 (U)	—
RE21-08-7059	21-603012	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	1.67 (U)	—
RE21-08-7060	21-603013	5.2500–6.2500	QBT3	12	—	—	—	—	—	—	1.59 (U)	—

Table 6.9-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Vanadium
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**17**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**39.6**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**
RE21-08-7061	21-603013	7.2500–8.2500	QBT3	—	—	—	—	—	—	—	1.54 (U)	—
RE21-08-7062	21-603014	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	1.58 (U)	—
RE21-08-7063	21-603014	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	1.52 (U)	—
RE21-08-7064	21-603015	3.5000–4.5000	QBT3	—	—	—	0.232	—	1.97 (J-)	0.00203 (J)	8.49	—
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	—	—	—	0.259	—	2.01 (J-)	0.00133 (J)	5.94	—

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSLs used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

Table 6.9-2
Summary of Organic Chemicals Detected at Consolidated Unit 21-023(a)-99

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl) phthalate	Chrysene
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**2340**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**20600**
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	—[b]	0.0114 (J)	—	NA[c]	—	—	—	—	—	—	—
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	—	—	0.0151 (J)	NA	0.0452	0.0377	0.0841	0.0176 (J)	—	—	0.0435
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	—	—	0.00952 (J)	NA	—	0.0175 (J)	0.029 (J)	—	—	—	0.0153 (J)
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	0.0171 (J)	—	0.0292 (J)	NA	—	0.0262 (J)	0.0287 (J)	—	0.0159 (J)	—	0.0348 (J)
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	—	—	—	NA	—	—	0.0144 (J)	—	—	—	0.0129 (J)
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	—	—	—	NA	—	0.0155 (J)	0.0261 (J)	—	—	—	0.0194 (J)
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	—	—	0.0115 (J)	NA	—	0.0513 (J)	0.0665 (J)	—	0.0324 (J)	0.0942 (J)	0.0524
MD21-09-8818	21-601114	9.0000–10.0000	SOIL	—	NA	—	NA	—	—	0.11 (J)	—	—	—	—
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	—	—	—	NA	—	0.0124 (J)	0.0237 (J)	—	—	—	0.0195 (J)
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	—	—	—	NA	—	—	0.0141 (J)	—	—	—	0.0122 (J)
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	2.12 (J)	—
RE21-08-7066	21-601118	4.0000–5.0000	QBT3	NA	NA	NA	0.0069 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	—	—	—	NA	—	—	0.0741 (J)	—	—	—	—
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	—	—	—	NA	—	—	0.0146 (J)	—	—	—	0.0159 (J)
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl) phthalate	Chrysene
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**2340**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**20600**
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	0.11	—	0.191	NA	1.97	**1.65**	2.57	0.562	—	—	1.81
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	—	—	0.0103 (J)	NA	0.0347	0.0274 (J)	0.032 (J)	—	0.0128 (J)	—	0.0271 (J)
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	—	—	0.0123 (J)	NA	—	0.0454	0.0784	0.0266 (J)	—	—	0.0554
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	0.0128 (J)
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	1.38	—	2.36	NA	15.4	12.2	14.5	3.94	—	—	14.9
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	—	—	—	NA	—	0.0322 (J)	0.0412	0.016 (J)	0.0166 (J)	—	0.0415
RE21-08-7056	21-603011	3.0000–4.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	0.025 (J)	—	0.0608	NA	0.197	0.187	0.345	0.0987	—	—	0.213
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	—	—	—	NA	—	—	—	—	—	—	—

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)
Residential SSL				**6110**	**69.7**	**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**68400**	**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**23800**	**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	—	0.000565 (J)	0.0188 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	—	—	0.109	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	—	—	0.0355 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	—	—	0.0922	0.0122 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	—	—	0.0261 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	—	—	0.0183 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	0.049 (J)	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	0.0469 (J)	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	0.156 (J)	—	0.0306 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	0.0523 (J)	—	0.0926	—	NA	NA	NA	NA	NA	NA	NA
MD21-09-8818	21-601114	9.0000–10.0000	SOIL	—	NA	0.15 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	0.0644 (J)	—	0.0429	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	0.0543 (J)	—	0.024 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-7066	21-601118	4.0000–5.0000	QBT3	NA	NA	NA	NA	9.6E-06	1.73E-05	0.0000555 (J)	0.0000879 (J)	0.000000605 (J)	0.000000193 (J)	4.3E-06
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	—	—	0.0254 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	0.0415 (J)	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	—	—	2.14	0.0261 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	—	—	0.0285 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	0.0668 (J)	—	0.0148 (J)	—	NA	NA	NA	NA	NA	NA	NA

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)
Residential SSL				**6110**	**69.7**	**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**68400**	**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**23800**	**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	0.108 (J)	—	0.0129 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	0.0615 (J)	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	—	—	0.118	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	—	0.000287 (J)	0.0199 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	—	—	20.2	0.42	NA	NA	NA	NA	NA	NA	NA
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	—	—	0.0636	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-7056	21-603011	3.0000–4.0000	QBT3	0.0395 (J)	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	—	—	0.533	0.0204 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	—	—	0.0141 (J)	—	NA	NA	NA	NA	NA	NA	NA

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran 1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [2,3,4,7,8-]
Residential SSL				**na**	**na**	**na**	**6.21**	**3210**[e]	**310**[f]	**45**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**23.4**	**14900**[e]	**4100**[f]	**252**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**213**	**10300**[e]	**1240**[g]	**702**	**na**	**na**	**na**	**na**
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	NA	NA	NA	0.0189 (J)	—	—	—	NA	NA	NA	NA
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
MD21-09-8818	21-601114	9.0000–10.0000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	NA	NA	NA	—	0.000297 (J)	—	—	NA	NA	NA	NA
RE21-08-7066	21-601118	4.0000–5.0000	QBT3	0.000000313 (J)	0.000000192 (J)	2.72E-05	NA	NA	NA	NA	0.0000969 (J)	0.000018 (J)	4.17E-07	0.000000133 (J)
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	NA	NA	NA	—	0.000399 (J)	—	—	NA	NA	NA	NA
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	NA	NA	NA	0.52	—	0.0213 (J)	0.0609	NA	NA	NA	NA
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran 1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [2,3,4,7,8-]
Residential SSL				**na**	**na**	**na**	**6.21**	**3210**[e]	**310**[f]	**45**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**23.4**	**14900**[e]	**4100**[f]	**252**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**213**	**10300**[e]	**1240**[g]	**702**	**na**	**na**	**na**	**na**
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	NA	NA	NA	0.022 (J)	—	—	—	NA	NA	NA	NA
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	NA	NA	NA	4.06	—	0.396	1.17	NA	NA	NA	NA
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	NA	NA	NA	0.0128 (J)	—	—	—	NA	NA	NA	NA
RE21-08-7056	21-603011	3.0000–4.0000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	NA	NA	NA	0.048	—	—	—	NA	NA	NA	NA
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	NA	NA	NA	—	—	—	—	NA	NA	NA	NA

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Tetrachloroethene	Toluene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**1830**	**1720**	**8970**	**0.000374**	**na**	**6.99**	**5570**	**9550**	**1090**[h]
Industrial SSL				**na**	**20500**	**18300**	**51200**	**0.00147**	**na**	**36.4**	**57900**	**31500**	**3610**[h]
Construction Worker SSL				**na**	**7150**	**6680**	**30300**	**0.0127**	**na**	**338**	**21100**	**27500**	**3130**[h]
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	NA	0.0172 (J)	0.0158 (J)	—	NA	NA	—	—	0.00101 (J)	0.00203 (J)
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	NA	0.0794	0.0855	—	NA	NA	0.00315	—	—	—
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	NA	—	—	—	NA	NA	0.000539 (J)	—	—	—
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	0.000868 (J)	—	—	—
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	NA	0.0346 (J)	0.0364 (J)	—	NA	NA	0.00616	0.000401 (J)	—	—
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	NA	0.101	0.0701	—	NA	NA	—	—	—	—
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	NA	0.0239 (J)	0.0215 (J)	—	NA	NA	0.0037	—	—	—
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	NA	0.0137 (J)	0.0138 (J)	—	NA	NA	0.00209	—	—	—
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	—	—	—	—
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	NA	—	—	—	NA	NA	—	—	—	—
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	NA	0.0168 (J)	0.0318 (J)	—	NA	NA	0.00584	—	—	—
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	NA	0.0485	0.0978	—	NA	NA	0.00148	—	—	—
MD21-09-8818	21-601114	9.0000–10.0000	SOIL	NA	—	0.14 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	NA	0.0236 (J)	0.0331 (J)	—	NA	NA	—	—	—	—
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	NA	0.0229 (J)	0.0227 (J)	—	NA	NA	—	—	—	—
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	—	—	—	—
RE21-08-7066	21-601118	4.0000–5.0000	QBT3	2.03E-06	NA	NA	NA	0.0000000951 (J)	9.51E-08	NA	NA	NA	NA
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	—	0.00035 (J)	—	—
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	NA	—	—	—	NA	NA	0.000243 (J)	—	—	—
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	NA	—	0.0184 (J)	—	NA	NA	—	—	—	—
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	NA	—	—	—	NA	NA	—	—	—	—
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	NA	0.506	2.63	—	NA	NA	—	—	—	—
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	NA	—	0.0446	—	NA	NA	—	—	—	—
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	NA	—	0.0134 (J)	—	NA	NA	—	—	—	—

Table 6.9-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Tetrachloroethene	Toluene	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**1830**	**1720**	**8970**	**0.000374**	**na**	**6.99**	**5570**	**9550**	**1090**[h]
Industrial SSL				**na**	**20500**	**18300**	**51200**	**0.00147**	**na**	**36.4**	**57900**	**31500**	**3610**[h]
Construction Worker SSL				**na**	**7150**	**6680**	**30300**	**0.0127**	**na**	**338**	**21100**	**27500**	**3130**[h]
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	NA	0.0118 (J)	—	—	NA	NA	—	—	—	—
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	NA	—	—	—	NA	NA	—	—	—	—
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	NA	0.0691	0.104	—	NA	NA	—	—	—	—
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	NA	0.0157 (J)	0.0207 (J)	0.00137	NA	NA	—	0.000333 (J)	0.000236 (J)	0.000286 (J)
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	NA	6.49	18.3	—	NA	NA	—	—	—	—
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	NA	0.0158 (J)	0.0634	—	NA	NA	—	—	—	—
RE21-08-7056	21-603011	3.0000–4.0000	QBT3	NA	—	—	—	NA	NA	—	—	—	—
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	NA	0.286	0.413	—	NA	NA	—	—	—	—
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	NA	—	—	—	NA	NA	—	—	—	—

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

[e] Isopropylbenzene used as surrogate based on structural similarity.

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

[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[h] SSLs for xylenes used as surrogates based on structural similarity.

Table 6.9-3
Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-023(a)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**
RE21-07-5211	21-601106	2.0000–3.0000	QBT3	0.0599	—[c]	—	0.589	—	4.62353	—	—
RE21-07-5212	21-601106	4.0000–5.0000	QBT3	—	—	—	—	—	1.24422	—	—
RE21-07-5213	21-601107	1.5000–2.5000	SOIL	0.113	0.133	—	0.624	—	0.275939	—	—
RE21-07-5214	21-601107	3.5000–4.0000	QBT3	—	—	—	0.122	—	0.195495	—	—
RE21-07-5215	21-601108	2.0000–3.0000	QBT3	0.0427	—	—	0.141	—	0.263227	—	0.0949
RE21-07-5216	21-601108	4.0000–5.0000	QBT3	—	—	—	0.293	—	0.286687	—	0.0987
RE21-07-5217	21-601109	4.0000–5.0000	QBT3	—	—	—	0.152	—	0.24201	—	—
RE21-07-5218	21-601109	6.0000–7.0000	QBT3	0.0288	—	—	0.134	—	0.18428	—	—
RE21-07-5219	21-601110	2.0000–3.0000	QBT3	0.0849	—	—	0.379	—	0.332126	—	—
RE21-07-5220	21-601110	4.0000–5.0000	QBT3	—	—	—	0.0787	—	0.433936	—	—
RE21-07-5221	21-601111	2.0000–3.0000	QBT3	—	NA[d]	—	0.0221	—	0.777312	—	—
RE21-07-5222	21-601111	4.0000–5.0000	QBT3	—	—	—	0.0338	—	0.688558	—	—
RE21-07-5227	21-601114	2.0000–3.0000	SOIL	0.281	—	0.167	2.25	—	0.055919	—	—
RE21-07-5228	21-601114	4.0000–5.0000	SOIL	0.229	—	0.175	2.88	—	0.08336	—	—
MD21-09-8818	21-601114	9.0000–10.0000	SOIL	NA	NA	0.289	3.77	NA	NA	NA	NA
RE21-07-5229	21-601115	2.0000–3.0000	SOIL	—	—	—	0.12	—	0.107468	—	—
RE21-07-5230	21-601115	4.0000–5.0000	SOIL	—	—	—	0.0385	—	0.116734	—	—
RE21-07-5231	21-601116	2.5000–3.5000	QBT3	—	—	—	0.044 (J)	—	0.148364	—	—
RE21-07-5232	21-601116	4.5000–5.5000	QBT3	0.204 (J)	—	0.253	1.51 (J)	—	0.141778	—	—
RE21-07-5233	21-601117	2.5000–3.5000	QBT3	—	—	—	0.0323 (J)	—	0.118129	—	—
RE21-07-5234	21-601117	4.5000–5.5000	QBT3	0.0369 (J)	—	0.0284	0.484 (J)	—	0.059569	—	0.0981
RE21-07-5235	21-601118	2.0000–3.0000	QBT3	—	—	—	0.164	0.131	0.14	—	—
RE21-07-5236	21-601118	4.0000–5.0000	QBT3	—	—	0.0346	0.149	—	0.140476	—	—
RE21-07-5237	21-601119	2.0000–3.0000	QBT3	0.0772	—	0.0483	1.51	—	0.215794	—	—
RE21-07-5238	21-601119	4.0000–5.0000	QBT3	0.119	—	—	0.727	—	0.265745	—	—

Table 6.9-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**
RE21-07-5239	21-601120	2.0000–3.0000	SOIL	—	—	—	0.0237	—	0.592029	—	—
RE21-07-5240	21-601120	4.0000–5.0000	SOIL	—	—	—	0.639	—	0.538788	—	—
MD21-09-8817	21-601120	9.0000–10.0000	QBT3	NA	NA	0.034	0.33	NA	NA	NA	NA
RE21-07-5241	21-601121	2.0000–3.0000	QBT3	—	—	—	—	—	0.064286	—	—
RE21-07-5242	21-601121	4.0000–5.0000	QBT3	—	—	—	0.0489	—	0.070967	—	0.107
RE21-07-5243	21-601122	2.0000–3.0000	QBT3	—	—	—	—	—	0.09209	—	—
RE21-07-5244	21-601122	4.0000–5.0000	QBT3	—	—	—	0.647	—	0.077	—	—
RE21-07-5245	21-601123	5.5000–6.5000	QBT3	—	—	—	0.0561	—	0.025925	—	—
RE21-07-5246	21-601123	7.5000–8.5000	QBT3	—	—	—	0.039	—	0.039274	—	—
RE21-07-5247	21-601124	5.5000–6.5000	QBT3	0.17	—	—	2.51	—	—	—	—
RE21-07-5248	21-601124	7.5000–8.5000	QBT3	—	—	—	0.398	—	—	—	—
RE21-07-5249	21-601125	5.0000–6.0000	QBT3	—	—	—	0.0952	—	—	—	0.138
RE21-07-5250	21-601125	7.0000–8.0000	QBT3	—	—	—	0.102	—	—	—	0.124
RE21-07-5251	21-601126	7.0000–8.0000	QBT3	—	—	—	0.154	—	—	—	—
RE21-07-5252	21-601126	9.0000–10.0000	QBT3	—	—	—	0.169	—	—	—	0.104
RE21-07-5253	21-601127	2.2500–3.2500	SOIL	0.101	—	—	0.324	—	—	—	—
RE21-07-5254	21-601127	4.2500–5.2500	SOIL	0.129	—	—	0.459	—	—	—	—
RE21-07-5255	21-601128	5.0000–6.0000	QBT3	—	—	—	0.0531	—	0.234088	—	—
RE21-07-5256	21-601128	10.0000–11.0000	QBT3	—	—	—	0.0307	—	0.180924	—	—
RE21-07-5257	21-601128	15.0000–16.0000	QBT3	—	—	—	0.0291	—	0.168947	—	—
RE21-07-5258	21-601129	6.0000–7.0000	QBT3	—	—	0.0279	0.0657 (J)	—	0.111499	—	—
RE21-07-5259	21-601129	11.0000–12.0000	QBT3	0.0728 (J)	—	0.158	0.423 (J)	—	0.073468	—	—
RE21-07-5260	21-601129	16.0000–17.0000	QBT3	0.116 (J)	—	0.139	1.38 (J)	—	0.087591	—	—
RE21-07-5261	21-601130	4.0000–5.0000	QBT3	—	—	—	0.0963 (J)	—	0.061984	—	—
RE21-07-5262	21-601130	9.0000–10.0000	QBT3	—	—	—	0.078 (J)	—	0.06058	—	—
RE21-07-5263	21-601130	14.0000–15.0000	QBT3	—	—	—	0.247 (J)	—	0.055369	—	—
RE21-08-7054	21-603010	3.0000–4.0000	SOIL	0.056	—	—	0.296	—	0.023597	—	—
RE21-08-7055	21-603010	5.0000–6.0000	SOIL	—	—	—	0.156	—	0.015122	—	—
RE21-08-7057	21-603011	5.0000–6.0000	QBT3	—	—	—	0.167 (J)	—	0.009338	—	—
RE21-08-7058	21-603012	4.0000–5.0000	QBT3	—	—	—	0.116 (J)	—	0.091009	—	—
RE21-08-7059	21-603012	6.0000–7.0000	QBT3	—	—	—	0.0384 (J)	—	0.209002	—	—
RE21-08-7060	21-603013	5.2500–6.2500	QBT3	0.0571	—	—	0.0592 (J)	—	0.040747	—	—

Table 6.9-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**
RE21-08-7061	21-603013	7.2500–8.2500	QBT3	—	—	—	—	—	0.034517	—	—
RE21-08-7062	21-603014	6.0000–7.0000	QBT3	—	—	—	—	—	0.032659	—	—
RE21-08-7063	21-603014	8.0000–9.0000	QBT3	—	—	—	—	—	0.014332	—	—
RE21-08-7064	21-603015	3.5000–4.5000	QBT3	1.75	—	0.076	0.086 (J)	1.95	0.194452	7.95	0.457
RE21-08-7065	21-603015	5.5000–6.5000	QBT3	2.3	—	—	0.0742 (J)	—	0.218761	2.53	0.143
MD21-09-8814	21-603015	10.5000–11.5000	QBT3	0.724	NA	NA	NA	NA	NA	NA	NA

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.10-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(a)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-74874	21-27320	0.0000–0.5000	SOIL	—[e]	—	—	—	—	—	—	—	20.3	—	—
RE21-07-74875	21-27320	2.0000–2.5000	QBT3	—	—	—	—	—	—	8.1	—	10	—	—
RE21-07-74877	21-27321	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	16.6	—	—
RE21-07-74878	21-27321	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74880	21-27322	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	25.6	—	—
RE21-07-74881	21-27322	2.0000–2.5000	SOIL	—	—	—	—	0.472 (J)	—	—	—	36.3	—	—
RE21-07-74883	21-27323	0.0000–0.5000	SOIL	—	—	—	—	0.548 (J)	—	—	—	62.4	—	—
RE21-07-74884	21-27323	2.0000–2.5000	SOIL	—	—	—	—	0.414 (J)	—	—	—	48.9	—	—
RE21-07-74887	21-27325	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74888	21-27325	2.0000–2.5000	QBT3	24000	4.72	166	1.64	—	3820	18.7	4	10.9	—	16600
RE21-09-3582	21-27325	4.0000–5.0000	QBT3	—	NA[f]	—	NA	NA	NA	13	NA	NA	NA	NA
RE21-07-74889	21-27326	0.0000–0.5000	SOIL	—	—	—	—	0.558	—	—	—	82.5	—	—
RE21-07-74890	21-27326	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	14.9	—	—
RE21-07-74891	21-27327	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	93.9	—	—
RE21-07-74892	21-27327	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	23.1	—	—
RE21-07-74893	21-27328	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74894	21-27328	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74895	21-27329	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74896	21-27329	2.0000–2.5000	SOIL	—	—	—	—	0.504 (U)	—	—	—	—	—	—
RE21-07-74897	21-27330	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74898	21-27330	2.0000–2.5000	QBT3	—	—	—	—	—	2270	32.4	—	—	—	—
RE21-07-74899	21-27331	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74900	21-27331	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74901	21-27332	0.0000–0.5000	SOIL	—	—	—	—	0.522 (U)	—	—	—	—	—	—
RE21-07-74902	21-27332	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74903	21-27333	0.0000–0.5000	SOIL	—	—	—	—	0.516 (U)	—	—	—	—	—	—
RE21-07-74904	21-27333	2.0000–2.5000	SOIL	—	—	—	—	0.498 (U)	—	—	—	—	—	—

Table 6.10-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-74907	21-27335	2.6700–3.6700	SOIL	—	—	—	—	—	7530	—	—	—	—	—
RE21-07-74908	21-27335	4.6700–5.6700	QBT3	—	—	46.9	—	—	—	7.21	—	5.46	—	—
RE21-07-74909	21-27336	2.0000–3.0000	QBT3	—	—	60.5	—	—	—	9.36	—	—	—	—
RE21-07-74910	21-27336	4.0000–5.0000	QBT3	—	—	—	—	—	—	9.73	—	—	—	—
RE21-07-74925	21-27338	2.6700–3.6700	SOIL	—	—	—	—	0.585 (U)	—	—	—	—	—	—
RE21-07-74926	21-27338	4.6700–5.6700	SOIL	—	—	—	—	0.56 (U)	—	—	—	—	—	—
RE21-07-74927	21-27339	6.1000–7.1000	QBT3	—	—	—	—	—	—	7.2	—	11	—	—
RE21-07-74928	21-27339	8.1000–9.1000	QBT3	—	—	—	—	—	—	10.5	—	—	—	—
RE21-07-74929	21-27340	5.0000–6.0000	QBT3	—	—	—	—	—	—	10.1	—	—	—	—
RE21-07-74930	21-27340	7.0000–8.0000	QBT3	—	—	—	—	—	3530 (J+)	8.07	—	—	—	—
RE21-07-74931	21-27341	5.0000–6.0000	QBT3	—	2.87	71.5	—	—	34000	8.73	4.09	10.8	—	—
RE21-07-74932	21-27341	10.0000–11.0000	QBT3	—	2.85	—	—	—	3880	13.9	—	—	—	—
RE21-07-74933	21-27341	15.0000–16.0000	QBT3	—	3.55	—	—	—	5500	—	—	—	—	—
RE21-07-74934	21-27342	0.0000–0.5000	SOIL	—	—	—	—	0.586 (U)	—	—	—	—	0.542	—
RE21-07-74935	21-27342	2.0000–3.0000	QBT3	—	—	—	—	—	—	12.7 (J)	—	—	—	—
RE21-07-74936	21-27342	5.0000–6.0000	QBT3	—	—	—	—	—	2570	13.3 (J)	—	—	—	—

Table 6.10-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Uranium	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2.4**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1.82**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**235**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**929**	**1550**	**92900**
RE21-07-74874	21-27320	0.0000–0.5000	SOIL	—	—	0.149	—	0.965 (J)	—	1.59 (U)	—	—	51.2
RE21-07-74875	21-27320	2.0000–2.5000	QBT3	—	—	—	—	0.727 (J)	—	1.57 (U)	—	—	—
RE21-07-74877	21-27321	0.0000–0.5000	SOIL	—	—	—	—	6.31	0.000616 (J-)	1.59 (U)	—	—	—
RE21-07-74878	21-27321	2.0000–2.5000	QBT3	—	—	—	—	1.46	—	1.5 (U)	—	—	—
RE21-07-74880	21-27322	0.0000–0.5000	SOIL	—	—	0.309	—	2.51	—	1.55 (U)	—	—	57.7
RE21-07-74881	21-27322	2.0000–2.5000	SOIL	30.7	—	0.34	—	2.12	—	1.59 (U)	—	—	116
RE21-07-74883	21-27323	0.0000–0.5000	SOIL	26	—	0.47	—	1.23	0.000959 (J-)	1.66 (U)	2.95	—	91.3
RE21-07-74884	21-27323	2.0000–2.5000	SOIL	22.7	—	0.408	—	0.856 (J)	—	1.53 (U)	—	—	69.8
RE21-07-74887	21-27325	0.0000–0.5000	SOIL	—	—	—	—	1.59	—	2.23 (U)	1.87	—	—
RE21-07-74888	21-27325	2.0000–2.5000	QBT3	28.5	3390	—	10.5	—	0.000755 (J-)	1.57 (U)	—	23	—
RE21-09-3582	21-27325	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74889	21-27326	0.0000–0.5000	SOIL	40.3	—	0.201	—	2.14	—	1.65 (U)	4.05	—	96.2
RE21-07-74890	21-27326	2.0000–2.5000	SOIL	—	—	—	—	0.655 (J)	—	—	—	—	—
RE21-07-74891	21-27327	0.0000–0.5000	SOIL	25.6	—	0.112	—	1.58	—	1.63 (U)	2.53	—	56.2
RE21-07-74892	21-27327	2.0000–2.5000	SOIL	—	—	—	—	0.836 (J)	0.00177 (J-)	—	—	—	—
RE21-07-74893	21-27328	0.0000–0.5000	SOIL	22.6	—	—	—	1.27	—	1.57 (U)	—	—	—
RE21-07-74894	21-27328	2.0000–2.5000	QBT3	13.5	—	—	—	0.752 (J)	—	1.53 (U)	—	—	—
RE21-07-74895	21-27329	0.0000–0.5000	SOIL	—	—	—	—	1.07	—	—	—	—	—
RE21-07-74896	21-27329	2.0000–2.5000	SOIL	—	—	—	—	0.746 (J)	—	—	—	—	—
RE21-07-74897	21-27330	0.0000–0.5000	QBT3	—	—	—	—	—	—	1.5 (U)	—	—	—
RE21-07-74898	21-27330	2.0000–2.5000	QBT3	—	—	—	—	—	—	1.49 (U)	—	—	—
RE21-07-74899	21-27331	0.0000–0.5000	QBT3	—	—	—	—	—	—	1.5 (U)	—	—	—
RE21-07-74900	21-27331	2.0000–2.5000	QBT3	—	—	—	—	—	—	1.5 (U)	—	—	—
RE21-07-74901	21-27332	0.0000–0.5000	SOIL	—	—	—	—	1.3	—	1.57 (U)	—	—	—
RE21-07-74902	21-27332	2.0000–2.5000	QBT3	18.5	—	—	—	1.2	—	1.52 (U)	—	—	—
RE21-07-74903	21-27333	0.0000–0.5000	SOIL	—	—	—	—	0.834 (J)	—	1.55 (U)	—	—	—
RE21-07-74904	21-27333	2.0000–2.5000	SOIL	—	—	—	—	0.849 (J)	—	—	—	—	—
RE21-07-74907	21-27335	2.6700–3.6700	SOIL	43.5 (J-)	—	0.798	—	0.905 (J)	—	—	—	—	123
RE21-07-74908	21-27335	4.6700–5.6700	QBT3	14 (J-)	—	0.205	—	0.772 (J)	—	1.13 (J)	—	—	—
RE21-07-74909	21-27336	2.0000–3.0000	QBT3	—	—	0.162	—	0.651 (J)	0.000787 (J)	0.835 (J)	—	—	—

Table 6.10-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Uranium	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2.4**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1.82**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**235**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**929**	**1550**	**92900**
RE21-07-74910	21-27336	4.0000–5.0000	QBT3	—	—	—	—	0.511 (J)	—	1.54 (U)	—	—	—
RE21-07-74925	21-27338	2.6700–3.6700	SOIL	—	—	0.431	—	—	—	1.63 (J)	1.94 (J)	—	—
RE21-07-74926	21-27338	4.6700–5.6700	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-74927	21-27339	6.1000–7.1000	QBT3	12.8	—	0.114	—	6.67	—	1.76 (U)	—	—	—
RE21-07-74928	21-27339	8.1000–9.1000	QBT3	—	—	—	—	4.97	—	1.82 (U)	—	—	—
RE21-07-74929	21-27340	5.0000–6.0000	QBT3	—	—	—	—	—	—	1.6 (U)	—	—	—
RE21-07-74930	21-27340	7.0000–8.0000	QBT3	—	—	—	—	—	—	1.61 (U)	—	—	—
RE21-07-74931	21-27341	5.0000–6.0000	QBT3	—	4010 (J+)	0.95	9.53	4.53	0.000903 (J)	16 (U)	13.3	23.2	—
RE21-07-74932	21-27341	10.0000–11.0000	QBT3	—	—	0.519	—	3.93	—	15.4 (U)	—	—	—
RE21-07-74933	21-27341	15.0000–16.0000	QBT3	—	—	—	—	2.75	—	15.6 (U)	3.05	—	—
RE21-07-74934	21-27342	0.0000–0.5000	SOIL	—	—	0.14 (J)	—	0.699 (J)	0.000719 (J)	—	—	—	—
RE21-07-74935	21-27342	2.0000–3.0000	QBT3	—	—	—	—	—	—	0.988 (U)	—	—	—
RE21-07-74936	21-27342	5.0000–6.0000	QBT3	—	—	—	—	0.492 (J)	—	0.642 (U)	—	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSLs used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.10-2
Summary of Organic Chemicals Detected at SWMU 21-024(a)

Sample ID	Location ID	Depth (ft)	Media	Acetone	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Chloroaniline[4-]	Chloroform	Chrysene	Dichlorobenzene[1,4-]
Residential SSL				**67500**	**17200**	**6.21**	**6.21**	**240000**[a]	**347**	**24**[a]	**5.72**	**621**	**32.2**
Industrial SSL				**851000**	**183000**	**23.4**	**23.4**	**2500000**[a]	**1370**	**86**[a]	**31.9**	**2340**	**180**
Construction Worker SSL				**263000**	**66800**	**213**	**213**	**952000**[b]	**4760**	**1084**[b]	**671**	**20600**	**3780**
RE21-07-74874	21-27320	0.0000–0.5000	SOIL	NA[c]	—[d]	—	—	0.567 (J)	—	—	NA	—	—
RE21-07-74875	21-27320	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74877	21-27321	0.0000–0.5000	SOIL	NA	—	—	0.0159 (J)	—	—	—	NA	—	—
RE21-07-74878	21-27321	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74880	21-27322	0.0000–0.5000	SOIL	NA	0.00916 (J)	—	0.0164 (J)	—	—	—	NA	—	—
RE21-07-74881	21-27322	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-74883	21-27323	0.0000–0.5000	SOIL	NA	—	—	—	0.621 (J)	—	0.0804 (J)	NA	—	—
RE21-07-74884	21-27323	2.0000–2.5000	SOIL	—	—	—	—	—	—	0.462	—	—	—
RE21-07-74888	21-27325	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74889	21-27326	0.0000–0.5000	SOIL	NA	—	0.0146 (J)	—	—	—	—	NA	0.0148 (J)	—
RE21-07-74890	21-27326	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-74892	21-27327	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-74893	21-27328	0.0000–0.5000	SOIL	NA	—	—	—	—	0.116 (J)	—	NA	—	—
RE21-07-74894	21-27328	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74895	21-27329	0.0000–0.5000	SOIL	NA	0.00721 (J)	—	—	—	—	—	NA	—	—
RE21-07-74896	21-27329	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-74898	21-27330	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74900	21-27331	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74902	21-27332	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	0.000442 (J)
RE21-07-74907	21-27335	2.6700–3.6700	SOIL	NA	—	—	—	—	—	—	NA	—	—
RE21-07-74908	21-27335	4.6700–5.6700	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-74926	21-27338	4.6700–5.6700	SOIL	0.26	—	—	—	—	—	—	0.000248 (J)	—	—
RE21-07-74927	21-27339	6.1000–7.1000	QBT3	—	—	—	—	—	—	—	0.000251 (J)	—	—
RE21-07-74928	21-27339	8.1000–9.1000	QBT3	0.0404	—	—	—	—	—	—	—	—	—
RE21-07-515	21-27340	5.5000–6.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74930	21-27340	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	0.000233 (J)	—	—
RE21-07-74936	21-27342	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—

Table 6.10-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluoranthene	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofuran[2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Isopropyltoluene[4-]	MethyleneChloride	Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]
Residential SSL				**2290**	**na**[e]	**na**	**na**	**na**	**na**	**na**	**3210**[f]	**199**	**na**
Industrial SSL				**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**14900**[f]	**1090**	**na**
Construction Worker SSL				**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**10300**[f]	**10600**	**na**
RE21-07-74874	21-27320	0.0000–0.5000	SOIL	0.0121 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74875	21-27320	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74877	21-27321	0.0000–0.5000	SOIL	0.0142 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74878	21-27321	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74880	21-27322	0.0000–0.5000	SOIL	0.0166 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74881	21-27322	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74883	21-27323	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74884	21-27323	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74888	21-27325	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74889	21-27326	0.0000–0.5000	SOIL	0.0209 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74890	21-27326	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74892	21-27327	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74893	21-27328	0.0000–0.5000	SOIL	0.0283 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74894	21-27328	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	0.000488 (J)	—	NA
RE21-07-74895	21-27329	0.0000–0.5000	SOIL	0.0157 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74896	21-27329	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74898	21-27330	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74900	21-27331	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74902	21-27332	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74907	21-27335	2.6700–3.6700	SOIL	0.0159 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74908	21-27335	4.6700–5.6700	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74926	21-27338	4.6700–5.6700	SOIL	—	NA	NA	NA	NA	NA	NA	—	0.0055 (J)	NA
RE21-07-74927	21-27339	6.1000–7.1000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74928	21-27339	8.1000–9.1000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-515	21-27340	5.5000–6.5000	QBT3	NA	0.00000147 (J)	3E-06	0.000000514 (J)	1.1E-06	0.0000000517 (J)	4.8E-07	NA	NA	0.000013 (J)
RE21-07-74930	21-27340	7.0000–8.0000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA
RE21-07-74936	21-27342	5.0000–6.0000	QBT3	—	NA	NA	NA	NA	NA	NA	—	—	NA

Table 6.10-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran[2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloroethene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**na**	**1830**	**1720**	**na**	**0.000374**	**na**	**5570**	**45.7**	**1090**[g]
Industrial SSL				**na**	**na**	**20500**	**18300**	**na**	**0.00147**	**na**	**57900**	**253**	**3610**[g]
Construction Worker SSL				**na**	**na**	**7150**	**6680**	**na**	**0.0127**	**na**	**21100**	**4600**	**3130**[g]
RE21-07-74874	21-27320	0.0000–0.5000	SOIL	NA	NA	—	0.0131 (J)	NA	NA	NA	NA	NA	NA
RE21-07-74875	21-27320	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.00107	—	—
RE21-07-74877	21-27321	0.0000–0.5000	SOIL	NA	NA	—	0.0141 (J)	NA	NA	NA	NA	NA	NA
RE21-07-74878	21-27321	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.00128	—	—
RE21-07-74880	21-27322	0.0000–0.5000	SOIL	NA	NA	—	0.0142 (J)	NA	NA	NA	NA	NA	NA
RE21-07-74881	21-27322	2.0000–2.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.00223	—	—
RE21-07-74883	21-27323	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-07-74884	21-27323	2.0000–2.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.00712	—	—
RE21-07-74888	21-27325	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.00338	—	—
RE21-07-74889	21-27326	0.0000–0.5000	SOIL	NA	NA	—	0.0241 (J)	NA	NA	NA	NA	NA	NA
RE21-07-74890	21-27326	2.0000–2.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.00273	—	—
RE21-07-74892	21-27327	2.0000–2.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.000895 (J)	—	—
RE21-07-74893	21-27328	0.0000–0.5000	SOIL	NA	NA	0.0115 (J)	0.0489	NA	NA	NA	NA	NA	NA
RE21-07-74894	21-27328	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.00126	0.000769 (J)	—
RE21-07-74895	21-27329	0.0000–0.5000	SOIL	NA	NA	—	0.0158 (J)	NA	NA	NA	NA	NA	NA
RE21-07-74896	21-27329	2.0000–2.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.00503	0.00286	—
RE21-07-74898	21-27330	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.000771 (J)	0.000335 (J)	—
RE21-07-74900	21-27331	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.000452 (J)	—	—
RE21-07-74902	21-27332	2.0000–2.5000	QBT3	NA	NA	—	—	NA	NA	NA	0.000887 (J)	—	—
RE21-07-74907	21-27335	2.6700–3.6700	SOIL	NA	NA	—	0.0171 (J)	NA	NA	NA	NA	NA	NA
RE21-07-74908	21-27335	4.6700–5.6700	QBT3	NA	NA	—	—	NA	NA	NA	0.000765 (J)	—	—
RE21-07-74926	21-27338	4.6700–5.6700	SOIL	NA	NA	—	—	NA	NA	NA	0.000709 (J)	—	—
RE21-07-74927	21-27339	6.1000–7.1000	QBT3	NA	NA	—	—	NA	NA	NA	0.00189	—	0.000333 (J)
RE21-07-74928	21-27339	8.1000–9.1000	QBT3	NA	NA	—	—	NA	NA	NA	0.000831 (J)	—	—
RE21-07-515	21-27340	5.5000–6.5000	QBT3	0.00000111 (J)	1.7E-07	NA	NA	7.5E-07	0.0000000773 (J)	3E-07	NA	NA	NA

Table 6.10-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran[2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloroethene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**na**	**1830**	**1720**	**na**	**0.000374**	**na**	**5570**	**45.7**	**1090**[g]
Industrial SSL				**na**	**na**	**20500**	**18300**	**na**	**0.00147**	**na**	**57900**	**253**	**3610**[g]
Construction Worker SSL				**na**	**na**	**7150**	**6680**	**na**	**0.0127**	**na**	**21100**	**4600**	**3130**[g]
RE21-07-74930	21-27340	7.0000–8.0000	QBT3	NA	NA	—	—	NA	NA	NA	0.000748 (J)	—	—
RE21-07-74936	21-27342	5.0000–6.0000	QBT3	NA	NA	—	—	NA	NA	NA	0.000362 (J)	—	—

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

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

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

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] NA = Not analyzed.

[d] — = Not detected.

[e] na = Not available.

[f] Isopropylbenzene used as surrogate based on structural similarity.

[g] SSLs for xylenes used as surrogate based on structural similarity.

Table 6.10-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(a)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-74874	21-27320	0.0000–0.5000	SOIL	0.0947	—[c]	—	0.504	—	0.015009	—	—	—
RE21-07-74875	21-27320	2.0000–2.5000	QBT3	—	0.0845	—	0.063	—	0.036049	—	—	—
RE21-07-74877	21-27321	0.0000–0.5000	SOIL	0.0932	—	—	1.75	—	0.038261	—	—	—
RE21-07-74878	21-27321	2.0000–2.5000	QBT3	—	0.119	—	0.267	—	0.027596	—	—	—
RE21-07-74880	21-27322	0.0000–0.5000	SOIL	0.0672	—	—	0.567	—	0.026947	—	—	—
RE21-07-74881	21-27322	2.0000–2.5000	SOIL	—	0.33	—	1.27	—	0.014929	—	—	—
RE21-09-3584	21-27322	4.0000–5.0000	QBT3	NA[d]	—	—	0.084	NA	NA	NA	NA	NA
MD21-09-12451	21-27322	9.0000–10.0000	SOIL	NA	NA	—	0.051	NA	NA	NA	NA	NA
RE21-07-74883	21-27323	0.0000–0.5000	SOIL	0.0953	—	—	0.934	—	0.024919	—	—	—
RE21-07-74884	21-27323	2.0000–2.5000	SOIL	—	—	—	0.248	—	0.021378	—	—	—
RE21-07-74887	21-27325	0.0000–0.5000	SOIL	—	—	—	0.151	—	0.035259	—	—	—
RE21-07-74888	21-27325	2.0000–2.5000	QBT3	—	—	—	—	—	0.058734	—	—	—
RE21-07-74889	21-27326	0.0000–0.5000	SOIL	0.173	—	0.0268	2.32	—	—	2.61	—	2.31
RE21-07-74890	21-27326	2.0000–2.5000	SOIL	—	0.275	—	0.172	—	—	—	—	—
RE21-07-74891	21-27327	0.0000–0.5000	SOIL	—	—	—	0.554	—	0.02316	—	—	—
RE21-07-74892	21-27327	2.0000–2.5000	SOIL	—	—	—	0.0292	—	0.047716	—	—	—
RE21-07-74893	21-27328	0.0000–0.5000	SOIL	—	—	—	0.212	—	0.012698	—	—	—
RE21-07-74894	21-27328	2.0000–2.5000	QBT3	—	—	—	0.111	—	0.006232	—	—	—
RE21-07-74895	21-27329	0.0000–0.5000	SOIL	—	—	—	0.233	—	0.019086	—	—	—
RE21-07-74896	21-27329	2.0000–2.5000	SOIL	—	—	—	0.0487	—	0.014184	—	—	—
RE21-07-74897	21-27330	0.0000–0.5000	QBT3	—	NA	—	0.038	0.104	0.018637	—	—	—
RE21-07-74898	21-27330	2.0000–2.5000	QBT3	—	—	—	—	—	0.005374	—	—	—
RE21-07-74899	21-27331	0.0000–0.5000	QBT3	—	—	—	—	—	0.015833	—	—	—
RE21-07-74900	21-27331	2.0000–2.5000	QBT3	—	—	—	—	—	0.004473	—	—	—
RE21-07-74901	21-27332	0.0000–0.5000	SOIL	—	—	—	0.363	—	—	—	—	—

Table 6.10-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-74902	21-27332	2.0000–2.5000	QBT3	—	0.0819	—	0.0786	—	—	—	—	—
RE21-07-74903	21-27333	0.0000–0.5000	SOIL	—	—	—	0.099	—	—	—	—	—
RE21-07-74907	21-27335	2.6700–3.6700	SOIL	—	—	—	1.2	—	0.064778	—	—	—
RE21-07-74908	21-27335	4.6700–5.6700	QBT3	—	—	—	0.753	—	0.041246	—	—	—
RE21-07-74909	21-27336	2.0000–3.0000	QBT3	—	—	—	0.199	—	0.04384	—	—	—
RE21-07-74910	21-27336	4.0000–5.0000	QBT3	—	—	—	0.0574	—	0.044809	—	—	—
RE21-07-74925	21-27338	2.6700–3.6700	SOIL	—	—	—	0.0299	—	0.09688	—	—	—
RE21-07-74926	21-27338	4.6700–5.6700	SOIL	—	—	—	—	—	0.050181	—	—	—
RE21-07-74927	21-27339	6.1000–7.1000	QBT3	0.0951	0.159	—	0.0765	—	—	—	—	—
RE21-07-74928	21-27339	8.1000–9.1000	QBT3	—	—	—	0.0428	—	—	—	—	—
RE21-07-74929	21-27340	5.0000–6.0000	QBT3	—	—	—	—	—	0.02714	—	—	—
RE21-07-74931	21-27341	5.0000–6.0000	QBT3	—	—	—	0.0586	—	0.03353	4.11	0.246	4.26
RE21-07-74932	21-27341	10.0000–11.0000	QBT3	—	—	0.0846	0.167	—	0.020324	—	—	—
RE21-07-74933	21-27341	15.0000–16.0000	QBT3	—	—	—	—	—	0.03534	2.02	0.106	1.95
RE21-07-74934	21-27342	0.0000–0.5000	SOIL	—	—	—	0.601	—	0.0784458 (J-)	—	—	—
RE21-07-74935	21-27342	2.0000–3.0000	QBT3	—	—	—	—	—	0.0470277 (J-)	—	—	—
RE21-07-74936	21-27342	5.0000–6.0000	QBT3	—	—	—	—	—	0.0383585 (J-)	—	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.11-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(b)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Vanadium	Zinc
QBT3 Background Value				**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**17**	**63.5**
SOIL Background Value				**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**39.6**	**48.8**
Residential SSL				**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**391**	**23500**
Industrial SSL				**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**1550**	**92900**
RE21-07-2202	21-600498	0.0000–0.5000	SOIL	—[e]	—	—	0.486 (U)	—	—	—	—	—	—	—	—	2.55	—	—	—	NA[f]	—	—
RE21-07-2203	21-600498	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00152 (J-)	1.47 (U)	—	NA	—	—
RE21-07-2204	21-600499	0.0000–0.5000	QBT3	—	49.2	—	—	—	—	—	—	—	14.9	—	—	3.27	—	0.671 (J)	—	NA	—	—
RE21-07-2205	21-600499	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.83	—	1.51 (U)	—	NA	—	—
RE21-07-2206	21-600500	0.0000–0.5000	SOIL	—	—	—	0.501 (U)	—	—	—	—	—	—	—	—	2.5	—	—	—	NA	—	54.7
RE21-07-2207	21-600500	2.0000–3.0000	QBT3	—	—	—	—	3740 (J+)	—	—	—	—	—	—	—	10.4	0.0139	1.48 (U)	—	NA	—	—
RE21-07-2208	21-600501	0.0000–0.5000	SOIL	—	—	—	0.48 (U)	—	—	—	—	—	—	—	—	1.39	—	—	—	NA	—	—
RE21-07-2209	21-600501	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.45 (U)	—	NA	—	—
RE21-07-2210	21-600502	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.5	—	1.51 (U)	—	NA	—	—
RE21-07-2211	21-600502	2.0000–3.0000	QBT3	—	—	—	—	—	8.16	—	—	—	—	—	—	—	—	1.51 (U)	—	NA	—	—
RE21-07-2212	21-600503	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.45	—	1.46 (U)	—	NA	—	—
RE21-07-2213	21-600503	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.48 (U)	—	NA	—	—
RE21-07-2214	21-600504	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	0.945	—	—	—	43.5	0.00285	—	—	NA	—	50.4
RE21-07-2215	21-600504	2.0000–3.0000	SOIL	—	—	2.38	0.573 (U)	30200	—	—	—	—	—	0.109 (J+)	16.3 (J+)	5.62	0.0109	—	—	NA	—	—
RE21-07-2216	21-600505	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	0.138 (J+)	—	5.63	0.000807 (J-)	—	—	NA	—	96.7
RE21-07-2217	21-600505	2.0000–3.0000	QBT3	—	60.5 (J+)	—	—	—	15.7	—	—	—	—	—	—	38.9	0.00102 (J)	0.807 (J)	—	NA	—	—
RE21-07-2244	21-600512	0.0000–0.5000	SOIL	—	—	—	0.511 (U)	—	—	—	—	—	—	—	—	16.8	0.00631	—	—	NA	—	59
RE21-07-2245	21-600512	2.0000–3.0000	SOIL	—	—	—	0.496 (U)	—	—	—	—	—	—	—	—	67.2	0.00609 (J-)	—	—	NA	—	48.9
RE21-07-2246	21-600512	5.0000–6.0000	QBT3	—	85.2 (J+)	—	—	—	16	4.22	5.02	—	19.1	—	7.14 (J+)	36.8	0.00374 (J-)	1.06 (J)	—	NA	—	—
RE21-07-5147	21-601086	5.3000–6.3000	SOIL	—	—	—	0.555 (U)	—	—	—	—	—	—	0.16 (J+)	—	2.01	—	1.67 (U)	—	17.6	—	50 (J)
RE21-07-5148	21-601086	7.3000–8.3000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.3	—	1.65 (U)	—	4.18	—	—
RE21-07-5149	21-601087	5.5000–6.5000	SOIL	—	—	—	—	—	19.8	—	—	—	23.1	0.28	—	1.35	—	—	—	28.7	—	68.7
RE21-07-5150	21-601087	7.5000–8.5000	QBT3	—	—	—	—	—	12.4	—	4.81 (J)	—	—	0.144	—	6.67	—	1.57 (U)	—	4.17	—	—
RE21-07-5151	21-601088	5.5000–6.5000	SOIL	—	—	—	—	6820 (J)	—	—	43.1 (J)	—	59.7	1.81	—	1.95	0.00762	1.55 (U)	4.09	28.7	—	87
RE21-07-5152	21-601088	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	4.25	0.00088 (J)	1.53 (U)	—	3.64	—	—
RE21-07-5153	21-601089	3.3000–4.3000	SOIL	—	—	—	0.593	—	52.4	—	70.3 (J)	—	40.8	4.42	—	2.3	0.000746 (J)	—	22.8	24.1	—	126
RE21-07-5154	21-601089	5.3000–6.3000	QBT3	—	—	—	—	—	13.3	—	16 (J)	—	—	0.385	—	1.37	—	1.56 (U)	5.81	6.14	—	—

Table 6.11-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Vanadium	Zinc
QBT3 Background Value				**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**17**	**63.5**
SOIL Background Value				**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**39.6**	**48.8**
Residential SSL				**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**391**	**23500**
Industrial SSL				**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**1550**	**92900**
RE21-07-5155	21-601090	1.5000–2.5000	QBT3	4.63	91.9	—	—	3130	—	—	10.1	—	17.6	0.125	7.02	10.6	0.018 (J+)	1.55 (U)	—	19.6	—	69.5
RE21-07-5156	21-601090	3.5000–4.5000	QBT3	5.01	56.4	—	—	—	8.44 (J)	—	8.76	0.949	13.8	—	—	2.57	0.0118 (J+)	0.734 (J)	—	15.7	—	98.2
RE21-07-5157	21-601091	5.0000–6.0000	SOIL	14.5	—	—	2.08	—	42.6 (J)	—	121	0.768	120	2.63	—	3.47	0.0434 (J+)	1.58 (U)	3.84	32.2	50.1	856
RE21-07-5158	21-601091	7.0000–8.0000	QBT3	6.45	128	—	—	2810	15.8 (J)	—	45.4	—	33.6	1.48	—	25.3	0.0348 (J+)	0.57 (J)	—	21.5	—	583
RE21-07-5161	21-601093	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.42	—	1.44 (U)	—	1.05	—	—
RE21-07-5162	21-601093	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	1.84	—	0.72 (J)	—	1.46	—	—
RE21-07-5163	21-601093	18.0000–19.0000	QBT3	—	—	—	—	2510	—	—	—	—	—	—	—	1.19	—	1.43 (U)	—	4.02	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSLs used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.11-2
Summary of Organic Chemicals Detected at SWMU 21-024(b)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthylene	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Di-n-butylphthalate
Residential SSL				**1720**[a]	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**	**6110**
Industrial SSL				**18300**[a]	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**2340**	**68400**
Construction Worker SSL				**6680**[a]	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**20600**	**23800**
RE21-07-2202	21-600498	0.0000–0.5000	SOIL	—[b]	—	NA[c]	NA	—	—	0.0203 (J)	—	—	—	0.0146 (J)	—
RE21-07-2204	21-600499	0.0000–0.5000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-2206	21-600500	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	0.0129 (J)	—	—	—	0.0117 (J)	—
RE21-07-2211	21-600502	2.0000–3.0000	QBT3	—	—	NA	NA	—	—	—	—	—	0.0764 (J)	—	—
RE21-07-2215	21-600504	2.0000–3.0000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-2216	21-600505	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-2217	21-600505	2.0000–3.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-2244	21-600512	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-2245	21-600512	2.0000–3.0000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-2246	21-600512	5.0000–6.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-5147	21-601086	5.3000–6.3000	SOIL	—	—	NA	NA	—	—	0.0118 (J)	—	—	0.0964 (J)	—	—
RE21-07-5149	21-601087	5.5000–6.5000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	0.152 (J)
RE21-07-5150	21-601087	7.5000–8.5000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-5151	21-601088	5.5000–6.5000	SOIL	—	—	NA	NA	—	0.0301 (J)	0.0405	—	0.0167 (J)	0.365 (J)	0.0315 (J)	—
RE21-07-5153	21-601089	3.3000–4.3000	SOIL	—	0.0218 (J)	NA	NA	0.114	0.131	0.179	0.0596	0.0739	0.456 (J)	0.139	—
RE21-07-5176	21-601089	3.3000–4.3000	SOIL	NA	NA	0.0909	0.0519	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5154	21-601089	5.3000–6.3000	QBT3	—	—	NA	NA	—	0.0263 (J)	0.0336 (J)	0.0165 (J)	—	—	0.0243 (J)	—
RE21-07-5155	21-601090	1.5000–2.5000	QBT3	—	0.0576 (J)	NA	NA	—	0.153	0.18	0.102 (J)	—	—	0.137 (J)	0.497 (J)
RE21-07-5156	21-601090	3.5000–4.5000	QBT3	—	—	NA	NA	—	0.0262 (J)	0.036	0.0125 (J)	—	—	0.0239 (J)	—
RE21-07-5157	21-601091	5.0000–6.0000	SOIL	0.0129 (J)	0.0331 (J)	NA	NA	0.419	0.508	0.828	0.338	—	0.083 (J)	0.495	0.069 (J)
RE21-07-5158	21-601091	7.0000–8.0000	QBT3	—	0.013 (J)	NA	NA	—	0.143	0.256	0.11	—	—	0.16	0.0411 (J)

Table 6.11-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Dichlorobenzene[1,4-]	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]
Residential SSL				**32.2**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**180**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**3780**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-2202	21-600498	0.0000–0.5000	SOIL	—	0.0348	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2204	21-600499	0.0000–0.5000	QBT3	—	0.0188 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2206	21-600500	0.0000–0.5000	SOIL	—	0.0264 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2211	21-600502	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2215	21-600504	2.0000–3.0000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2216	21-600505	0.0000–0.5000	SOIL	—	0.0183 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2217	21-600505	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2244	21-600512	0.0000–0.5000	SOIL	—	0.0145 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2245	21-600512	2.0000–3.0000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2246	21-600512	5.0000–6.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5147	21-601086	5.3000–6.3000	SOIL	—	0.0122 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5149	21-601087	5.5000–6.5000	SOIL	—	0.0185 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5150	21-601087	7.5000–8.5000	QBT3	—	0.0114 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5151	21-601088	5.5000–6.5000	SOIL	—	0.0502	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5153	21-601089	3.3000–4.3000	SOIL	—	0.295	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5176	21-601089	3.3000–4.3000	SOIL	NA	NA	8.21E-06	1.53E-05	0.00000207 (J)	4.54E-06	0.000000592 (J)	2.79E-06	0.0000006 (J)	0.000000324 (J)	0.000000229 (J)
RE21-07-5154	21-601089	5.3000–6.3000	QBT3	—	0.0481	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5155	21-601090	1.5000–2.5000	QBT3	—	0.296	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5156	21-601090	3.5000–4.5000	QBT3	—	0.0396	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5157	21-601091	5.0000–6.0000	SOIL	0.237 (J)	0.429	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5158	21-601091	7.0000–8.0000	QBT3	—	0.0689	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.11-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene
Residential SSL				**na**	**6.21**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**
Industrial SSL				**na**	**23.4**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**
Construction Worker SSL				**na**	**213**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**
RE21-07-2202	21-600498	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.016 (J)	0.0261 (J)	NA	NA	NA
RE21-07-2204	21-600499	0.0000–0.5000	QBT3	NA	—	NA	NA	NA	NA	—	0.0176 (J)	NA	NA	NA
RE21-07-2206	21-600500	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	0.0126 (J)	0.0224 (J)	NA	NA	NA
RE21-07-2211	21-600502	2.0000–3.0000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	—
RE21-07-2215	21-600504	2.0000–3.0000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	0.00079 (J)
RE21-07-2216	21-600505	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	0.0174 (J)	NA	NA	NA
RE21-07-2217	21-600505	2.0000–3.0000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	0.00089 (J)
RE21-07-2244	21-600512	0.0000–0.5000	SOIL	NA	—	NA	NA	NA	NA	—	0.016 (J)	NA	NA	NA
RE21-07-2245	21-600512	2.0000–3.0000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	0.00114
RE21-07-2246	21-600512	5.0000–6.0000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	0.00064 (J)
RE21-07-5147	21-601086	5.3000–6.3000	SOIL	NA	—	NA	NA	NA	NA	—	0.0131 (J)	NA	NA	—
RE21-07-5149	21-601087	5.5000–6.5000	SOIL	NA	—	NA	NA	NA	NA	—	—	NA	NA	0.000398 (J)
RE21-07-5150	21-601087	7.5000–8.5000	QBT3	NA	—	NA	NA	NA	NA	—	—	NA	NA	—
RE21-07-5151	21-601088	5.5000–6.5000	SOIL	NA	—	NA	NA	NA	NA	—	0.0343	NA	NA	0.000304 (J)
RE21-07-5153	21-601089	3.3000–4.3000	SOIL	NA	0.0271 (J)	NA	NA	NA	NA	—	0.147	NA	NA	—
RE21-07-5176	21-601089	3.3000–4.3000	SOIL	3.26E-06	NA	7.48E-05	0.00000349 (J)	0.00000038 (J)	2.11E-06	NA	NA	0.000000522 (J)	1.77E-06	NA
RE21-07-5154	21-601089	5.3000–6.3000	QBT3	NA	—	NA	NA	NA	NA	—	0.0336 (J)	NA	NA	—
RE21-07-5155	21-601090	1.5000–2.5000	QBT3	NA	0.0484 (J)	NA	NA	NA	NA	0.249	0.315	NA	NA	0.00135
RE21-07-5156	21-601090	3.5000–4.5000	QBT3	NA	—	NA	NA	NA	NA	0.0131 (J)	0.0338 (J)	NA	NA	—
RE21-07-5157	21-601091	5.0000–6.0000	SOIL	NA	0.276	NA	NA	NA	NA	0.0842	0.518	NA	NA	—
RE21-07-5158	21-601091	7.0000–8.0000	QBT3	NA	0.0821	NA	NA	NA	NA	0.0237 (J)	0.137	NA	NA	—

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

Table 6.11-3
Summary of Radionuclides Detected or detected above BVs/FVs at SWMU 21-024(b)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-2202	21-600498	0.0000–0.5000	SOIL	0.239	—[c]	—	3.59	—	2.8	—	2.87
RE21-07-2204	21-600499	0.0000–0.5000	QBT3	0.706	0.342	0.515	15.7	0.01292	—	0.0903	—
RE21-07-2205	21-600499	2.0000–3.0000	QBT3	—	—	—	0.232	0.004857	—	—	—
RE21-07-2206	21-600500	0.0000–0.5000	SOIL	0.0824	—	—	1.37	—	—	—	—
RE21-07-2207	21-600500	2.0000–3.0000	QBT3	—	—	—	0.0369	0.011309	—	—	—
RE21-07-2208	21-600501	0.0000–0.5000	SOIL	0.118	—	0.0238	4.08	0.004914	—	—	—
RE21-07-2209	21-600501	2.0000–3.0000	QBT3	—	—	—	0.0231	—	—	—	—
RE21-07-2210	21-600502	0.0000–0.5000	QBT3	—	0.27	—	0.465	—	—	—	—
RE21-07-2211	21-600502	2.0000–3.0000	QBT3	—	—	—	0.0243	—	—	—	—
RE21-07-2212	21-600503	0.0000–0.5000	QBT3	—	0.136	—	0.231	0.007712	—	0.0919	—
RE21-07-2213	21-600503	2.0000–3.0000	QBT3	—	—	—	—	—	—	0.103	—
RE21-07-2214	21-600504	0.0000–0.5000	SOIL	3.4	NA[d]	—	70.4 (J)	—	—	—	—
RE21-07-2215	21-600504	2.0000–3.0000	SOIL	0.471	—	—	10.3 (J)	0.079681	—	—	—
RE21-07-2216	21-600505	0.0000–0.5000	SOIL	2.23	—	0.352	59.5 (J)	—	—	—	—
RE21-07-2217	21-600505	2.0000–3.0000	QBT3	0.792	—	0.164	24.2 (J)	0.032238	—	—	—
RE21-07-2244	21-600512	0.0000–0.5000	SOIL	2.64	—	0.642	76.3 (J)	—	—	—	—
RE21-07-2245	21-600512	2.0000–3.0000	SOIL	2.85	NA	0.666	131 (J)	0.038799	—	—	—
RE21-07-2246	21-600512	5.0000–6.0000	QBT3	0.536	—	—	9.16 (J)	0.013586	—	—	—
RE21-07-5147	21-601086	5.3000–6.3000	SOIL	—	—	—	0.345	—	—	—	—
RE21-07-5148	21-601086	7.3000–8.3000	QBT3	—	—	—	0.259	0.023415	—	—	—
RE21-07-5149	21-601087	5.5000–6.5000	SOIL	2.85	—	1.2	50.2	0.061433	5.01	0.208	—
RE21-07-5150	21-601087	7.5000–8.5000	QBT3	1.05	—	0.32	17.4	0.042351	2.03	0.16	—
RE21-07-5151	21-601088	5.5000–6.5000	SOIL	31	—	1.31	55.3	0.033348	—	—	—
RE21-07-5152	21-601088	7.5000–8.5000	QBT3	0.916	—	—	2.05	—	—	0.0947	—
RE21-07-5153	21-601089	3.3000–4.3000	SOIL	73	—	2	73.1	0.028888	—	—	—
RE21-07-5154	21-601089	5.3000–6.3000	QBT3	4.68	NA	0.171	5.09	0.021017	—	0.0969	—
RE21-07-5155	21-601090	1.5000–2.5000	QBT3	1.69	NA	0.248	31	—	—	0.121	—

Table 6.11-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-5156	21-601090	3.5000–4.5000	QBT3	2.43	—	0.295	37.7 (J)	0.011982	2.32	0.109	—
RE21-07-5157	21-601091	5.0000–6.0000	SOIL	18	NA	4.95	797 (J)	0.042039	8.42	0.318	3.44
RE21-07-5158	21-601091	7.0000–8.0000	QBT3	20.9	—	2.32	420 (J)	0.03551	4.95	0.264	2.65
RE21-07-5161	21-601093	8.0000–9.0000	QBT3	0.197	—	—	1.87	—	—	—	—
RE21-07-5162	21-601093	13.0000–14.0000	QBT3	0.254	—	0.0355	6.22	—	—	—	—
RE21-07-5163	21-601093	18.0000–19.0000	QBT3	0.123	—	—	2.19	—	—	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.12-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(d)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**6.58**	**na**[a]	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	—[e]	3.07	—	—	4720 (J+)	—	—	—	—	61.7	—	—	—	1.07	—	2.2	—	NA[f]	—	—
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	—	4.17	—	—	11800 (J+)	—	—	4.88	—	98.8	—	—	—	1.16	—	5.3	—	NA	—	—
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	—	3.69	—	—	6390 (J+)	—	—	10.4	—	65.2	—	—	—	1.66	—	2.7	—	NA	—	—
MD21-09-8609	19-601285	25.0000–26.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	NA	57	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	—	—	—	0.627	—	—	—	33.1	0.57	35.5	—	0.218 (J+)	NA	16.6	0.0011 (J-)	1.66 (U)	7.22	3.27 (J)	—	71.5
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	—	—	—	1.04	—	37.4	—	160	0.938	47.1	—	0.699 (J+)	NA	41.7	—	—	9.23	4.5 (J)	—	96
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	7420 (J+)	2.86	53.1	—	—	27.4	—	106	—	27.5	—	0.352 (J+)	NA	16.4	—	0.872 (J)	4.6	3.76 (J)	19.3	69.7
RE21-07-75013	21-27366	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	2.73	—	1.6 (U)	—	—	—	—
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	42.8	—	—	—	2.89	—	1.52 (U)	—	—	—	—
MD21-09-8613	21-27366	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	53 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-12448	21-27366	9.0000–10.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75015	21-27367	0.0000–0.5000	SOIL	—	—	—	1.8	—	43.2	—	109	2.24	75.9	—	0.689	—	8.61	—	1.59 (U)	20.1	14.8	—	140
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	—	—	—	—	2460 (J+)	—	—	10.2	—	—	—	—	—	4.24	—	1.46 (U)	4.68	—	—	—
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	—	—	—	0.952	—	—	—	51.7	0.514	—	—	0.168	—	5.72	—	1.58 (U)	9.14	4.3	—	55.4
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	7.82	—	—	—	—	—	7.61	—	1.48 (U)	—	—	—	—
RE21-07-75019	21-27369	0.0000–0.5000	SOIL	—	—	—	0.502 (U)	—	—	—	—	—	—	—	—	—	1.35	—	—	—	—	—	—
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	—	—	—	—	—	8.2	—	—	—	—	—	—	—	0.717 (J)	—	1.46 (U)	—	—	—	—
RE21-07-75021	21-27370	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2	—	1.53 (U)	6.42	—	—	—
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.53 (U)	2.19	—	—	—
RE21-07-75023	21-27371	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	0.621	—	—	—	—	1.89	—	1.56 (U)	4.3	2.27	—	—
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.1	—	1.51 (U)	—	—	—	—
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	—	—	—	2.3	—	36.5	—	161	2.28	56.6	—	0.826 (J+)	NA	121	0.00591 (J-)	—	11	8.51 (J)	—	145
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	—	—	—	1.11	—	23.6	—	85.1	1.17	37.3	—	0.422 (J+)	NA	65	0.00237 (J-)	—	4.34	6.79 (J)	—	107
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	—	—	—	0.493 (J)	—	—	—	—	0.554	—	—	—	NA	53.5	0.00187 (J-)	1.61 (U)	1.25	2.11 (J)	—	51.7
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	—	—	—	0.436 (J)	—	—	—	—	—	22.7	—	—	NA	28.1	0.00329 (J-)	1.65 (U)	—	—	—	—
RE21-07-6091	21-601270	4.0000–5.0000	SOIL	—	—	—	—	—	—	—	—	NA	—	—	—	—	0.52	—	—	—	NA	—	—

Table 6.12-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**6.58**	**na[a]**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219[b]**	**23[c]**	**3130**	**1560**	**400**	**10700**	**23[c]**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920[b]**	**300[c]**	**45400**	**22700**	**800**	**145000**	**310[c]**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449[b]**	**34.9[d]**	**12400**	**6190**	**800**	**463**	**92.9[d]**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-07-6092	21-601271	2.0000–3.0000	SOIL	—	—	—	—	10700	—	—	—	NA	94.1	—	—	—	0.2 (J)	—	—	—	NA	—	—
RE21-07-6093	21-601271	4.0000–5.0000	QBT3	—	—	—	—	—	14.3	—	—	NA	—	—	—	7.8	0.34	—	—	—	NA	—	—
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	—	11.8	—	1.4	7380	—	—	35.2	—	44.9	1360	0.388	15.7 (J-)	3.37	—	7.98	2.56	NA	—	158 (J+)
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	—	9.37	71.1 (J+)	—	5170	18	—	37.7	—	38.3	615	0.465	12.1 (J-)	—	—	5.82	2.77	NA	18.2	131 (J+)
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	—	—	—	1.24	8700	233	10.1	575	—	102	—	1.5	70.4 (J-)	2.04	0.00068 (J)	9.7	18.1	NA	—	258 (J+)
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	—	—	—	1.09	9460	29.1	—	199	—	74.3	—	0.691	—	1.63	—	7.17	11.3	NA	—	163 (J+)
RE21-07-6098	21-601274	2.0000–3.0000	SOIL	—	—	—	0.511 (U)	—	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—
RE21-07-6099	21-601274	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.66 (U)	—	NA	—	—
RE21-07-6100	21-601275	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	2.16	—	1.82 (U)	—	NA	—	—
RE21-07-6101	21-601275	4.0000–5.0000	QBT3	—	2.81	—	—	—	—	—	—	—	—	—	—	—	2.16	—	1.8 (U)	—	NA	—	—
RE21-07-6102	21-601276	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.48	—	1.72 (U)	—	NA	—	—
RE21-07-6103	21-601276	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	1.22	—	1.62 (U)	—	NA	—	—
RE21-07-6104	21-601277	2.0000–3.0000	SOIL	—	—	—	0.609 (U)	—	—	—	—	—	—	—	—	—	2.11	—	1.83 (U)	—	NA	—	—
RE21-07-6105	21-601277	4.0000–5.0000	SOIL	—	—	—	0.622 (U)	—	—	—	—	—	—	—	—	—	1.91	—	—	—	NA	—	—
RE21-07-6106	21-601278	2.0000–3.0000	SOIL	—	—	—	0.565 (U)	7480	—	—	—	—	—	—	—	—	—	—	1.69 (U)	—	NA	—	—
RE21-07-6107	21-601278	4.0000–5.0000	QBT3	—	3.69	121 (J+)	—	9640	—	—	5.84	—	—	—	—	6.78 (J+)	—	—	1.71 (U)	—	NA	—	—
RE21-07-6108	21-601279	2.0000–3.0000	SOIL	—	—	—	0.58 (U)	—	—	—	—	—	—	—	—	—	—	—	1.74 (U)	—	NA	—	—
RE21-07-6109	21-601279	4.0000–5.0000	SOIL	—	—	—	0.574 (U)	—	—	—	—	—	—	—	—	—	—	—	1.72 (U)	—	NA	—	—
RE21-07-6110	21-601280	2.0000–3.0000	QBT3	—	3.2	—	—	—	—	—	—	—	—	—	—	—	—	—	1.7 (U)	—	NA	—	—
RE21-07-6111	21-601280	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.64 (U)	—	NA	—	—
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.62 (U)	—	NA	—	—
RE21-07-6113	21-601281	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.63 (U)	—	NA	—	—
RE21-07-6114	21-601282	2.0000–3.0000	QBT3	—	3.31	—	—	—	—	—	—	—	—	—	—	—	—	—	1.7 (U)	—	NA	—	—

Table 6.12-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**6.58**	**na[a]**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219[b]**	**23[c]**	**3130**	**1560**	**400**	**10700**	**23[c]**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920[b]**	**300[c]**	**45400**	**22700**	**800**	**145000**	**310[c]**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449[b]**	**34.9[d]**	**12400**	**6190**	**800**	**463**	**92.9[d]**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-07-6115	21-601282	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.64 (U)	—	NA	—	—
RE21-07-6116	21-601283	2.0000–3.0000	QBT3	—	—	—	—	8810	—	—	—	—	—	—	—	—	—	—	1.67 (U)	—	NA	—	—
RE21-07-6117	21-601283	4.0000–5.0000	QBT3	—	—	—	—	4520	—	—	—	—	—	—	0.143	—	—	—	1.63 (U)	—	NA	—	—
RE21-07-6118	21-601284	2.0000–3.0000	QBT3	—	—	—	—	5150	—	—	—	—	—	—	—	—	—	—	1.67 (U)	—	NA	—	—
RE21-07-6119	21-601284	4.0000–5.0000	QBT3	—	—	—	—	2600	—	—	—	—	—	—	—	—	—	—	1.61 (U)	—	NA	—	—
MD21-09-8848	21-605286	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	NA	—	0.74 (U)	26	NA	—	NA	—	NA	NA	—	—	NA	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.12-2
Organic Chemicals Detected at SWMU 21-024(d)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Residential SSL				**3440**	**1720**[a]	**17200**	**2.22**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**
Industrial SSL				**36700**	**18300**[a]	**183000**	**8.26**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**
Construction Worker SSL				**18600**	**6680**[a]	**66800**	**75.8**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	—[b]	—	—	NA[c]	NA	NA	—	—	—	—	—
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	—	—	—	NA	NA	NA	—	—	0.0115 (J)	—	—
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	0.04	—	0.124	NA	NA	NA	0.18	0.147	0.234	0.0818 (J)	—
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-08-10278	21-27365	0.0000–0.5000	SOIL	NA	NA	NA	0.178	0.422	0.186	NA	NA	NA	NA	NA
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-08-10279	21-27365	2.0000–2.5000	SOIL	NA	NA	NA	0.256	0.457	0.188	NA	NA	NA	NA	NA
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
MD21-09-8616	21-27365	4.0000–5.0000	QBT3	NA	NA	NA	—	0.26	—	NA	NA	NA	NA	NA
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-3012	21-27367	0.0000–0.5000	SOIL	NA	NA	NA	—	0.129	0.051	NA	NA	NA	NA	NA
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-08-10281	21-27370	0.0000–0.5000	SOIL	NA	NA	NA	—	0.0285	0.0117	NA	NA	NA	NA	NA
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-08-10282	21-27370	2.0000–2.5000	QBT3	NA	NA	NA	0.0037	0.0056	0.0024 (J)	NA	NA	NA	NA	NA
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	—	0.0162 (J)	—	NA	NA	NA	0.1 (J)	—	0.42 (J)	—	—
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	0.0758	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-6090	21-601270	2.0000–3.0000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-6091	21-601270	4.0000–5.0000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-6092	21-601271	2.0000–3.0000	SOIL	—	—	0.047 (J)	NA	NA	NA	0.3 (J)	0.27 (J)	0.28 (J)	0.12 (J)	0.3 (J)

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Anthracene	Aroclor-1242	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
Residential SSL				**3440**	**1720**[a]	**17200**	**2.22**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**
Industrial SSL				**36700**	**18300**[a]	**183000**	**8.26**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**
Construction Worker SSL				**18600**	**6680**[a]	**66800**	**75.8**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**
RE21-07-6093	21-601271	4.0000–5.0000	QBT3	—	—	—	NA	NA	NA	0.11 (J)	0.1 (J)	0.11 (J)	0.052 (J)	0.11 (J)
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	—	—	—	NA	NA	NA	—	0.0155 (J)	0.0392	0.0183 (J)	—
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	—	—	—	NA	NA	NA	—	—	0.0404	0.0146 (J)	—
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	0.0181 (J-)	—	0.0538 (J-)	NA	NA	NA	—	0.0991 (J-)	0.162 (J-)	0.0555 (J-)	—
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	—	—	—	NA	NA	NA	—	—	—	—	—
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	0.0574	—	—	0.0283 (J)	—
RE21-07-6113	21-601281	4.0000–5.0000	QBT3	—	—	0.166 (J)	NA	NA	NA	0.456	0.486 (J)	0.93 (J)	0.226	—
MD21-09-8615	21-601281	9.0000–10.0000	QBT3	—	—	0.11 (J)	NA	NA	NA	0.42	0.35 (J)	0.57 (J)	0.17 (J)	0.33 (J)
RE21-07-6138	21-601283	4.0000–5.0000	QBT3	NA	NA	NA	—	—	—	NA	NA	NA	NA	NA

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Carbazole	Chrysene	Di-n-butylphthalate	Dibenz(a,h)anthracene	Dichlorobenzene[1,2-]	Dichlorobenzene[1,3-]	Dichlorobenzene[1,4-]	Fluoranthene
Residential SSL				**240000**[d]	**347**	**2600**[d]	**240**[f]	**621**	**6110**	**0.621**	**3010**	**69**[f]	**32.2**	**2290**
Industrial SSL				**2500000**[d]	**1370**	**9100**[d]	**960**[f]	**2340**	**68400**	**2.34**	**14300**	**140**[f]	**180**	**24400**
Construction Worker SSL				**952000**[e]	**4760**	**47600**[e]	**10800**[g]	**20600**	**23800**	**21.3**	**9710**	**5780**[g]	**3780**	**8910**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	—	—	—	NA	—	0.0674 (J)	—	—	—	—	0.0112 (J)
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	—	0.0751 (J)	—	NA	0.0107 (J)	0.0979 (J)	—	—	—	—	0.0182 (J)
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	—	0.0897 (J)	—	NA	0.16	0.154 (J)	—	—	—	0.000331 (J)	0.41
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	—	0.181 (J)	—	NA	—	0.184 (J)	—	—	—	—	—
RE21-08-10278	21-27365	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	—	0.307	0.248 (J)	NA	—	0.335 (J)	—	—	—	0.000241 (J)	—
RE21-08-10279	21-27365	2.0000–2.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Carbazole	Chrysene	Di-n-butylphthalate	Dibenz(a,h)anthracene	Dichlorobenzene[1,2-]	Dichlorobenzene[1,3-]	Dichlorobenzene[1,4-]	Fluoranthene
Residential SSL				**240000**[d]	**347**	**2600**[d]	**240**[f]	**621**	**6110**	**0.621**	**3010**	**69**[f]	**32.2**	**2290**
Industrial SSL				**2500000**[d]	**1370**	**9100**[d]	**960**[f]	**2340**	**68400**	**2.34**	**14300**	**140**[f]	**180**	**24400**
Construction Worker SSL				**952000**[e]	**4760**	**47600**[e]	**10800**[g]	**20600**	**23800**	**21.3**	**9710**	**5780**[g]	**3780**	**8910**
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	—	0.287	—	NA	—	0.308 (J)	—	—	—	—	—
MD21-09-8616	21-27365	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	0.000306 (J)	—
RE21-07-3012	21-27367	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	0.445 (J)	—	—	NA	—	—	—	—	—	—	0.0103 (J)
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	0.00062 (J)	—
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-08-10281	21-27370	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-08-10282	21-27370	2.0000–2.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	0.453 (J)	—	—	NA	—	—	—	—	—	—	—
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	—	0.43 (J)	—	NA	0.198 (J)	0.395	—	—	—	—	0.0407
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	—	0.159 (J)	—	NA	—	0.132 (J)	—	—	—	—	—
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-6090	21-601270	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	0.043 (J)
RE21-07-6091	21-601270	4.0000–5.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-6092	21-601271	2.0000–3.0000	SOIL	—	—	—	NA	0.5	—	0.04 (J)	—	—	—	0.88
RE21-07-6093	21-601271	4.0000–5.0000	QBT3	—	—	—	NA	0.19 (J)	—	—	0.00025 (J)	0.00025 (J)	—	0.3 (J)
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	—	—	—	NA	—	0.125 (J)	—	—	—	—	0.0142 (J)
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	—	—	—	NA	0.0204 (J)	0.0706 (J)	—	—	—	0.000307 (J)	0.0122 (J)
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	—	0.187 (J)	0.211 (J-)	NA	0.0941 (J-)	0.164 (J-)	—	—	—	0.097 (J-)	0.169 (J-)
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	—	0.0956 (J)	0.0827 (J)	NA	—	0.0568 (J)	—	—	—	—	—
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	0.131 (J)
RE21-07-6113	21-601281	4.0000–5.0000	QBT3	—	—	—	NA	0.63 (J)	—	—	—	—	—	1.17 (J)
MD21-09-8615	21-601281	9.0000–10.0000	QBT3	NA	—	—	0.1 (J)	0.42	—	0.085 (J)	—	—	—	1.1
RE21-07-6138	21-601283	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]
Residential SSL				**2290**	**na**[h]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	0.0505	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10278	21-27365	0.0000–0.5000	SOIL	NA	0.000677	0.00134	0.000175	7.31E-06	0.000604	3.33E-05	3.88E-05	3.32E-05	0.00056	1.14E-05
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10279	21-27365	2.0000–2.5000	SOIL	NA	0.000312	0.000628	9.11E-05	3.5E-06	0.000287	1.68E-05	0.000018	1.66E-05	0.000273	5.45E-06
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8616	21-27365	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3012	21-27367	0.0000–0.5000	SOIL	NA	0.000408	0.000868	0.000129	4.03E-06	0.000348	1.18E-05	1.98E-05	1.66E-05	0.000277	4.85E-06
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10281	21-27370	0.0000–0.5000	SOIL	NA	3.41E-05	7.37E-05	1.03E-05	0.000000437 (J)	2.47E-05	0.0000013 (J)	0.00000192 (J)	0.00000136 (J)	2.74E-05	0.000000547 (J)
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10282	21-27370	2.0000–2.5000	QBT3	NA	2.93E-06	6.72E-06	0.000000833 (J)	—	2.04E-06	0.000000152 (J)	0.000000195 (J)	—	2.09E-06	—
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6090	21-601270	2.0000–3.0000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6091	21-601270	4.0000–5.0000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6092	21-601271	2.0000–3.0000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6093	21-601271	4.0000–5.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]
Residential SSL				**2290**	**na**[h]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	0.0206 (J-)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6113	21-601281	4.0000–5.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8615	21-601281	9.0000–10.0000	QBT3	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6138	21-601283	4.0000–5.0000	QBT3	NA	3.93E-06	8.77E-06	0.00000127 (J)	—	0.0000036 (J)	—	0.000000278 (J)	0.000000271 (J)	5.49E-07	—

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[i]	**199**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[i]	**1090**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[i]	**10600**	**na**	**na**	**na**	**na**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	NA	NA	NA	NA	—	0.00117	—	NA	NA	NA	NA
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	NA	NA	NA	NA	0.0726	0.0027	—	NA	NA	NA	NA
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA
RE21-08-10278	21-27365	0.0000–0.5000	SOIL	4.82E-06	2.67E-06	6.98E-06	0.000215	NA	NA	NA	0.00439	0.000414	1.54E-05	0.000234
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-08-10279	21-27365	2.0000–2.5000	SOIL	0.00000241 (J)	0.00000126 (J)	3.55E-06	0.000109	NA	NA	NA	0.00169	0.000166	6.63E-06	0.000106
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
MD21-09-8616	21-27365	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzodioxins (Total)
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[i]	**199**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[i]	**1090**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[i]	**10600**	**na**	**na**	**na**	**na**
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-07-3012	21-27367	0.0000–0.5000	SOIL	0.000004	0.00000128 (J)	5.95E-06	0.000171	NA	NA	NA	0.0024	0.000267	5.59E-06	9.47E-05
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	NA	NA	NA	NA	—	0.000495 (J)	—	NA	NA	NA	NA
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-08-10281	21-27370	0.0000–0.5000	SOIL	0.000000501 (J)	—	0.000000743 (J)	1.35E-05	NA	NA	NA	0.000221	1.44E-05	0.00000065 (J)	9.03E-06
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-08-10282	21-27370	2.0000–2.5000	QBT3	—	—	—	4.14E-07	NA	NA	NA	1.78E-05	—	—	4.75E-07
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	NA	NA	NA	NA
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-07-6090	21-601270	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	0.019	NA	NA	NA	NA
RE21-07-6091	21-601270	4.0000–5.0000	SOIL	NA	NA	NA	NA	—	—	0.014	NA	NA	NA	NA
RE21-07-6092	21-601271	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.13 (J)	—	0.012	NA	NA	NA	NA
RE21-07-6093	21-601271	4.0000–5.0000	QBT3	NA	NA	NA	NA	0.057 (J)	—	0.014	NA	NA	NA	NA
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	NA	NA	NA	NA	0.0127 (J)	—	—	NA	NA	NA	NA
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	NA	NA	NA	NA	0.0123 (J)	—	—	NA	NA	NA	NA
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	NA	NA	NA	NA	0.05 (J-)	—	—	NA	NA	NA	NA
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	NA	NA	NA	NA
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	NA	NA	NA	NA	0.0226 (J)	—	—	NA	NA	NA	NA
RE21-07-6113	21-601281	4.0000–5.0000	QBT3	NA	NA	NA	NA	0.222	—	—	NA	NA	NA	NA
MD21-09-8615	21-601281	9.0000–10.0000	QBT3	NA	NA	NA	NA	0.21 (J)	NA	NA	NA	NA	NA	NA
RE21-07-6138	21-601283	4.0000–5.0000	QBT3	—	—	—	4.8E-07	NA	NA	NA	0.000028 (J)	0.00000284 (J)	—	—

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloroethene
Residential SSL				**na**	**na**	**na**	**1830**	**1720**	**0.000045**	**na**	**0.000374**	**na**	**5570**	**45.7**
Industrial SSL				**na**	**na**	**na**	**20500**	**18300**	**0.000204**	**na**	**0.00147**	**na**	**57900**	**253**
Construction Worker SSL				**na**	**na**	**na**	**7150**	**6680**	**0.000284**	**na**	**0.0127**	**na**	**21100**	**4600**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	—	—
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	NA	NA	NA	0.0161 (J)	0.0148 (J)	NA	NA	NA	NA	—	—
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	NA	NA	NA	0.402	0.308	NA	NA	NA	NA	—	—
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-08-10278	21-27365	0.0000–0.5000	SOIL	2.65E-06	6.36E-06	0.000102	NA	NA	2.23E-06	8.93E-05	6.11E-06	5.97E-05	NA	NA
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	0.00333	0.00232
RE21-08-10279	21-27365	2.0000–2.5000	SOIL	0.00000112 (J)	3.12E-06	4.68E-05	NA	NA	0.000001	3.88E-05	2.72E-06	3.04E-05	NA	NA
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	0.00677	0.00292
MD21-09-8616	21-27365	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	—	—
RE21-07-3012	21-27367	0.0000–0.5000	SOIL	0.00000118 (J)	4.93E-06	5.73E-05	NA	NA	8.62E-07	3.05E-05	5.52E-06	4.48E-05	NA	NA
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	0.0032	0.00236
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	0.00166	0.0014
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	—	0.00105
RE21-08-10281	21-27370	0.0000–0.5000	SOIL	0.000000186 (J)	0.000000784 (J)	9.9E-06	NA	NA	—	1.21E-06	8.12E-07	6.37E-06	NA	NA
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	0.00148	—
RE21-08-10282	21-27370	2.0000–2.5000	QBT3	—	—	2.91E-07	NA	NA	—	—	0.0000000861 (J)	1.8E-07	NA	NA
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	NA	NA	NA	—	—	NA	NA	NA	NA	0.00304	—
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	NA	NA	NA	—	0.0756 (J)	NA	NA	NA	NA	NA	NA
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	0.00897	0.0041
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	NA	NA
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	0.00225	0.00213
RE21-07-6090	21-601270	2.0000–3.0000	SOIL	NA	NA	NA	—	0.037 (J)	NA	NA	NA	NA	0.0003 (J)	—
RE21-07-6091	21-601270	4.0000–5.0000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	—	—
RE21-07-6092	21-601271	2.0000–3.0000	SOIL	NA	NA	NA	0.37	0.62	NA	NA	NA	NA	—	—
RE21-07-6093	21-601271	4.0000–5.0000	QBT3	NA	NA	NA	0.13 (J)	0.22 (J)	NA	NA	NA	NA	—	—
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	NA	NA	NA	—	0.0169 (J)	NA	NA	NA	NA	—	—
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	NA	NA	NA	—	0.015 (J)	NA	NA	NA	NA	—	—

Table 6.12-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloroethene
Residential SSL				**na**	**na**	**na**	**1830**	**1720**	**0.000045**	**na**	**0.000374**	**na**	**5570**	**45.7**
Industrial SSL				**na**	**na**	**na**	**20500**	**18300**	**0.000204**	**na**	**0.00147**	**na**	**57900**	**253**
Construction Worker SSL				**na**	**na**	**na**	**7150**	**6680**	**0.000284**	**na**	**0.0127**	**na**	**21100**	**4600**
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	NA	NA	NA	0.151 (J-)	0.158 (J-)	NA	NA	NA	NA	—	—
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	NA	NA	NA	—	—	NA	NA	NA	NA	—	—
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	NA	NA	NA	0.146 (J)	0.127 (J)	NA	NA	NA	NA	—	—
RE21-07-6113	21-601281	4.0000–5.0000	QBT3	NA	NA	NA	0.86 (J)	1.3 (J)	NA	NA	NA	NA	—	—
MD21-09-8615	21-601281	9.0000–10.0000	QBT3	NA	NA	NA	0.59	0.95	NA	NA	NA	NA	NA	NA
RE21-07-6138	21-601283	4.0000–5.0000	QBT3	—	—	1.38E-07	NA	NA	—	1.2E-06	—	—	NA	NA

Source: SSLs from NMED (2009, 108070).

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

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

[b] — = Not detected.

[c] NA= Not analyzed.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[f] EPA Region 6 SSL (EPA 2007, 099314).

[g] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) (carcinogens multiplied by 10 to adjust to 10-5 risk value) and equation and parameters from NMED (2009, 108070).

[h] na= Not available.

[i] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table 6.12-3
Summary of Radionuclides Detected or Detected above BV/FVs at SWMU 21-024(d)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Europium-152	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**na**	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**2.9**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**11**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**9.1**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE19-07-6120	19-601285	10.0000–11.0000	QBT3	—[c]	—	—	—	0.385	—	0.025119	—	—	—
RE19-07-6121	19-601285	15.0000–16.0000	QBT3	—	—	—	—	1.01	—	0.030802	—	—	—
RE19-07-6122	19-601285	20.0000–21.0000	QBT3	0.0379	—	—	—	0.492	—	0.053224	—	—	—
RE21-07-75010	21-27365	0.0000–0.5000	SOIL	0.471	—	—	0.104	16.8	—	0.037773	—	—	—
RE21-07-75011	21-27365	2.0000–2.5000	SOIL	0.708	0.103	—	0.166	16.3	—	0.123101	4.49	—	2.81
RE21-07-75012	21-27365	3.0000–3.5000	QBT3	0.302	0.106	—	—	3.92	—	0.095431	2.29	0.0914	—
RE21-07-75013	21-27366	0.0000–0.5000	SOIL	—	—	—	—	1.14	—	—	—	—	—
RE21-07-75014	21-27366	2.0000–2.5000	QBT3	—	0.158	—	—	0.533	0.315	0.007864	—	—	—
RE21-07-75015	21-27367	0.0000–0.5000	SOIL	2.21	—	—	0.593	32.7	—	0.061404	9.03	0.538	6.58
RE21-07-75016	21-27367	2.0000–2.5000	QBT3	0.228	—	—	0.0679	3.97	—	0.018172	—	0.1	—
RE21-07-75017	21-27368	0.0000–0.5000	SOIL	0.619	—	—	0.112	14.1	—	0.016641	3.17	—	2.57
RE21-07-75018	21-27368	2.0000–2.5000	QBT3	0.115	0.179	—	—	1.9	—	0.009855	—	—	—
RE21-07-75019	21-27369	0.0000–0.5000	SOIL	—	—	—	—	0.196	—	—	—	—	—
RE21-07-75020	21-27369	2.0000–2.5000	QBT3	—	—	—	—	0.101	—	—	—	—	—
RE21-07-75021	21-27370	0.0000–0.5000	SOIL	0.184	—	—	—	6.22	—	—	—	—	—
RE21-07-75022	21-27370	2.0000–2.5000	QBT3	—	—	—	—	0.246	—	—	—	—	—
RE21-07-75023	21-27371	0.0000–0.5000	SOIL	0.0471	—	—	—	1.04	—	—	—	—	—
RE21-07-75024	21-27371	2.0000–2.5000	QBT3	—	0.117	—	—	1.07	—	—	—	—	—
RE21-07-75025	21-27372	0.0000–0.5000	SOIL	1.73	—	—	0.168	16.5	—	0.138667	6	0.63	3.67
RE21-07-75026	21-27372	2.0000–2.5000	SOIL	0.284	0.128	—	0.069	3.5	—	0.110556	3.35	—	2.44
RE21-07-75027	21-27373	0.0000–0.5000	SOIL	0.222	—	—	0.0469	5.45	—	—	—	—	—
RE21-07-75028	21-27373	2.0000–2.5000	SOIL	—	0.165	—	—	0.765	—	0.100607	—	—	—
RE21-07-6090	21-601270	2.0000–3.0000	SOIL	—	—	0.393	—	0.18 (J)	—	—	—	—	—

Table 6.12-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Europium-152	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**na**	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**2.9**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**11**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**9.1**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-6094	21-601272	1.0000–2.0000	SOIL	2.31 (J)	0.312	—	0.123	33.8 (J)	—	0.046735	—	—	—
RE21-07-6095	21-601272	3.0000–4.0000	QBT3	0.539 (J)	0.312	—	0.0405	7.55 (J)	—	0.031771	—	—	—
RE21-07-6096	21-601273	1.0000–2.0000	SOIL	1.12 (J)	0.254	—	0.106 (J-)	19.3 (J-)	—	—	4.28	0.222	—
RE21-07-6097	21-601273	2.0000–3.0000	SOIL	0.209 (J)	NA[d]	—	—	4.38 (J-)	—	—	—	—	—
RE21-07-6098	21-601274	2.0000–3.0000	SOIL	—	—	—	—	0.0558	0.263	—	—	—	—
RE21-07-6101	21-601275	4.0000–5.0000	QBT3	—	—	—	—	0.137	—	—	—	—	—
RE21-07-6102	21-601276	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	0.11	—
RE21-07-6106	21-601278	2.0000–3.0000	SOIL	0.0664	—	—	—	0.0384	0.219	—	—	—	—
RE21-07-6107	21-601278	4.0000–5.0000	QBT3	—	—	—	—	0.0307	—	0.037936	—	0.0955	—
RE21-07-6108	21-601279	2.0000–3.0000	SOIL	—	—	—	—	0.0241	—	—	—	—	—
RE21-07-6109	21-601279	4.0000–5.0000	SOIL	—	—	—	—	—	0.854	0.05887	—	—	—
RE21-07-6112	21-601281	2.0000–3.0000	QBT3	0.123	—	—	—	—	—	—	—	0.115	—
RE21-07-6114	21-601282	2.0000–3.0000	QBT3	—	—	—	—	0.027	—	—	—	0.106	—
RE21-07-6115	21-601282	4.0000–5.0000	QBT3	—	—	—	—	0.0502	—	—	—	—	—
RE21-07-6116	21-601283	2.0000–3.0000	QBT3	—	—	—	—	2.1	—	—	—	0.119	—
RE21-07-6117	21-601283	4.0000–5.0000	QBT3	—	—	—	0.0246	5.02	—	—	—	—	—
MD21-09-8614	21-601283	9.0000–10.0000	QBT3	NA	NA	NA	—	1.24	NA	NA	NA	NA	NA
RE21-07-6119	21-601284	4.0000–5.0000	QBT3	—	—	—	—	0.0258	—	—	—	—	—
MD21-09-8848	21-605286	0.0000–0.5000	SOIL	0.276	NA	NA	0.0315	3.37	NA	—	—	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.13-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(e)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-07-74568	21-27242	0.0000–0.5000	SOIL	—[e]	—	—	—	—	—	—	—	—	—	—	—	0.848	—	1.7	0.00284 (J+)	—	—	2.22	—	—
RE21-07-74582	21-27242	2.0000–3.0000	QBT3	—	—	—	—	—	—	7.87	—	—	—	—	—	0.993	—	—	—	1.68 (U)	—	—	—	—
RE21-07-74569	21-27243	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.658	—	1.68	—	1.6 (U)	—	—	—	—
RE21-07-74583	21-27243	2.0000–3.0000	SOIL	—	—	—	—	0.564 (U)	—	—	—	—	—	—	—	—	—	—	—	1.69 (U)	—	—	—	—
RE21-07-74572	21-27244	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.563	—	1.34	—	1.57 (U)	—	8.54	—	71.6
RE21-07-74577	21-27244	2.0000–3.0000	QBT3	—	—	—	—	—	—	7.66	—	—	—	—	—	1.5	—	—	—	1.53 (U)	—	—	—	—
RE21-07-74571	21-27245	0.0000–0.5000	SOIL	—	3.23	—	—	2.32	—	21.4	—	26.5	—	72.1	0.595	1.23	—	1.28	—	1.75 (U)	1.1	22.5	—	124
RE21-07-74580	21-27245	2.0000–3.0000	QBT3	8150 (J+)	—	3.31	47.1	—	—	11.1	—	6.25	—	—	—	1.46	—	—	—	1.65 (U)	—	—	—	—
RE21-07-74570	21-27246	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.17	—	1.6 (U)	—	2.3	—	50.1
RE21-07-74581	21-27246	2.0000–3.0000	QBT3	—	—	—	—	—	—	11.2	—	—	—	—	—	1.67	—	—	—	1.61 (U)	—	—	—	—
RE21-07-74575	21-27247	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.579	—	4.03	0.000866 (J)	1.63 (U)	—	—	—	—
RE21-07-74578	21-27247	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.605	—	2.3	—	1.56 (U)	—	—	—	—
RE21-07-74574	21-27248	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.592	—	13.3	—	1.56 (U)	—	—	—	58.2
RE21-07-74579	21-27248	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.933	—	1.36	—	1.51 (U)	—	—	—	—
RE21-07-74573	21-27249	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	0.599	—	2.29	—	1.67 (U)	—	3.1	—	—
RE21-07-74576	21-27249	2.0000–3.0000	QBT3	—	—	—	—	—	—	18.4	—	5.11	—	—	—	2.24	—	—	—	1.49 (U)	—	—	—	—
RE21-07-74584	21-27250	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA[f]	—	2.51	—	1.6 (U)	—	2.71 (J+)	—	—
RE21-07-74585	21-27250	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.292	—	1.06	—	1.54 (U)	—	—	—	—
RE21-07-74586	21-27251	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	2.2	—	1.62 (U)	—	1.98 (J+)	—	50.1
RE21-07-74587	21-27251	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.245	—	1.95	—	1.51 (U)	—	—	—	—
RE21-07-74588	21-27252	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	2.54	0.000609 (J)	1.54 (U)	—	3.62 (J+)	—	—
RE21-07-74589	21-27252	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.354	—	0.929 (J)	—	1.6 (U)	—	—	—	—

Table 6.13-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-07-74590	21-27253	0.0000–0.5000	SOIL	—	—	—	—	0.506 (U)	—	—	—	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-74591	21-27253	1.0000–1.5000	QBT3	—	—	—	—	—	—	—	—	—	—	20.9	—	0.289	—	—	—	1.55 (U)	—	—	—	—
RE21-07-74592	21-27254	0.0000–0.5000	SOIL	—	—	—	—	0.564 (U)	—	—	—	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-74593	21-27254	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.319	—	—	—	1.61 (U)	—	—	—	—
RE21-07-74594	21-27255	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	—	1.68 (U)	—	1.92 (J+)	—	—
RE21-07-74595	21-27255	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.311	—	—	—	1.69 (U)	—	—	—	—
RE21-07-74615	21-27259	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.983 (J)	—	—	—	0.566 (J)	—	—	—	—
RE21-07-74616	21-27259	15.0000–16.0000	QBT3	—	—	—	—	—	—	9.12 (J)	—	4.75	—	—	—	0.973 (J)	—	—	—	1.04 (J)	—	—	—	—
RE21-07-74617	21-27259	20.0000–21.0000	QBT3	—	—	—	—	—	—	14 (J)	—	5.29	—	—	—	1.73 (J)	—	—	—	0.962 (J)	—	—	—	—
RE21-07-74618	21-27260	0.0000–0.5000	SOIL	—	—	—	—	0.655	—	—	—	—	—	28.1	—	0.479 (J)	—	9.72	0.0012 (J)	—	—	3.49	—	78.9
RE21-07-74619	21-27260	2.0000–3.0000	QBT3	—	—	4.98	58.6	—	—	8.81 (J)	3.23	8.23	—	25.8	—	0.66 (J)	—	2.34	—	1.55	—	—	21.1	—
RE21-07-74620	21-27260	5.0000–6.0000	QBT3	—	—	—	—	—	—	7.35 (J)	—	—	—	—	—	1.02 (J)	—	2.04	—	1.02 (J)	—	—	—	—
RE21-07-74627	21-27263	3.0000–4.0000	SOIL	—	NA	—	—	0.557 (U)	—	—	—	—	0.777	—	—	0.351	—	1.3 (J-)	—	—	—	—	—	—
RE21-07-74628	21-27263	5.0000–6.0000	SOIL	—	NA	—	—	0.557 (U)	—	—	—	—	—	—	—	0.487	15.5	—	—	—	—	—	—	—
RE21-07-74629	21-27264	4.0000–5.0000	SOIL	—	NA	—	—	—	—	—	—	29.2	30.3	28.2	0.267 (J+)	0.755	—	—	0.000891 (J)	—	1.24	62	—	84.7
RE21-07-74630	21-27264	6.0000–7.0000	SOIL	—	NA	—	—	0.526 (U)	—	—	—	—	—	—	—	0.32	—	2.12 (J-)	0.00177 (J)	1.58 (U)	—	—	—	—
RE21-07-74631	21-27265	4.2500–5.2500	SOIL	—	NA	—	—	—	—	—	—	—	—	65.8	0.127 (J+)	0.541	—	1.4 (J-)	—	—	—	2.08	—	66.1
RE21-07-74632	21-27265	6.2500–7.2500	QBT3	—	NA	—	—	—	6260	8.55	—	—	—	86.8	—	0.956	—	1.41 (J-)	—	0.933 (J)	—	—	—	—
RE21-07-74633	21-27266	4.5000–5.5000	SOIL	—	NA	—	—	0.531 (U)	—	—	—	—	—	—	—	0.684	—	1.55	0.00136 (J)	—	—	2.02	—	—
RE21-07-74634	21-27266	6.5000–7.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—	1.61	—	1.83	0.000564 (J)	1.6 (U)	—	—	—	—
RE21-07-74635	21-27267	5.0000–6.0000	SOIL	—	NA	—	—	0.498 (U)	—	—	—	—	—	—	—	0.684	—	—	0.00114 (J)	—	—	—	—	—
RE21-07-74636	21-27267	7.0000–8.0000	QBT3	—	NA	—	—	—	—	10.3	—	—	—	—	—	0.644	—	9.27	—	1.53 (U)	—	—	—	—
RE21-07-74637	21-27268	3.7500–4.7500	SOIL	—	NA	—	—	0.508 (U)	—	—	—	—	—	—	—	0.829	—	—	—	—	—	—	—	—
RE21-07-74638	21-27268	5.7500–6.7500	QBT3	—	NA	—	—	—	—	8.6	—	—	—	—	—	1.25	—	1.44	—	1.62 (U)	—	—	—	—
RE21-07-74639	21-27269	1.2500–2.2500	SOIL	—	NA	—	—	2.93	—	—	—	130	—	161	2.95	1.94	—	1.47	—	—	1.52	9.02	—	102 (J+)
RE21-07-74640	21-27269	3.2500–4.2500	QBT3	—	NA	—	47.8 (J+)	2.4	—	9.6	—	29.7	—	17.8	1.02	0.46	—	23.8	—	1.68 (U)	—	5.08	—	72.3 (J+)
RE21-07-74641	21-27270	2.0000–3.0000	SOIL	—	NA	—	—	15	—	—	—	25.9	—	23	0.485	0.776	—	1.54	—	—	—	2.2	—	82.6 (J+)
RE21-07-74642	21-27270	4.0000–5.0000	SOIL	—	NA	—	—	6.55	—	—	—	—	—	—	0.219	0.507	—	1.62	—	1.55 (U)	—	—	—	67.1 (J+)
RE21-07-74643	21-27271	6.0000–7.0000	SOIL	—	—	—	—	0.517 (U)	—	—	—	—	—	—	—	0.502 (J)	—	6.11	0.000667 (J)	—	—	—	—	—
RE21-07-74644	21-27271	8.0000–9.0000	QBT3	—	—	—	—	—	—	9.95 (J)	—	—	—	—	—	1.8 (J)	—	2.71	0.000704 (J)	0.691 (J)	—	—	—	—

Table 6.13-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Vanadium	Zinc
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**0.1**	**na**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**17**	**63.5**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**391**	**23500**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**1550**	**92900**
RE21-07-74645	21-27272	6.0000–7.0000	SOIL	—	—	—	—	0.564 (U)	—	—	—	—	—	—	—	0.597 (J)	—	2.2	—	—	—	—	—	52.9
RE21-07-74646	21-27272	9.0000–10.0000	QBT3	—	—	—	—	—	—	—	—	5.72	—	—	—	0.516 (J)	—	2.43	—	0.608 (J)	—	—	—	—
RE21-07-74647	21-27273	3.5000–4.0000	SOIL	—	—	—	—	0.566 (U)	—	—	—	—	—	31.7	—	0.368 (J)	—	2.83	—	—	—	—	—	—
RE21-07-74648	21-27273	5.0000–6.0000	QBT3	—	—	—	—	—	—	12.4 (J)	—	—	—	—	—	1.37 (J)	—	2.58	—	0.607 (J)	—	—	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSLs used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.13-2
Summary of Organic Chemicals Detected at SWMU 21-024(e)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Residential SSL				**3440**	**1720**[a]	**67500**	**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**39600**
Industrial SSL				**36700**	**18300**[a]	**851000**	**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**369000**
Construction Worker SSL				**18600**	**6680**[a]	**263000**	**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**148000**
RE21-07-74568	21-27242	0.0000–0.5000	SOIL	—[b]	—	—	0.00711 (J)	—	—	—	—	—	—	—
RE21-07-74582	21-27242	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74569	21-27243	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74583	21-27243	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74572	21-27244	0.0000–0.5000	SOIL	—	—	—	—	0.0131 (J)	—	0.0364	—	—	—	—
RE21-07-74577	21-27244	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74571	21-27245	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74580	21-27245	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74570	21-27246	0.0000–0.5000	SOIL	—	—	0.00437 (J)	—	—	—	—	—	—	—	—
RE21-07-74581	21-27246	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74575	21-27247	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74578	21-27247	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74574	21-27248	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74579	21-27248	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74573	21-27249	0.0000–0.5000	SOIL	0.0188 (J)	—	—	0.0349 (J)	0.117	0.125	0.203	—	0.0786	—	—
RE21-07-74576	21-27249	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74584	21-27250	0.0000–0.5000	SOIL	—	—	NA[c]	—	—	—	—	—	—	—	NA
RE21-07-74585	21-27250	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74586	21-27251	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	NA
RE21-07-74587	21-27251	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74589	21-27252	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-4045	21-27253	1.0000–1.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74591	21-27253	1.0000–1.5000	QBT3	—	—	0.00284 (J)	—	—	—	—	—	—	—	—
RE21-07-74592	21-27254	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	NA
RE21-07-74593	21-27254	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74595	21-27255	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—

Table 6.13-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Residential SSL				**3440**	**1720**[a]	**67500**	**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**39600**
Industrial SSL				**36700**	**18300**[a]	**851000**	**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**369000**
Construction Worker SSL				**18600**	**6680**[a]	**263000**	**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**148000**
RE21-07-74616	21-27259	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74617	21-27259	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	0.00471 (J)
RE21-07-74618	21-27260	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	NA
RE21-07-74619	21-27260	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74628	21-27263	5.0000–6.0000	SOIL	—	—	0.00385 (J)	—	—	—	—	—	—	—	—
RE21-07-74629	21-27264	4.0000–5.0000	SOIL	—	0.0261 (J)	0.00904 (J)	0.0108 (J)	—	—	—	—	—	—	—
RE21-07-74631	21-27265	4.2500–5.2500	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74635	21-27267	5.0000–6.0000	SOIL	—	—	—	0.00753 (J)	0.0784	—	0.165	0.0291 (J)	—	—	—
RE21-07-74637	21-27268	3.7500–4.7500	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74639	21-27269	1.2500–2.2500	SOIL	—	—	—	—	—	—	—	0.125	—	—	—
RE21-07-74640	21-27269	3.2500–4.2500	QBT3	—	—	—	—	—	—	—	0.0386	—	0.115 (J)	—
RE21-07-74641	21-27270	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74642	21-27270	4.0000–5.0000	SOIL	—	—	—	—	—	—	—	—	—	0.383	—
RE21-07-74643	21-27271	6.0000–7.0000	SOIL	0.0223 (J)	—	—	0.117	0.498	0.406	0.738	0.184	—	—	—
RE21-07-74644	21-27271	8.0000–9.0000	QBT3	—	—	—	—	—	—	0.0224 (J)	—	0.0107 (J)	—	—
RE21-07-74645	21-27272	6.0000–7.0000	SOIL	—	—	—	0.0177 (J)	0.111	—	0.193	—	—	—	—
RE21-07-74646	21-27272	9.0000–10.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74647	21-27273	3.5000–4.0000	SOIL	0.0142 (J)	—	—	0.0741	0.242 (J)	0.197 (J)	0.315 (J)	0.0946 (J)	—	0.0801 (J)	—

Table 6.13-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chloroaniline[4-]	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Ethylbenzene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[2-]
Residential SSL				**24**[d]	**621**	**6110**	**32.2**	**69.7**	**2290**	**2290**	**6.21**	**3210**[f]	**199**	**310**[d]
Industrial SSL				**86**[d]	**2340**	**68400**	**180**	**385**	**24400**	**24400**	**23.4**	**14900**[f]	**1090**	**4100**[d]
Construction Worker SSL				**1084**[e]	**20600**	**23800**	**3780**	**6630**	**8910**	**8910**	**213**	**10300**[f]	**10600**	**1240**[e]
RE21-07-74568	21-27242	0.0000–0.5000	SOIL	—	—	—	—	—	0.0143 (J)	—	—	—	—	—
RE21-07-74582	21-27242	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74569	21-27243	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74583	21-27243	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74572	21-27244	0.0000–0.5000	SOIL	—	0.0196 (J)	—	—	—	0.0275 (J)	—	—	—	—	—
RE21-07-74577	21-27244	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74571	21-27245	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74580	21-27245	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74570	21-27246	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74581	21-27246	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74575	21-27247	0.0000–0.5000	SOIL	—	—	—	—	—	0.0162 (J)	—	—	—	—	—
RE21-07-74578	21-27247	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74574	21-27248	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74579	21-27248	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74573	21-27249	0.0000–0.5000	SOIL	—	0.144	—	—	—	0.278	0.0306 (J)	—	—	—	0.0113 (J)
RE21-07-74576	21-27249	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74584	21-27250	0.0000–0.5000	SOIL	—	—	0.0622 (J)	—	NA	0.0122 (J)	—	—	NA	NA	—
RE21-07-74585	21-27250	2.0000–2.5000	QBT3	—	—	0.0925 (J)	—	—	—	—	—	—	—	—
RE21-07-74586	21-27251	0.0000–0.5000	SOIL	—	—	—	—	NA	0.0268 (J)	—	—	NA	NA	—
RE21-07-74587	21-27251	2.0000–2.5000	QBT3	—	—	0.0828 (J)	—	—	—	—	—	—	—	—
RE21-07-74589	21-27252	2.0000–2.5000	QBT3	—	—	0.0839 (J)	—	—	—	—	—	—	—	—
RE21-07-4045	21-27253	1.0000–1.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-74591	21-27253	1.0000–1.5000	QBT3	—	—	0.0735 (J)	—	—	—	—	—	0.0508 (J)	—	—
RE21-07-74592	21-27254	0.0000–0.5000	SOIL	—	—	0.0404 (J)	—	NA	0.0181 (J)	—	—	NA	NA	—
RE21-07-74593	21-27254	2.0000–2.5000	QBT3	—	—	0.1 (J)	—	—	—	—	—	0.00106 (J)	—	—
RE21-07-74595	21-27255	2.0000–2.5000	QBT3	—	—	0.0992 (J)	—	—	—	—	—	0.000685 (J)	—	—

Table 6.13-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chloroaniline[4-]	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Ethylbenzene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[2-]
Residential SSL				**24**[d]	**621**	**6110**	**32.2**	**69.7**	**2290**	**2290**	**6.21**	**3210**[f]	**199**	**310**[d]
Industrial SSL				**86**[d]	**2340**	**68400**	**180**	**385**	**24400**	**24400**	**23.4**	**14900**[f]	**1090**	**4100**[d]
Construction Worker SSL				**1084**[e]	**20600**	**23800**	**3780**	**6630**	**8910**	**8910**	**213**	**10300**[f]	**10600**	**1240**[e]
RE21-07-74616	21-27259	15.0000–16.0000	QBT3	—	—	0.0443 (J)	—	—	—	—	—	—	—	—
RE21-07-74617	21-27259	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74618	21-27260	0.0000–0.5000	SOIL	—	—	0.0497 (J)	—	NA	0.0143 (J)	—	—	NA	NA	—
RE21-07-74619	21-27260	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	0.000915 (J)	—	—
RE21-07-74628	21-27263	5.0000–6.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-74629	21-27264	4.0000–5.0000	SOIL	—	—	—	—	0.000663 (J)	0.0162 (J)	—	—	—	—	—
RE21-07-74631	21-27265	4.2500–5.2500	SOIL	—	—	—	—	—	0.0192 (J)	—	—	—	0.00251 (J+)	—
RE21-07-74635	21-27267	5.0000–6.0000	SOIL	—	0.0792	—	—	—	0.0913	—	—	—	—	—
RE21-07-74637	21-27268	3.7500–4.7500	SOIL	—	—	—	—	—	—	—	—	0.000419 (J)	—	—
RE21-07-74639	21-27269	1.2500–2.2500	SOIL	0.263 (J)	—	0.121 (J)	0.000635 (J)	—	0.0411	—	—	—	—	—
RE21-07-74640	21-27269	3.2500–4.2500	QBT3	—	—	0.0987 (J)	—	—	—	—	—	—	—	—
RE21-07-74641	21-27270	2.0000–3.0000	SOIL	—	—	0.0822 (J)	—	—	—	—	—	—	—	—
RE21-07-74642	21-27270	4.0000–5.0000	SOIL	0.407 (J)	—	0.326 (J)	—	—	0.0207 (J)	—	—	—	—	—
RE21-07-74643	21-27271	6.0000–7.0000	SOIL	—	0.48	—	—	—	0.781	0.0205 (J)	—	—	—	—
RE21-07-74644	21-27271	8.0000–9.0000	QBT3	—	0.0186 (J)	—	—	—	0.0351	—	—	—	—	—
RE21-07-74645	21-27272	6.0000–7.0000	SOIL	—	0.108	—	—	—	0.182	—	—	—	—	—
RE21-07-74646	21-27272	9.0000–10.0000	QBT3	—	0.0268 (J)	—	—	—	0.0458	—	—	—	—	—
RE21-07-74647	21-27273	3.5000–4.0000	SOIL	—	0.239 (J)	—	—	—	0.512	0.0192 (J)	0.168 (J)	—	—	—

Table 6.13-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trichloroethene	Trimethylbenzene[1,2,4-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**45**	**na**[g]	**na**	**1830**	**1720**	**5570**	**45.7**	**62**[d]	**9550**	**1090**[h]
Industrial SSL				**252**	**na**	**na**	**20500**	**18300**	**57900**	**253**	**260**[d]	**31500**	**3610**[h]
Construction Worker SSL				**702**	**na**	**na**	**7150**	**6680**	**21100**	**4600**	**688**[e]	**27500**	**3130**[h]
RE21-07-74568	21-27242	0.0000–0.5000	SOIL	—	NA	NA	—	0.0119 (J)	0.00373	—	—	—	—
RE21-07-74582	21-27242	2.0000–3.0000	QBT3	—	NA	NA	—	—	0.00206	—	—	—	—
RE21-07-74569	21-27243	0.0000–0.5000	SOIL	—	NA	NA	—	—	0.00506	0.00118	—	—	—
RE21-07-74583	21-27243	2.0000–3.0000	SOIL	—	NA	NA	—	—	0.000466 (J)	—	—	—	—
RE21-07-74572	21-27244	0.0000–0.5000	SOIL	—	NA	NA	0.0114 (J)	0.0231 (J)	0.00145	0.00062 (J)	—	—	—
RE21-07-74577	21-27244	2.0000–3.0000	QBT3	—	NA	NA	—	—	0.000448 (J)	—	—	—	—
RE21-07-74571	21-27245	0.0000–0.5000	SOIL	—	NA	NA	—	—	0.01	—	—	—	—
RE21-07-74580	21-27245	2.0000–3.0000	QBT3	—	NA	NA	—	—	0.00222	—	—	—	—
RE21-07-74570	21-27246	0.0000–0.5000	SOIL	—	NA	NA	—	—	0.00145	—	—	—	—
RE21-07-74581	21-27246	2.0000–3.0000	QBT3	—	NA	NA	—	—	0.000448 (J)	—	—	—	—
RE21-07-74575	21-27247	0.0000–0.5000	SOIL	—	NA	NA	—	0.0129 (J)	0.00747	0.00515	—	—	—
RE21-07-74578	21-27247	2.0000–3.0000	QBT3	—	NA	NA	—	—	0.0025	—	—	—	—
RE21-07-74574	21-27248	0.0000–0.5000	SOIL	—	NA	NA	—	—	0.0249	0.0164	—	—	—
RE21-07-74579	21-27248	2.0000–3.0000	QBT3	—	NA	NA	—	0.0121 (J)	0.00561	—	—	—	—
RE21-07-74573	21-27249	0.0000–0.5000	SOIL	0.0209 (J)	NA	NA	0.22	0.212	0.00141	0.00408	—	—	—
RE21-07-74576	21-27249	2.0000–3.0000	QBT3	—	NA	NA	—	—	0.000795 (J)	—	—	—	—
RE21-07-74584	21-27250	0.0000–0.5000	SOIL	—	NA	NA	—	0.0121 (J)	NA	NA	NA	NA	NA
RE21-07-74585	21-27250	2.0000–2.5000	QBT3	—	NA	NA	—	—	0.00495	—	—	—	—
RE21-07-74586	21-27251	0.0000–0.5000	SOIL	—	NA	NA	—	0.022 (J)	NA	NA	NA	NA	NA
RE21-07-74587	21-27251	2.0000–2.5000	QBT3	—	NA	NA	—	—	0.00391	—	—	—	—
RE21-07-74589	21-27252	2.0000–2.5000	QBT3	—	NA	NA	—	—	0.00262	—	—	—	—
RE21-07-4045	21-27253	1.0000–1.5000	QBT3	NA	0.00000478 (J)	0.000000411 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-07-74591	21-27253	1.0000–1.5000	QBT3	—	NA	NA	—	—	0.00849	—	—	—	—
RE21-07-74592	21-27254	0.0000–0.5000	SOIL	—	NA	NA	—	0.0312 (J)	NA	NA	NA	NA	NA
RE21-07-74593	21-27254	2.0000–2.5000	QBT3	—	NA	NA	—	—	0.00899	—	—	—	—
RE21-07-74595	21-27255	2.0000–2.5000	QBT3	—	NA	NA	—	—	0.0209	—	—	—	—

Table 6.13-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trichloroethene	Trimethylbenzene[1,2,4-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**45**	**na**[g]	**na**	**1830**	**1720**	**5570**	**45.7**	**62**[d]	**9550**	**1090**[h]
Industrial SSL				**252**	**na**	**na**	**20500**	**18300**	**57900**	**253**	**260**[d]	**31500**	**3610**[h]
Construction Worker SSL				**702**	**na**	**na**	**7150**	**6680**	**21100**	**4600**	**688**[e]	**27500**	**3130**[h]
RE21-07-74616	21-27259	15.0000–16.0000	QBT3	—	NA	NA	—	—	—	—	—	—	—
RE21-07-74617	21-27259	20.0000–21.0000	QBT3	—	NA	NA	—	—	—	—	—	—	—
RE21-07-74618	21-27260	0.0000–0.5000	SOIL	—	NA	NA	—	0.0148 (J)	NA	NA	NA	NA	NA
RE21-07-74619	21-27260	2.0000–3.0000	QBT3	—	NA	NA	—	—	—	—	—	—	—
RE21-07-74628	21-27263	5.0000–6.0000	SOIL	—	NA	NA	—	—	—	—	—	—	—
RE21-07-74629	21-27264	4.0000–5.0000	SOIL	—	NA	NA	0.0176 (J)	—	0.00402	—	0.00034 (J)	0.00157	0.00411
RE21-07-74631	21-27265	4.2500–5.2500	SOIL	—	NA	NA	—	0.0235 (J)	—	—	—	—	—
RE21-07-74635	21-27267	5.0000–6.0000	SOIL	—	NA	NA	0.0228 (J)	0.0841	—	—	—	—	—
RE21-07-74637	21-27268	3.7500–4.7500	SOIL	—	NA	NA	—	—	0.000426 (J)	—	—	—	—
RE21-07-74639	21-27269	1.2500–2.2500	SOIL	—	NA	NA	0.0154 (J)	0.0487	—	—	—	—	—
RE21-07-74640	21-27269	3.2500–4.2500	QBT3	—	NA	NA	—	—	—	—	—	—	—
RE21-07-74641	21-27270	2.0000–3.0000	SOIL	—	NA	NA	—	0.0114 (J)	0.00044 (J)	—	—	—	—
RE21-07-74642	21-27270	4.0000–5.0000	SOIL	—	NA	NA	0.0108 (J)	0.0255 (J)	—	—	—	—	—
RE21-07-74643	21-27271	6.0000–7.0000	SOIL	—	NA	NA	0.316	0.768	—	—	—	—	—
RE21-07-74644	21-27271	8.0000–9.0000	QBT3	—	NA	NA	0.0162 (J)	0.0303 (J)	—	—	—	—	—
RE21-07-74645	21-27272	6.0000–7.0000	SOIL	—	NA	NA	0.064	0.179	—	—	—	—	—
RE21-07-74646	21-27272	9.0000–10.0000	QBT3	—	NA	NA	0.0184 (J)	0.0434	—	—	—	—	—
RE21-07-74647	21-27273	3.5000–4.0000	SOIL	—	NA	NA	0.257	0.555 (J)	—	—	—	—	—

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

[b] — = Not detected.

[c] NA= Not analyzed.

[d] EPA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[f] Isopropylbenzene used as surrogate based on structural similarity.

[g] na = Not available.

[h] SSLs for xylenes used as surrogates based on structural similarity.

Table 6.13-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(e)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-74568	21-27242	0.0000–0.5000	SOIL	0.0407	—[c]	—	0.561	—	0.01487	—	—	—
RE21-07-74582	21-27242	2.0000–3.0000	QBT3	—	—	—	0.0643	—	0.038647	—	—	—
RE21-07-74569	21-27243	0.0000–0.5000	SOIL	—	—	—	0.303	—	0.036577	—	—	—
RE21-07-74583	21-27243	2.0000–3.0000	SOIL	—	—	—	0.111	—	—	—	—	—
RE21-07-74572	21-27244	0.0000–0.5000	SOIL	—	—	—	0.893	—	—	—	—	—
RE21-07-74571	21-27245	0.0000–0.5000	SOIL	1.86	—	0.329	56.6	—	—	12.3	0.589	8.96
RE21-07-74580	21-27245	2.0000–3.0000	QBT3	0.105	—	—	2.52	—	—	—	—	—
RE21-07-74570	21-27246	0.0000–0.5000	SOIL	0.0802	—	—	0.934	—	—	—	—	—
RE21-07-74581	21-27246	2.0000–3.0000	QBT3	—	—	—	—	—	0.027444	—	—	—
RE21-07-74575	21-27247	0.0000–0.5000	SOIL	—	—	—	6.66	—	0.028921	—	—	—
RE21-07-74578	21-27247	2.0000–3.0000	QBT3	—	—	—	0.12	—	—	—	—	—

Table 6.13-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-74574	21-27248	0.0000–0.5000	SOIL	0.1	NA[d]	—	2.54	—	0.016943	—	—	—
RE21-07-74579	21-27248	2.0000–3.0000	QBT3	0.0242	—	—	1.26	—	—	—	—	—
RE21-07-74573	21-27249	0.0000–0.5000	SOIL	0.0949	—	—	1.7	—	—	—	—	—
RE21-07-74576	21-27249	2.0000–3.0000	QBT3	—	—	—	0.0484	—	—	—	—	—
RE21-07-74584	21-27250	0.0000–0.5000	SOIL	0.135	NA	—	2.52	—	0.017846	—	—	—
RE21-07-74585	21-27250	2.0000–2.5000	QBT3	—	0.158	—	0.437	0.111	0.010917	—	—	—
RE21-07-74586	21-27251	0.0000–0.5000	SOIL	0.191	—	—	4.23	—	—	—	—	—
RE21-07-74587	21-27251	2.0000–2.5000	QBT3	—	—	—	0.15	—	0.014319	—	—	—
RE21-07-74588	21-27252	0.0000–0.5000	SOIL	—	—	—	0.393	—	—	—	—	—
RE21-07-74589	21-27252	2.0000–2.5000	QBT3	—	0.0856	—	—	—	—	—	—	—
RE21-07-74591	21-27253	1.0000–1.5000	QBT3	—	—	—	0.0457	—	0.007133	—	—	—
RE21-07-74592	21-27254	0.0000–0.5000	SOIL	—	—	—	0.0988	—	—	—	—	—
RE21-07-74593	21-27254	2.0000–2.5000	QBT3	—	0.207	—	0.0449	—	0.01582	—	—	—
RE21-07-74594	21-27255	0.0000–0.5000	SOIL	—	—	—	0.3	—	—	—	—	—
RE21-07-74615	21-27259	10.0000–11.0000	QBT3	—	—	—	0.0416	—	—	—	—	—
RE21-07-74618	21-27260	0.0000–0.5000	SOIL	0.133	NA	—	4.03	—	0.005895	—	—	—
RE21-07-74619	21-27260	2.0000–3.0000	QBT3	0.0749	—	—	1.51	—	—	—	0.103	—
RE21-07-74620	21-27260	5.0000–6.0000	QBT3	—	—	—	0.333	—	—	—	—	—

Table 6.13-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-74627	21-27263	3.0000–4.0000	SOIL	—	—	—	0.12 (J-)	—	0.108333	—	—	—
RE21-07-74628	21-27263	5.0000–6.0000	SOIL	—	—	—	—	—	0.045126	—	—	—
RE21-07-74629	21-27264	4.0000–5.0000	SOIL	—	—	—	0.0581 (J-)	—	0.045377	3.54	—	—
RE21-07-74630	21-27264	6.0000–7.0000	SOIL	—	—	—	—	—	0.049336	—	—	—
RE21-07-74631	21-27265	4.2500–5.2500	SOIL	0.393	—	0.0265 (J-)	3.03 (J-)	—	—	2.96	—	—
RE21-07-74632	21-27265	6.2500–7.2500	QBT3	—	—	—	0.112 (J-)	—	—	—	—	—
RE21-07-74633	21-27266	4.5000–5.5000	SOIL	0.221	—	0.0208	2.03	—	—	3.41	0.232	2.45
RE21-07-74634	21-27266	6.5000–7.5000	QBT3	—	—	—	0.279	—	—	—	—	—
RE21-07-74635	21-27267	5.0000–6.0000	SOIL	—	0.0814	—	0.379	—	—	—	—	—
RE21-07-74636	21-27267	7.0000–8.0000	QBT3	—	—	—	0.0524	—	0.023919	—	—	—
RE21-07-74637	21-27268	3.7500–4.7500	SOIL	—	—	—	0.262	—	—	—	—	—
RE21-07-74638	21-27268	5.7500–6.7500	QBT3	—	—	—	0.0987	—	—	—	0.102	—
RE21-07-74639	21-27269	1.2500–2.2500	SOIL	0.169	0.231	—	2.85	—	—	6.28	0.335	4.83
RE21-07-74640	21-27269	3.2500–4.2500	QBT3	0.0904	NA	—	0.633	—	—	3.26	0.22	3.12
RE21-07-74641	21-27270	2.0000–3.0000	SOIL	0.0857	0.227	—	0.612	—	0.018934	—	—	—
RE21-07-74642	21-27270	4.0000–5.0000	SOIL	0.0313	0.179	—	0.207	—	0.024928	—	—	—
RE21-07-74643	21-27271	6.0000–7.0000	SOIL	—	—	—	0.111	—	—	—	—	—
RE21-07-74644	21-27271	8.0000–9.0000	QBT3	—	—	—	—	—	0.016426	—	—	—

Table 6.13-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**5.7**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**1900**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**800**	**320000**	**220**	**43**	**160**
RE21-07-74645	21-27272	6.0000–7.0000	SOIL	—	—	—	0.153	—	—	—	—	—
RE21-07-74646	21-27272	9.0000–10.0000	QBT3	—	—	—	0.0249	—	—	—	—	—

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.14-1
Summary of Inorganic Chemicals Detected at SWMU 21-024(g)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**300**[d]	**12400**	**6190**	**217000**
RE21-07-75871	21-27592	0.0000–0.5000	SOIL	—[e]	NA[f]	—	—	—	0.541 (U)	—	—	—	—	—	—
RE21-07-75872	21-27592	2.0000–2.5000	QBT3	—	NA	—	—	—	—	—	18.7	—	—	—	—
RE21-07-75873	21-27593	0.0000–0.5000	SOIL	—	NA	—	—	—	0.506 (U)	—	—	—	—	—	—
RE21-07-75874	21-27593	2.0000–2.5000	QBT3	—	NA	3.34	53.5	—	—	—	—	—	4.82	—	—
RE21-07-75875	21-27594	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	—	—	—	0.844	—
RE21-07-75876	21-27594	2.0000–2.5000	SOIL	—	NA	—	—	—	0.556 (U)	—	—	—	—	—	—
RE21-07-75877	21-27595	0.0000–0.5000	SOIL	—	NA	—	—	—	0.807	—	—	—	23.1	1.25	—
RE21-07-75878	21-27595	2.0000–2.5000	QBT3	—	NA	6.22	—	—	—	2240 (J+)	11.7	—	11.4	—	—
RE21-07-75879	21-27596	0.0000–0.5000	SOIL	—	NA	—	—	—	0.537 (U)	—	—	—	—	—	—
RE21-07-75880	21-27596	2.0000–2.5000	QBT3	—	NA	—	—	—	—	—	11.6	—	—	—	—
RE21-07-75881	21-27597	0.0000–0.5000	SOIL	—	NA	—	—	—	0.609 (U)	—	—	—	—	—	—
RE21-07-75882	21-27597	2.0000–2.5000	QBT3	10800 (J+)	NA	—	—	—	—	—	23.7	—	—	—	—
RE21-07-75883	21-27598	0.0000–0.5000	SOIL	—	—	—	—	—	1.14	—	—	—	25.4	1.17	—
RE21-07-75884	21-27598	2.0000–2.5000	SOIL	—	—	—	—	—	0.803	—	—	—	16.2	0.685	—
RE21-07-75885	21-27599	0.0000–0.5000	SOIL	—	—	—	—	—	0.571 (U)	—	—	—	—	—	—
RE21-07-75886	21-27599	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	37.5	—	—	—	—
RE21-07-75887	21-27600	0.0000–0.5000	SOIL	—	NA	—	—	—	0.591 (U)	—	—	—	—	—	—
RE21-07-75888	21-27600	2.0000–2.5000	QBT3	—	NA	—	—	—	—	—	19.2	—	—	—	—
RE21-07-75889	21-27601	0.0000–0.5000	SOIL	—	NA	—	—	—	0.563 (U)	—	—	—	—	—	—
RE21-07-75890	21-27601	2.0000–2.5000	QBT3	15000 (J+)	NA	3.98	130	—	—	—	10.6	—	7.51	—	—
RE21-07-75891	21-27602	0.0000–0.5000	SOIL	—	NA	—	—	—	0.554 (U)	—	—	—	—	—	—
RE21-07-75892	21-27602	2.0000–2.5000	QBT3	10900 (J+)	NA	3.49	73.8	—	—	2290	—	—	—	—	—
RE21-07-75893	21-27603	0.0000–0.5000	SOIL	—	NA	—	—	—	0.543 (U)	—	—	—	—	—	—
RE21-07-75894	21-27603	2.0000–2.5000	SOIL	—	NA	—	—	—	0.522 (U)	—	—	—	—	—	—
RE21-07-75895	21-27604	0.0000–0.5000	SOIL	—	NA	—	—	—	0.57 (U)	—	—	—	—	—	—
RE21-07-75896	21-27604	2.0000–2.5000	SOIL	—	NA	—	—	—	0.543 (U)	—	—	—	—	—	—
RE21-07-75897	21-27605	0.0000–0.5000	QBT3	—	NA	—	—	—	—	—	8.36	—	—	—	—
RE21-07-75898	21-27605	2.0000–2.5000	QBT3	—	NA	—	—	—	—	—	11.9	—	—	—	—

Table 6.14-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**300**[d]	**12400**	**6190**	**217000**
RE21-07-75911	21-27606	0.0000–1.0000	SOIL	—	NA	—	—	—	0.561 (U)	—	—	—	—	—	—
RE21-07-75912	21-27606	5.0000–6.0000	SOIL	—	NA	—	—	—	0.54 (U)	—	31.6	—	—	—	—
RE21-07-75913	21-27606	10.0000–11.0000	QBT3	—	NA	—	—	—	—	—	15.2	—	—	—	—
RE21-07-75914	21-27607	0.0000–1.0000	SOIL	—	NA	—	—	—	0.533 (U)	—	—	—	—	—	—
RE21-07-75915	21-27607	5.0000–6.0000	QBT3	—	NA	—	—	—	—	—	12.4	—	—	—	—
RE21-07-75916	21-27607	10.0000–11.0000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-75917	21-27608	0.0000–0.5000	SOIL	—	—	—	—	—	0.537 (U)	—	—	—	—	—	—
RE21-07-75918	21-27608	2.0000–3.0000	QBT3	—	—	6.93	—	—	—	—	11	—	—	—	—
RE21-07-75919	21-27608	5.0000–6.0000	QBT3	—	—	5.21	—	—	—	—	13.8	—	4.67	—	—
RE21-07-75920	21-27609	3.2000–4.2000	SOIL	—	—	—	—	—	0.597 (U)	—	—	—	—	—	—
RE21-07-75921	21-27609	8.2000–9.2000	QBT3	—	—	—	—	—	—	—	28.3	—	—	—	—
RE21-07-75922	21-27609	13.2000–14.2000	QBT3	—	—	—	—	—	—	4600	—	—	—	—	—
RE21-07-75923	21-27610	0.0000–0.5000	SOIL	—	—	—	—	—	0.574 (U)	—	—	—	—	—	—
RE21-07-75924	21-27610	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	7.79	—	—	—	—
RE21-07-75925	21-27610	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	45.6	—	—	—	—
RE21-07-75926	21-27611	0.0000–0.5000	SOIL	—	—	—	—	—	0.532 (U)	—	—	—	—	—	—
RE21-07-75927	21-27611	2.0000–3.0000	QBT3	—	—	—	50.4	—	—	—	12.3	—	6.81	—	—
RE21-07-75928	21-27611	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	7.15	—	—	—	—
RE21-07-75929	21-27612	0.0000–0.5000	SOIL	—	NA	—	—	—	0.576 (U)	—	—	—	—	—	—
RE21-07-75930	21-27612	2.0000–2.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-75931	21-27613	0.0000–0.5000	SOIL	—	NA	—	—	—	0.619 (U)	—	—	—	—	—	—
RE21-07-75932	21-27613	2.0000–2.5000	SOIL	—	NA	—	—	—	0.606 (U)	—	—	—	—	—	—
RE21-07-75933	21-27614	1.8000–2.8000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75934	21-27614	3.8000–4.8000	QBT3	—	0.511 (UJ)	—	—	—	—	—	26.2	—	—	—	—
RE21-07-75935	21-27615	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75936	21-27615	4.5000–5.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75937	21-27616	0.0000–0.5000	SOIL	—	—	—	—	—	0.565 (U)	—	—	—	—	—	—
RE21-07-75938	21-27616	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	21.4	—	—	—	—
RE21-07-75939	21-27617	0.0000–1.0000	QBT3	—	—	—	—	—	—	—	10.2	5.49	—	—	—
RE21-07-75940	21-27617	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.14-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**300**[d]	**12400**	**6190**	**217000**
RE21-07-75941	21-27618	0.0000–1.0000	QBT3	—	—	—	—	—	—	—	24	—	—	—	—
RE21-07-75942	21-27618	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	16.8	—	—	—	—
RE21-07-75943	21-27619	4.0000–5.0000	SOIL	—	—	—	—	—	0.585 (U)	—	—	—	—	—	—
RE21-07-75944	21-27619	6.0000–7.0000	QBT3	—	—	—	—	—	—	8450 (J-)	—	—	—	—	—
RE21-07-75945	21-27620	4.6000–5.6000	QBT3	—	—	3.47	—	—	—	—	—	—	—	—	—
RE21-07-75946	21-27620	6.6000–7.6000	QBT3	8670 (J+)	0.548 (U)	10.8	79	1.44	—	2580 (J+)	13.4 (J)	—	5.19	—	—
RE21-07-75947	21-27621	3.6000–4.6000	QBT3	—	—	2.85	—	—	—	—	12.9 (J)	—	—	—	—
RE21-07-75948	21-27621	5.6000–6.6000	QBT3	—	—	—	—	—	—	—	10.8 (J)	—	—	—	—
RE21-07-75949	21-27622	4.0000–5.0000	QBT3	8440	—	3.89	96	1.41 (J)	3.05 (U)	6570	14.5	—	7.32	—	25800 (J+)
RE21-07-75950	21-27622	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	11.7	—	—	—	—
RE21-07-75951	21-27623	4.0000–5.0000	QBT3	—	—	—	54.3	—	—	—	11.8	—	—	NA	—
RE21-07-75952	21-27623	6.0000–7.0000	QBT3	—	—	—	—	—	—	3260 (J-)	—	—	—	NA	—
RE21-07-75970	21-27625	0.0000–0.5000	QBT3	—	—	3.88	67.6	—	—	—	—	—	—	—	—
RE21-07-75971	21-27625	5.0000–6.0000	QBT3	—	—	4.35	55.9	—	—	2500	11	—	5.39	—	—
RE21-07-75972	21-27625	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	26.4	—	—	—	—
RE21-07-75973	21-27626	0.0000–0.5000	SOIL	—	—	—	—	—	0.549 (U)	—	—	—	—	—	—
RE21-07-75974	21-27626	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	28.8	—	—	—	—
RE21-07-75975	21-27626	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	18.3	—	—	—	—
RE21-07-75976	21-27627	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75977	21-27627	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75978	21-27627	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75979	21-27628	0.0000–0.5000	SOIL	—	—	—	—	—	0.537 (U)	—	—	—	—	—	—
RE21-07-75980	21-27628	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	20.8	—	—	—	—
RE21-07-75981	21-27629	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75982	21-27629	2.0000–3.0000	QBT3	—	—	3.4	65.8	—	—	—	8.43	—	—	—	—
RE21-07-75983	21-27630	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75984	21-27630	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	21.2	—	—	—	—
RE21-08-10263	21-603268	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-08-10264	21-603268	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	9.56	—	—	—	—
MD21-09-8750	21-605246	2.0000–2.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA

Table 6.14-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Uranium	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2770**	**2.4**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**915**	**1.82**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**na**	**235**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**na**	**3410**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**na**	**929**	**1550**	**92900**
RE21-07-75871	21-27592	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75872	21-27592	2.0000–2.5000	QBT3	—	—	—	—	—	—	1.59 (U)	—	—	—	—
RE21-07-75873	21-27593	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75874	21-27593	2.0000–2.5000	QBT3	17.2	—	—	—	1.16	—	1.66 (U)	—	—	—	—
RE21-07-75875	21-27594	0.0000–0.5000	SOIL	—	—	0.139	—	—	—	—	—	2.43	—	69.9
RE21-07-75876	21-27594	2.0000–2.5000	SOIL	—	—	—	—	—	0.00062 (J-)	—	—	—	—	57.8
RE21-07-75877	21-27595	0.0000–0.5000	SOIL	37.7	—	0.786	—	3.26	—	—	—	5.79	—	156
RE21-07-75878	21-27595	2.0000–2.5000	QBT3	12.1	—	0.249	—	1.42	—	1.75 (U)	—	2.55	—	131
RE21-07-75879	21-27596	0.0000–0.5000	SOIL	22.5	—	—	—	—	—	—	—	—	—	—
RE21-07-75880	21-27596	2.0000–2.5000	QBT3	13	—	—	—	—	—	1.53 (U)	—	—	—	—
RE21-07-75881	21-27597	0.0000–0.5000	SOIL	23	—	—	—	1.66	—	—	—	2	—	—
RE21-07-75882	21-27597	2.0000–2.5000	QBT3	16.1	—	—	—	—	—	0.757 (J)	—	—	—	—
RE21-07-75883	21-27598	0.0000–0.5000	SOIL	35.1	—	1.14	—	3.58	—	—	—	6.83	—	221
RE21-07-75884	21-27598	2.0000–2.5000	SOIL	—	—	0.525	—	1.94	—	1.69 (U)	—	4.37	—	181
RE21-07-75885	21-27599	0.0000–0.5000	SOIL	28.1	—	—	—	—	—	1.71 (U)	—	—	—	—
RE21-07-75886	21-27599	2.0000–2.5000	QBT3	12.1	—	—	—	—	—	1.63 (U)	—	—	—	—
RE21-07-75887	21-27600	0.0000–0.5000	SOIL	—	—	—	—	—	—	1.77 (U)	—	—	—	—
RE21-07-75888	21-27600	2.0000–2.5000	QBT3	—	—	—	—	—	—	1.63 (U)	—	—	—	—
RE21-07-75889	21-27601	0.0000–0.5000	SOIL	36.2	—	—	—	0.865 (J)	0.000745 (J-)	—	937	2	—	65.2
RE21-07-75890	21-27601	2.0000–2.5000	QBT3	20.8	2070	—	—	0.612 (J)	0.00138 (J-)	1.82 (U)	—	—	21.3	—
RE21-07-75891	21-27602	0.0000–0.5000	SOIL	—	—	—	—	0.962 (J)	—	—	—	—	—	—
RE21-07-75892	21-27602	2.0000–2.5000	QBT3	—	—	—	—	0.609 (J)	—	1.59 (U)	—	—	—	—
RE21-07-75893	21-27603	0.0000–0.5000	SOIL	—	—	—	—	0.88 (J)	—	—	—	—	—	—
RE21-07-75894	21-27603	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75895	21-27604	0.0000–0.5000	SOIL	—	—	—	—	—	—	1.71 (U)	—	—	—	110
RE21-07-75896	21-27604	2.0000–2.5000	SOIL	—	—	—	—	—	—	1.63 (U)	—	—	—	—
RE21-07-75897	21-27605	0.0000–0.5000	QBT3	—	—	—	—	0.604 (J)	—	1.66 (U)	—	—	—	—
RE21-07-75898	21-27605	2.0000–2.5000	QBT3	—	—	—	—	—	—	1.61 (U)	—	—	—	—
RE21-07-75911	21-27606	0.0000–1.0000	SOIL	—	—	—	—	1.15	—	1.68 (U)	—	—	—	57.5
RE21-07-75912	21-27606	5.0000–6.0000	SOIL	—	—	—	—	1.63	—	1.62 (U)	—	—	—	53.6
RE21-07-75913	21-27606	10.0000–11.0000	QBT3	—	—	—	—	1.29	—	1.59 (U)	—	—	—	—
RE21-07-75914	21-27607	0.0000–1.0000	SOIL	—	—	—	—	1.44	—	1.6 (U)	—	—	—	—
RE21-07-75915	21-27607	5.0000–6.0000	QBT3	—	—	—	—	1.24	—	1.58 (U)	—	—	—	—

Table 6.14-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Uranium	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2770**	**2.4**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**915**	**1.82**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**na**	**235**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**na**	**3410**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**na**	**929**	**1550**	**92900**
RE21-07-75916	21-27607	10.0000–11.0000	QBT3	—	—	—	—	1.14	0.00119 (J+)	1.44 (U)	—	—	—	—
RE21-07-75917	21-27608	0.0000–0.5000	SOIL	—	—	—	—	1.56	—	1.61 (U)	—	—	—	—
RE21-07-75918	21-27608	2.0000–3.0000	QBT3	—	—	—	—	—	—	1.66 (U)	—	—	—	—
RE21-07-75919	21-27608	5.0000–6.0000	QBT3	—	—	0.13	—	—	—	1.6 (U)	—	—	—	—
RE21-07-75920	21-27609	3.2000–4.2000	SOIL	—	—	—	—	—	—	1.79 (U)	—	16.6	—	64.5
RE21-07-75921	21-27609	8.2000–9.2000	QBT3	—	—	—	—	—	—	1.61 (U)	—	—	—	—
RE21-07-75922	21-27609	13.2000–14.2000	QBT3	—	—	—	—	1.32	—	1.66 (U)	—	—	—	—
RE21-07-75923	21-27610	0.0000–0.5000	SOIL	—	—	—	—	—	—	1.72 (U)	—	—	—	—
RE21-07-75924	21-27610	5.0000–6.0000	QBT3	—	—	—	—	—	—	1.66 (U)	—	—	—	—
RE21-07-75925	21-27610	10.0000–11.0000	QBT3	—	—	—	—	—	—	1.63 (U)	—	—	—	—
RE21-07-75926	21-27611	0.0000–0.5000	SOIL	35	—	—	—	1.26	—	1.6 (U)	—	—	—	86.1
RE21-07-75927	21-27611	2.0000–3.0000	QBT3	27.5	—	—	—	—	—	1.66 (U)	—	—	—	—
RE21-07-75928	21-27611	5.0000–6.0000	QBT3	17.9	—	—	—	1.69	—	1.61 (U)	—	—	—	—
RE21-07-75929	21-27612	0.0000–0.5000	SOIL	—	—	—	—	—	—	1.73 (U)	—	—	—	60.6
RE21-07-75930	21-27612	2.0000–2.5000	QBT3	20.3	—	—	—	—	—	1.55 (U)	—	—	—	—
RE21-07-75931	21-27613	0.0000–0.5000	SOIL	24.5	—	—	—	—	—	—	—	—	—	80.3
RE21-07-75932	21-27613	2.0000–2.5000	SOIL	—	—	—	—	—	—	1.82 (U)	—	—	—	—
RE21-07-75933	21-27614	1.8000–2.8000	QBT3	41.9 (J+)	—	—	—	1.21	—	1.85 (U)	—	2.89	—	—
RE21-07-75934	21-27614	3.8000–4.8000	QBT3	109 (J+)	—	—	8.75	—	—	1.84 (U)	—	4.23	—	—
RE21-07-75935	21-27615	2.5000–3.5000	QBT3	—	—	0.109	—	—	—	1.04 (J)	—	4.73	—	—
RE21-07-75936	21-27615	4.5000–5.5000	QBT3	—	—	—	—	—	—	1.71 (U)	—	2.45	—	—
RE21-07-75937	21-27616	0.0000–0.5000	SOIL	—	—	—	—	—	—	1.7 (U)	—	6.25	—	—
RE21-07-75938	21-27616	2.0000–3.0000	QBT3	—	—	—	—	—	—	1.75 (U)	—	3.02	—	—
RE21-07-75939	21-27617	0.0000–1.0000	QBT3	—	—	—	—	—	—	1.71 (U)	—	—	—	—
RE21-07-75940	21-27617	2.0000–3.0000	QBT3	—	—	—	—	—	—	1.81 (U)	—	—	—	—
RE21-07-75941	21-27618	0.0000–1.0000	QBT3	—	—	—	—	0.922 (J)	—	1.67 (U)	—	—	—	—
RE21-07-75942	21-27618	2.0000–3.0000	QBT3	—	—	—	—	—	—	1.59 (U)	—	—	—	—
RE21-07-75943	21-27619	4.0000–5.0000	SOIL	—	—	—	—	—	—	1.75 (U)	—	—	—	—
RE21-07-75944	21-27619	6.0000–7.0000	QBT3	—	—	—	—	1.12	—	1.64 (U)	—	—	—	—
RE21-07-75945	21-27620	4.6000–5.6000	QBT3	20.9 (J)	—	—	—	—	—	1.74 (U)	—	—	—	—
RE21-07-75946	21-27620	6.6000–7.6000	QBT3	32.5 (J)	—	—	—	—	—	2.08 (U)	—	—	—	—
RE21-07-75947	21-27621	3.6000–4.6000	QBT3	—	—	—	—	—	—	1.71 (U)	—	—	—	—
RE21-07-75948	21-27621	5.6000–6.6000	QBT3	—	—	—	—	—	—	1.68 (U)	—	—	—	—

Table 6.14-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Sodium	Uranium	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**2770**	**2.4**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**915**	**1.82**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**na**	**235**	**391**	**23500**
Industrial SSL				**800**	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**na**	**3410**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**na**	**929**	**1550**	**92900**
RE21-07-75949	21-27622	4.0000–5.0000	QBT3	16.8	1940 (J+)	0.392	11.1	1.39	—	9.14 (U)	—	—	—	—
RE21-07-75950	21-27622	6.0000–7.0000	QBT3	—	—	—	—	1.6	—	0.658 (J)	—	—	—	—
RE21-07-75951	21-27623	4.0000–5.0000	QBT3	—	—	—	—	2.19	—	1 (J)	—	—	—	—
RE21-07-75952	21-27623	6.0000–7.0000	QBT3	—	—	—	—	1.38	—	1.66 (U)	—	—	—	—
RE21-07-75970	21-27625	0.0000–0.5000	QBT3	—	—	—	—	1.88	—	16.9 (U)	—	—	—	—
RE21-07-75971	21-27625	5.0000–6.0000	QBT3	—	—	—	—	—	0.00248	15.6 (U)	—	—	—	—
RE21-07-75972	21-27625	10.0000–11.0000	QBT3	—	—	—	—	—	0.000838 (J)	1.52 (U)	—	—	—	—
RE21-07-75973	21-27626	0.0000–0.5000	SOIL	—	—	—	—	4.6	—	16.5 (U)	—	—	—	—
RE21-07-75974	21-27626	5.0000–6.0000	QBT3	—	—	—	—	1.36	—	15.4 (U)	—	—	—	—
RE21-07-75975	21-27626	10.0000–11.0000	QBT3	—	—	—	—	1.28	—	15 (U)	—	—	—	—
RE21-07-75976	21-27627	10.0000–11.0000	QBT3	—	—	—	—	1.93	—	0.641 (J)	—	—	—	—
RE21-07-75977	21-27627	15.0000–16.0000	QBT3	15.7	—	—	—	2.44	—	1.52 (U)	—	—	—	—
RE21-07-75978	21-27627	20.0000–21.0000	QBT3	—	—	—	—	1.84	—	1.5 (U)	—	—	—	—
RE21-07-75979	21-27628	0.0000–0.5000	SOIL	—	—	—	—	2.77	—	16.1 (U)	—	—	—	51.7
RE21-07-75980	21-27628	2.0000–3.0000	QBT3	—	—	—	—	—	—	1.77 (U)	—	—	—	—
RE21-07-75981	21-27629	0.0000–0.5000	SOIL	—	—	—	—	4.15	—	17.1 (U)	—	—	—	—
RE21-07-75982	21-27629	2.0000–3.0000	QBT3	—	—	—	—	1.24	—	16.9 (U)	—	—	—	—
RE21-07-75983	21-27630	0.0000–0.5000	SOIL	—	—	—	—	1.79	—	17.1 (U)	—	1.84	—	—
RE21-07-75984	21-27630	2.0000–3.0000	QBT3	—	—	—	—	—	—	1.74 (U)	—	—	—	—
RE21-08-10263	21-603268	3.0000–4.0000	QBT3	—	—	—	—	—	—	1.78 (U)	—	NA	—	—
RE21-08-10264	21-603268	5.0000–6.0000	QBT3	—	—	—	—	—	—	1.75 (U)	—	NA	—	—
MD21-09-8750	21-605246	2.0000–2.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: Results are in mg/kg. Data qualifiers are presented in Appendix A.
Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.14-2
Summary Organic Chemicals Detected at SWMU 21-024(g)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**1720**[a]	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]
Industrial SSL				**36700**	**18300**[a]	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]
Construction Worker SSL				**18600**	**6680**[a]	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**2500000**[c]
RE21-07-75874	21-27593	2.0000–2.5000	QBT3	—[d]	—	—	—	NA[e]	NA	—	—	—	—	—	0.224 (J)
RE21-07-75875	21-27594	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	0.0141 (J)	—	—	—
RE21-07-75878	21-27595	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75879	21-27596	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-582	21-27596	2.0000–3.0000	QBT3	NA	NA	NA	NA	0.0025 (J)	0.0022 (J)	NA	NA	NA	NA	NA	NA
RE21-07-75881	21-27597	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	0.0239 (J)	0.0213 (J)	0.0457	—	—	—
RE21-07-75883	21-27598	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75884	21-27598	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	—	—	0.0207 (J)	—	—	—
RE21-07-75885	21-27599	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75887	21-27600	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	0.0409 (J)	0.0547 (J)	—	—	—
RE21-07-75889	21-27601	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75890	21-27601	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75891	21-27602	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75892	21-27602	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75893	21-27603	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	0.0405	—	0.0191 (J)	—
RE21-07-75895	21-27604	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75897	21-27605	0.0000–0.5000	QBT3	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75912	21-27606	5.0000–6.0000	SOIL	—	0.0265 (J)	—	0.0409	NA	NA	0.82	2.17	3.53 (J)	2.49	—	—
RE21-07-75913	21-27606	10.0000–11.0000	QBT3	—	—	—	—	NA	NA	—	0.241	—	0.22	0.242	—
RE21-07-75914	21-27607	0.0000–1.0000	SOIL	—	—	NA	—	NA	NA	0.0196 (J)	—	—	—	0.0446	—
RE21-07-75922	21-27609	13.2000–14.2000	QBT3	—	—	0.00541 (J)	—	NA	NA	—	—	—	—	—	—
RE21-07-75923	21-27610	0.0000–0.5000	SOIL	—	—	0.0846	—	NA	NA	—	—	—	—	—	—
RE21-07-75924	21-27610	5.0000–6.0000	QBT3	—	—	0.0501	—	NA	NA	—	—	—	—	—	—
RE21-07-75925	21-27610	10.0000–11.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75926	21-27611	0.0000–0.5000	SOIL	—	—	NA	0.0157 (J)	NA	NA	0.14	—	0.36 (J)	0.0975 (J)	—	—
RE21-07-75927	21-27611	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75928	21-27611	5.0000–6.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75929	21-27612	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—

Table 6.14-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid
Residential SSL				**3440**	**1720**[a]	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]
Industrial SSL				**36700**	**18300**[a]	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]
Construction Worker SSL				**18600**	**6680**[a]	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**2500000**[c]
RE21-07-75930	21-27612	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75931	21-27613	0.0000–0.5000	SOIL	0.0369 (J)	—	NA	0.0551	NA	NA	0.227	0.222 (J)	0.401 (J)	0.127 (J)	—	—
RE21-07-75937	21-27616	0.0000–0.5000	SOIL	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75938	21-27616	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	0.0703 (J)	—	—	—
RE21-07-75939	21-27617	0.0000–1.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75941	21-27618	0.0000–1.0000	QBT3	—	—	0.00392 (J)	—	NA	NA	—	—	—	—	—	—
RE21-07-75942	21-27618	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75943	21-27619	4.0000–5.0000	SOIL	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75944	21-27619	6.0000–7.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75945	21-27620	4.6000–5.6000	QBT3	—	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-75948	21-27621	5.6000–6.6000	QBT3	—	—	0.00308 (J)	—	NA	NA	—	—	—	—	—	—
RE21-07-75949	21-27622	4.0000–5.0000	QBT3	—	—	0.0033 (J)	0.105	NA	NA	0.502	0.359	0.813	0.22 (J)	—	—
RE21-07-75951	21-27623	4.0000–5.0000	QBT3	—	—	0.00479 (J)	—	NA	NA	—	—	0.0129 (J)	—	—	—
RE21-07-75973	21-27626	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	—	—	—	—
RE21-07-75979	21-27628	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	—	—	0.186 (J)	—	—	—
RE21-07-75981	21-27629	0.0000–0.5000	SOIL	—	—	NA	—	NA	NA	0.0374 (J)	—	0.24 (J)	—	—	—
RE21-07-75982	21-27629	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	0.0202 (J)	—
RE21-07-75983	21-27630	0.0000–0.5000	SOIL	—	—	NA	0.0116 (J)	NA	NA	—	—	—	—	0.0251 (J)	—

Table 6.14-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Bis(2-ethylhexyl)phthalate	Chloroform	Chrysene	Di-n-butylphthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Residential SSL				**347**	**5.72**	**621**	**6110**	**69.7**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**
Industrial SSL				**1370**	**31.9**	**2340**	**68400**	**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**4760**	**671**	**20600**	**23800**	**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**
RE21-07-75874	21-27593	2.0000–2.5000	QBT3	—	—	—	—	—	0.0487	—	NA	NA	NA	NA	NA
RE21-07-75875	21-27594	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0142 (J)	—	NA	NA	NA	NA	NA
RE21-07-75878	21-27595	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75879	21-27596	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0267 (J)	—	NA	NA	NA	NA	NA
RE21-07-582	21-27596	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	0.0000013 (J)	2.67E-06	0.000000546 (J)	9.98E-07	4.15E-07
RE21-07-75881	21-27597	0.0000–0.5000	SOIL	—	NA	0.0292 (J)	—	NA	0.0436	—	NA	NA	NA	NA	NA
RE21-07-75883	21-27598	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0205 (J)	—	NA	NA	NA	NA	NA
RE21-07-75884	21-27598	2.0000–2.5000	SOIL	—	—	—	—	0.000265 (J)	0.0145 (J)	—	NA	NA	NA	NA	NA
RE21-07-75885	21-27599	0.0000–0.5000	SOIL	—	NA	0.0203 (J)	—	NA	0.0194 (J)	—	NA	NA	NA	NA	NA
RE21-07-75887	21-27600	0.0000–0.5000	SOIL	—	NA	0.0458	—	NA	0.0703	—	NA	NA	NA	NA	NA
RE21-07-75889	21-27601	0.0000–0.5000	SOIL	—	NA	0.0289 (J)	—	NA	0.0392	—	NA	NA	NA	NA	NA
RE21-07-75890	21-27601	2.0000–2.5000	QBT3	—	—	—	—	—	0.0128 (J)	—	NA	NA	NA	NA	NA
RE21-07-75891	21-27602	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0115 (J)	—	NA	NA	NA	NA	NA
RE21-07-75892	21-27602	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75893	21-27603	0.0000–0.5000	SOIL	—	NA	0.0295 (J)	—	NA	0.0439	—	NA	NA	NA	NA	NA
RE21-07-75895	21-27604	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0139 (J)	—	NA	NA	NA	NA	NA
RE21-07-75897	21-27605	0.0000–0.5000	QBT3	—	NA	—	0.327 (J)	NA	—	—	NA	NA	NA	NA	NA
RE21-07-75912	21-27606	5.0000–6.0000	SOIL	0.0863 (J)	—	—	—	—	0.0628	—	NA	NA	NA	NA	NA
RE21-07-75913	21-27606	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75914	21-27607	0.0000–1.0000	SOIL	—	NA	0.0267 (J)	—	NA	0.0253 (J)	—	NA	NA	NA	NA	NA
RE21-07-75922	21-27609	13.2000–14.2000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75923	21-27610	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75924	21-27610	5.0000–6.0000	QBT3	0.136 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75925	21-27610	10.0000–11.0000	QBT3	0.0754 (J)	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75926	21-27611	0.0000–0.5000	SOIL	0.11 (J)	NA	0.17	—	NA	0.222	—	NA	NA	NA	NA	NA
RE21-07-75927	21-27611	2.0000–3.0000	QBT3	0.0779 (J)	—	—	—	—	0.0194 (J)	—	NA	NA	NA	NA	NA
RE21-07-75928	21-27611	5.0000–6.0000	QBT3	0.0784 (J)	—	0.0167 (J)	—	—	0.022 (J)	—	NA	NA	NA	NA	NA
RE21-07-75929	21-27612	0.0000–0.5000	SOIL	—	NA	0.0322 (J)	—	NA	0.0499	—	NA	NA	NA	NA	NA
RE21-07-75930	21-27612	2.0000–2.5000	QBT3	—	—	—	—	—	0.0111 (J)	—	NA	NA	NA	NA	NA
RE21-07-75931	21-27613	0.0000–0.5000	SOIL	—	NA	0.255	—	NA	0.52	0.041 (J)	NA	NA	NA	NA	NA

Table 6.14-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Bis(2-ethylhexyl)phthalate	Chloroform	Chrysene	Di-n-butylphthalate	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)
Residential SSL				**347**	**5.72**	**621**	**6110**	**69.7**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**
Industrial SSL				**1370**	**31.9**	**2340**	**68400**	**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**4760**	**671**	**20600**	**23800**	**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**
RE21-07-75937	21-27616	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75938	21-27616	2.0000–3.0000	QBT3	—	—	0.0489 (J)	—	—	0.0973 (J)	—	NA	NA	NA	NA	NA
RE21-07-75939	21-27617	0.0000–1.0000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75941	21-27618	0.0000–1.0000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75942	21-27618	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75943	21-27619	4.0000–5.0000	SOIL	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75944	21-27619	6.0000–7.0000	QBT3	—	0.000233 (J)	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75945	21-27620	4.6000–5.6000	QBT3	—	—	0.0132 (J)	—	—	0.0214 (J)	—	NA	NA	NA	NA	NA
RE21-07-75948	21-27621	5.6000–6.6000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75949	21-27622	4.0000–5.0000	QBT3	—	—	0.62	—	—	1.47	—	NA	NA	NA	NA	NA
RE21-07-75951	21-27623	4.0000–5.0000	QBT3	—	—	—	—	—	0.0195 (J)	—	NA	NA	NA	NA	NA
RE21-07-75973	21-27626	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0252 (J)	—	NA	NA	NA	NA	NA
RE21-07-75979	21-27628	0.0000–0.5000	SOIL	—	NA	—	—	NA	0.0265 (J)	—	NA	NA	NA	NA	NA
RE21-07-75981	21-27629	0.0000–0.5000	SOIL	—	NA	0.0521	—	NA	0.0503	—	NA	NA	NA	NA	NA
RE21-07-75982	21-27629	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-75983	21-27630	0.0000–0.5000	SOIL	—	NA	0.0209 (J)	—	NA	0.0245 (J)	—	NA	NA	NA	NA	NA

Table 6.14-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Toluene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**6.21**	**3210**[g]	**310**[b]	**45**	**na**	**na**	**na**	**1830**	**1720**	**5570**	**1090**[h]
Industrial SSL				**23.4**	**14900**[g]	**4100**[b]	**252**	**na**	**na**	**na**	**20500**	**18300**	**57900**	**3610**[h]
Construction Worker SSL				**213**	**10300**[g]	**4100**[c]	**702**	**na**	**na**	**na**	**7150**	**6680**	**21100**	**3130**[h]
RE21-07-75874	21-27593	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	NA	—	0.0565	—	—
RE21-07-75875	21-27594	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	—	NA	NA
RE21-07-75878	21-27595	2.0000–2.5000	QBT3	—	0.00205 (J)	—	—	NA	NA	NA	—	—	0.00273	—
RE21-07-75879	21-27596	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	0.0319 (J)	NA	NA
RE21-07-582	21-27596	2.0000–3.0000	QBT3	NA	NA	NA	NA	8.79E-06	0.000000714 (J)	2.23E-07	NA	NA	NA	NA
RE21-07-75881	21-27597	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	0.038 (J)	NA	NA
RE21-07-75883	21-27598	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	0.0173 (J)	NA	NA
RE21-07-75884	21-27598	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	0.00329	0.000319 (J)
RE21-07-75885	21-27599	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	0.0263 (J)	NA	NA
RE21-07-75887	21-27600	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0342 (J)	0.0984	NA	NA
RE21-07-75889	21-27601	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0276 (J)	0.0594	NA	NA
RE21-07-75890	21-27601	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	NA	—	0.0164 (J)	—	—
RE21-07-75891	21-27602	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	—	NA	NA
RE21-07-75892	21-27602	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	NA	—	—	0.000408 (J)	—
RE21-07-75893	21-27603	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0221 (J)	0.0398	NA	NA
RE21-07-75895	21-27604	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	—	NA	NA
RE21-07-75897	21-27605	0.0000–0.5000	QBT3	—	NA	—	—	NA	NA	NA	—	—	NA	NA
RE21-07-75912	21-27606	5.0000–6.0000	SOIL	1.7 (J)	—	—	—	NA	NA	NA	0.0126 (J)	0.382	0.000409 (J)	—
RE21-07-75913	21-27606	10.0000–11.0000	QBT3	—	—	—	—	NA	NA	NA	—	0.0181 (J)	—	—
RE21-07-75914	21-27607	0.0000–1.0000	SOIL	—	NA	—	—	NA	NA	NA	0.0117 (J)	0.0325 (J)	NA	NA
RE21-07-75922	21-27609	13.2000–14.2000	QBT3	—	—	—	—	NA	NA	NA	—	—	—	—
RE21-07-75923	21-27610	0.0000–0.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	0.000478 (J)	—
RE21-07-75924	21-27610	5.0000–6.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	—	—
RE21-07-75925	21-27610	10.0000–11.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	—	—
RE21-07-75926	21-27611	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0856	0.288	NA	NA
RE21-07-75927	21-27611	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	0.0151 (J)	0.0253 (J)	—	—
RE21-07-75928	21-27611	5.0000–6.0000	QBT3	—	—	—	—	NA	NA	NA	0.011 (J)	0.033 (J)	—	—
RE21-07-75929	21-27612	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0312 (J)	0.0711	NA	NA
RE21-07-75930	21-27612	2.0000–2.5000	QBT3	—	—	—	—	NA	NA	NA	—	0.0132 (J)	—	—
RE21-07-75931	21-27613	0.0000–0.5000	SOIL	0.104 (J)	NA	0.029 (J)	0.0435	NA	NA	NA	0.403	0.633	NA	NA

Table 6.14-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Toluene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**6.21**	**3210**[g]	**310**[b]	**45**	**na**	**na**	**na**	**1830**	**1720**	**5570**	**1090**[h]
Industrial SSL				**23.4**	**14900**[g]	**4100**[b]	**252**	**na**	**na**	**na**	**20500**	**18300**	**57900**	**3610**[h]
Construction Worker SSL				**213**	**10300**[g]	**4100**[c]	**702**	**na**	**na**	**na**	**7150**	**6680**	**21100**	**3130**[h]
RE21-07-75937	21-27616	0.0000–0.5000	SOIL	—	0.00038 (J)	—	—	NA	NA	NA	—	—	0.000804 (J)	—
RE21-07-75938	21-27616	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	0.0588 (J)	0.124 (J)	0.000425 (J)	—
RE21-07-75939	21-27617	0.0000–1.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	0.000563 (J)	—
RE21-07-75941	21-27618	0.0000–1.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	0.00101 (J)	—
RE21-07-75942	21-27618	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	0.00101 (J)	—
RE21-07-75943	21-27619	4.0000–5.0000	SOIL	—	—	—	—	NA	NA	NA	—	—	0.00127	—
RE21-07-75944	21-27619	6.0000–7.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	—	—
RE21-07-75945	21-27620	4.6000–5.6000	QBT3	—	—	—	—	NA	NA	NA	—	0.0204 (J)	—	—
RE21-07-75948	21-27621	5.6000–6.6000	QBT3	—	—	—	—	NA	NA	NA	—	—	—	—
RE21-07-75949	21-27622	4.0000–5.0000	QBT3	0.204 (J)	—	—	—	NA	NA	NA	0.36	0.964	0.00184	—
RE21-07-75951	21-27623	4.0000–5.0000	QBT3	—	—	—	—	NA	NA	NA	—	0.0144 (J)	—	—
RE21-07-75973	21-27626	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	0.0243 (J)	NA	NA
RE21-07-75979	21-27628	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0131 (J)	0.0321 (J)	NA	NA
RE21-07-75981	21-27629	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	0.0195 (J)	0.0482	NA	NA
RE21-07-75982	21-27629	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	—	—
RE21-07-75983	21-27630	0.0000–0.5000	SOIL	—	NA	—	—	NA	NA	NA	—	0.0265 (J)	NA	NA

Note: Results are in mg/kg. Data qualifiers are presented in Appendix A.
Source: SSLs from NMED (2009, 108070).
[a] Pyrene SSL used as surrogate based on structural similarity.
[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] — = Not detected.
[e] NA = Not analyzed.
[f] na = Not available.
[g] Isopropylbenzene SSL used as surrogate based on structural similarity.
[h] SSLs for xylenes used as surrogate based on structural similarity.

Table 6.14-3
Summary of Radionuclides Detected or Detected above BV/FVs at SWMU 21-024(g)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75871	21-27592	0.0000–0.5000	SOIL	—[c]	NA[d]	—	0.268	—	—	—	—
RE21-07-75872	21-27592	2.0000–2.5000	QBT3	—	—	—	—	0.04313	—	—	—
RE21-07-75873	21-27593	0.0000–0.5000	SOIL	—	—	—	0.136	0.008471	—	—	—
RE21-07-75874	21-27593	2.0000–2.5000	QBT3	0.0818	0.679	—	0.709	0.027597	—	—	—
RE21-07-75875	21-27594	0.0000–0.5000	SOIL	0.0881	—	—	1.18	—	—	—	—
RE21-07-75876	21-27594	2.0000–2.5000	SOIL	—	0.17	—	0.205	0.02488	—	—	—
RE21-07-75877	21-27595	0.0000–0.5000	SOIL	0.146	—	0.0439	3.92	0.19858	—	—	—
RE21-07-75878	21-27595	2.0000–2.5000	QBT3	—	0.307	—	0.526	0.126432	—	—	—
RE21-07-75879	21-27596	0.0000–0.5000	SOIL	0.0475	—	—	1.2	—	—	—	—
RE21-07-75880	21-27596	2.0000–2.5000	QBT3	—	0.111	—	0.236	0.011098	—	—	—
RE21-07-75881	21-27597	0.0000–0.5000	SOIL	—	—	—	1.87	—	—	—	—
RE21-07-75882	21-27597	2.0000–2.5000	QBT3	—	—	—	0.0214	0.036723	—	—	—
RE21-07-75883	21-27598	0.0000–0.5000	SOIL	0.181	—	0.0327	3.79	0.158735	3.71	—	3.32
RE21-07-75884	21-27598	2.0000–2.5000	SOIL	0.0766	0.608	—	1.5	0.114161	2.74	—	2.58
RE21-07-75885	21-27599	0.0000–0.5000	SOIL	0.0612	—	—	0.887	0.028163	—	—	—
RE21-07-75886	21-27599	2.0000–2.5000	QBT3	—	—	—	0.11	0.020146	—	—	—

Table 6.14-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75887	21-27600	0.0000–0.5000	SOIL	0.0301	—	—	0.176	—	—	—	—
RE21-07-75888	21-27600	2.0000–2.5000	QBT3	—	—	—	0.0504	—	—	0.0919	—
RE21-07-75889	21-27601	0.0000–0.5000	SOIL	0.0697	—	—	1.18	0.036	—	—	—
RE21-07-75890	21-27601	2.0000–2.5000	QBT3	0.0509	—	—	1.41	—	—	—	—
RE21-07-75891	21-27602	0.0000–0.5000	SOIL	—	—	—	0.36	0.061551	—	—	—
RE21-07-75892	21-27602	2.0000–2.5000	QBT3	—	—	—	0.182	0.022297	—	—	—
RE21-07-75893	21-27603	0.0000–0.5000	SOIL	—	—	—	0.235	0.025333	—	—	—
RE21-07-75894	21-27603	2.0000–2.5000	SOIL	—	—	—	0.162	0.024348	—	—	—
RE21-07-75895	21-27604	0.0000–0.5000	SOIL	0.0335	—	—	0.341	—	—	—	—
RE21-07-75896	21-27604	2.0000–2.5000	SOIL	—	—	—	0.205	0.027562	—	—	—
RE21-07-75897	21-27605	0.0000–0.5000	QBT3	—	—	—	0.0452	—	—	—	—
RE21-07-75898	21-27605	2.0000–2.5000	QBT3	—	—	—	—	0.022956	—	—	—
RE21-07-75911	21-27606	0.0000–1.0000	SOIL	—	0.135	—	0.179	—	—	—	—
RE21-07-75912	21-27606	5.0000–6.0000	SOIL	—	—	—	0.348	—	—	—	—
RE21-07-75913	21-27606	10.0000–11.0000	QBT3	—	—	—	1.72	0.063603	—	—	—
MD21-09-8756	21-27606	11.0000–11.5000	SOIL	NA	NA	—	0.049	NA	NA	NA	NA
RE21-07-75914	21-27607	0.0000–1.0000	SOIL	—	0.192	—	0.524	—	—	—	—

Table 6.14-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75915	21-27607	5.0000–6.0000	QBT3	—	—	—	—	0.021789	—	—	—
RE21-07-75916	21-27607	10.0000–11.0000	QBT3	—	—	—	—	0.00283	—	—	—
RE21-07-75917	21-27608	0.0000–0.5000	SOIL	—	—	—	0.356	—	—	—	—
RE21-07-75919	21-27608	5.0000–6.0000	QBT3	—	—	—	0.131	—	—	0.0961	—
RE21-07-75920	21-27609	3.2000–4.2000	SOIL	—	—	—	0.0941	—	4.43	0.256	4.31
RE21-07-75921	21-27609	8.2000–9.2000	QBT3	—	—	—	—	—	—	0.122	—
RE21-07-75922	21-27609	13.2000–14.2000	QBT3	—	—	—	0.0365	0.195922	—	—	—
RE21-07-75923	21-27610	0.0000–0.5000	SOIL	—	—	—	1.58	—	—	—	—
RE21-07-75924	21-27610	5.0000–6.0000	QBT3	—	—	—	0.0515	—	—	—	—
RE21-07-75925	21-27610	10.0000–11.0000	QBT3	—	—	—	0.0317	0.023351	—	—	—
RE21-07-75926	21-27611	0.0000–0.5000	SOIL	—	—	—	0.202	—	—	—	—
RE21-07-75927	21-27611	2.0000–3.0000	QBT3	—	0.0858	—	0.477	—	—	—	—
RE21-07-75928	21-27611	5.0000–6.0000	QBT3	—	—	—	0.106	—	—	—	—
RE21-07-75929	21-27612	0.0000–0.5000	SOIL	0.0501	—	—	0.127	—	—	—	—
RE21-07-75930	21-27612	2.0000–2.5000	QBT3	—	NA	—	0.0806	0.014595	—	—	—
RE21-07-75931	21-27613	0.0000–0.5000	SOIL	—	—	—	0.178	—	—	—	—
RE21-07-75932	21-27613	2.0000–2.5000	SOIL	—	—	—	0.0865	0.038469	—	—	—
RE21-07-75933	21-27614	1.8000–2.8000	QBT3	—	—	—	—	—	—	0.162	—

Table 6.14-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75934	21-27614	3.8000–4.8000	QBT3	—	—	—	—	0.041284	2.56	0.176	2.76
RE21-07-75935	21-27615	2.5000–3.5000	QBT3	—	—	—	—	0.035163	2.22	0.167	2.17
RE21-07-75937	21-27616	0.0000–0.5000	SOIL	—	—	—	—	—	2.99	0.23	3.15
RE21-07-75938	21-27616	2.0000–3.0000	QBT3	—	—	—	—	—	—	0.161	1.97
RE21-07-75939	21-27617	0.0000–1.0000	QBT3	—	—	—	0.0911 (J+)	—	2.22	0.109	2.21
RE21-07-75940	21-27617	2.0000–3.0000	QBT3	—	—	—	0.0496 (J+)	—	—	—	—
RE21-07-75941	21-27618	0.0000–1.0000	QBT3	—	—	—	—	0.057695	—	—	—
RE21-07-75942	21-27618	2.0000–3.0000	QBT3	—	—	—	—	0.054695	—	—	—
RE21-07-75943	21-27619	4.0000–5.0000	SOIL	—	0.105	—	0.12 (J+)	—	—	—	—
RE21-07-75945	21-27620	4.6000–5.6000	QBT3	—	—	—	0.198 (J+)	—	—	—	—
RE21-07-75947	21-27621	3.6000–4.6000	QBT3	—	—	—	0.162 (J+)	—	—	0.109	—
RE21-07-75949	21-27622	4.0000–5.0000	QBT3	—	—	—	0.0587	0.100756	—	—	—
RE21-07-75950	21-27622	6.0000–7.0000	QBT3	—	—	—	—	0.078273	—	—	—
RE21-07-75970	21-27625	0.0000–0.5000	QBT3	—	NA	—	0.106	—	—	—	—
RE21-07-75971	21-27625	5.0000–6.0000	QBT3	—	—	—	0.0573	0.050666	—	—	—
RE21-07-75972	21-27625	10.0000–11.0000	QBT3	—	—	—	—	0.006325	—	—	—
RE21-07-75973	21-27626	0.0000–0.5000	SOIL	—	—	—	0.141	—	—	—	—
RE21-07-75974	21-27626	5.0000–6.0000	QBT3	—	NA	—	—	0.009478	—	—	—

Table 6.14-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75975	21-27626	10.0000–11.0000	QBT3	—	—	—	0.0475	—	—	—	—
RE21-07-75976	21-27627	10.0000–11.0000	QBT3	—	—	—	—	0.576794	—	—	—
RE21-07-75977	21-27627	15.0000–16.0000	QBT3	—	—	—	—	0.012467	—	—	—
RE21-07-75978	21-27627	20.0000–21.0000	QBT3	—	—	—	—	0.048847	—	—	—
RE21-07-75979	21-27628	0.0000–0.5000	SOIL	—	—	—	0.188	—	—	—	—
RE21-07-75981	21-27629	0.0000–0.5000	SOIL	—	—	—	0.395	—	—	—	—
RE21-07-75982	21-27629	2.0000–3.0000	QBT3	—	—	—	0.045	—	—	—	—
RE21-07-75983	21-27630	0.0000–0.5000	SOIL	0.0493	—	—	0.601	—	—	—	—
RE21-08-10264	21-603268	5.0000–6.0000	QBT3	—	—	—	—	0.077647	—	—	—
MD21-09-8747	21-605245	0.0000–0.5000	SOIL	0.116	NA	—	1.49	NA	NA	NA	NA
MD21-09-8757	21-605250	0.0000–0.5000	SOIL	0.0228	NA	—	0.303	NA	NA	NA	NA

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.15-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(h)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**na**[a]	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**3130**	**1560**	**400**	**10700**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**	**145000**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**	**463**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-246	21-600059	1.0000–2.0000	SOIL	—[e]	—	NA[f]	—	0.719	—	21.6	36.6 (J)	0.503	87.7	—	2.28 (J)	NA	—	1.17	0.0019 (J)	—	2.57	—	85.2 (J)
RE21-07-247	21-600059	3.0000–4.0000	QBT3	—	4.01	NA	—	—	—	20.1	17.4 (J)	—	48.8	—	1.3 (J)	NA	7.29	—	0.00161 (J)	1.6 (U)	2.46	—	—
RE21-07-248	21-600060	1.5000–2.5000	QBT3	0.793	4.02	NA	—	—	2480 (J)	9.4	25.5 (J)	0.521	33.1	—	1.17 (J)	NA	—	—	0.000691 (J)	0.975 (J)	—	—	105 (J)
RE21-07-249	21-600060	3.5000–4.5000	QBT3	1.2	2.91	NA	—	—	—	16.4	25.2 (J)	—	25.7	—	0.479 (J)	NA	—	—	—	1.6 (U)	—	—	65.5 (J)
RE21-07-250	21-600061	3.0000–4.0000	QBT3	—	3.8	NA	—	—	—	9.28	—	—	—	—	0.11 (J)	NA	—	—	—	1.8 (U)	—	—	—
RE21-07-251	21-600061	5.0000–6.0000	QBT3	—	4.66	NA	—	—	—	17.6	5.93 (J)	—	18.6	—	0.155 (J)	NA	—	—	—	1.61 (U)	—	—	—
RE21-07-252	21-600062	0.0000–1.0000	SOIL	—	—	—	—	—	—	—	—	0.58 (U)	—	—	—	0.72	—	—	—	—	—	—	—
RE21-07-253	21-600062	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	0.56 (U)	—	—	—	0.49 (J)	—	—	—	—	—	—	—
RE21-07-373	21-600062	5.0000–6.0000	QBT3	—	—	—	—	—	2900	7.38	—	—	—	—	—	NA	—	—	—	1.26 (J)	—	—	—
RE21-07-377	21-600075	0.0000–0.5000	SOIL	—	—	—	—	0.511 (U)	—	—	—	—	—	—	—	NA	—	1.23 (J-)	—	—	—	—	—
RE21-07-378	21-600075	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	4.76	—	—	—	—	NA	—	—	0.00434	1.15 (J)	—	—	—
RE21-07-379	21-600076	0.0000–0.5000	QBT3	—	—	—	—	—	—	15.5	5.26	—	—	—	0.155 (J)	NA	—	1.84	—	1.64	—	—	—
RE21-07-380	21-600076	2.0000–3.0000	QBT3	—	—	—	—	—	—	14.1	—	—	12.4	—	0.446	NA	—	—	—	1.76 (U)	—	—	—
RE21-07-381	21-600077	0.0000–0.5000	SOIL	—	—	—	—	0.506 (U)	—	—	—	—	—	—	—	NA	—	1.23 (J-)	—	—	—	—	—
RE21-07-382	21-600077	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	1.08 (J-)	0.00203 (J)	1.55 (U)	—	—	—
RE21-07-383	21-600078	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	1.65 (J-)	0.000613 (J)	1.65 (U)	—	—	—
RE21-07-384	21-600078	2.0000–3.0000	QBT3	—	2.85	—	—	—	—	8.34	11.2	—	39	—	1.02	NA	—	1.05 (J-)	0.00119 (J)	1.66 (U)	—	—	—
MD21-09-8738	21-600078	4.0000–5.0000	QBT3	2.1 (U J)	—	—	—	—	—	—	—	NA	—	—	NA	NA	—	NA	NA	0.51 (U)	—	—	—
RE21-07-385	21-600079	0.0000–0.5000	SOIL	—	—	—	—	0.502 (U)	—	—	—	—	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-386	21-600079	2.0000–3.0000	SOIL	—	—	—	—	0.552 (U)	—	—	—	—	—	—	—	NA	—	—	0.00074 (J)	—	—	—	—
RE21-07-387	21-600080	0.0000–0.5000	SOIL	—	—	—	—	0.519 (U)	6970 (J)	—	—	—	—	—	—	NA	—	—	—	1.56 (U)	—	—	—
RE21-07-388	21-600080	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	—	1.69 (U)	—	—	—
RE21-07-389	21-600081	0.0000–0.5000	SOIL	—	—	—	—	0.987	—	—	31.5	—	35.7	—	0.36	NA	—	—	—	2.43 (U)	—	—	321
RE21-07-390	21-600081	2.0000–3.0000	QBT3	—	—	49.3	—	—	—	—	—	—	—	—	—	NA	—	1.44	—	0.964 (J)	—	—	—
RE21-07-391	21-600082	0.0000–0.5000	SOIL	—	—	—	—	—	6860 (J)	—	—	0.815	22.8	681 (J+)	—	NA	—	0.982 (J-)	0.00258	1.73 (U)	—	—	—
RE21-07-392	21-600082	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	0.00107 (J)	1.53 (U)	—	—	—
RE21-07-393	21-600083	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	1.51 (J-)	—	1.66 (U)	—	—	—
RE21-07-394	21-600083	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	0.0016 (J)	1.55 (U)	—	—	—
RE21-07-395	21-600084	0.0000–0.5000	SOIL	—	—	—	—	0.513 (U)	9340 (J)	—	—	—	—	—	0.23	NA	—	1.07 (J-)	—	1.54 (U)	—	—	—

Table 6.15-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead	Manganese	Mercury	Molybdenum	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**	**482**	**0.1**	**na**[a]	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**	**671**	**0.1**	**na**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**3130**	**1560**	**400**	**10700**	**23**[c]	**391**	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**	**145000**	**310**[c]	**5680**	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**	**463**	**92.9**[d]	**1550**	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-396	21-600084	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	11.8	—	—	NA	—	—	—	1.74 (U)	—	—	—
RE21-07-397	21-600085	0.0000–0.5000	SOIL	—	—	—	—	0.618 (U)	—	—	—	—	—	—	—	NA	—	1.3 (J-)	—	1.85 (U)	—	—	—
RE21-07-398	21-600085	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	1.19 (J-)	—	1.63 (U)	—	—	—
RE21-07-5177	21-601095	3.5000–4.5000	QBT3	11.9 (J-)	11.9	165	—	4.99	3350 (J-)	57.5 (J-)	374	2.76	317	—	20	NA	7.56	—	0.00122 (J)	7.92 (U)	16	23.9	407 (J-)
RE21-07-5178	21-601095	5.5000–6.5000	QBT3	1.47 (J-)	3.72	—	—	—	—	32 (J-)	43.2	—	53.2	—	2.11	NA	—	—	0.00184 (J)	1.57 (U)	1.54	—	87.5 (J-)
RE21-07-5179	21-601096	8.5000–9.5000	SOIL	—	—	—	1.95	0.556 (U)	—	—	—	—	114	729 (J-)	—	NA	—	—	—	1.53 (J)	—	—	130 (J-)
RE21-07-5180	21-601096	10.5000–11.5000	SOIL	—	—	—	—	0.57 (U)	—	—	—	—	29.5	—	0.225 (U)	NA	—	—	—	—	—	—	53.6 (J-)
RE21-07-5181	21-601097	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	7.06	—	17.6 (J)	NA	0.311 (J+)	NA	—	1.1 (J-)	—	2.23	—	—	—
RE21-07-5182	21-601097	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	4.77	—	13.4 (J)	NA	0.174 (J+)	NA	—	1.46 (J-)	—	1.34 (J)	—	—	—
RE21-07-5183	21-601098	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	0.738 (J+)	NA	—	—	—	0.678 (J)	—	—	—
RE21-07-5184	21-601098	5.0000–6.0000	QBT3	—	2.84	—	—	—	—	—	7.04	—	—	NA	1.56 (J+)	NA	—	—	—	1.1 (J)	—	—	—
MD21-09-8739	21-601098	10.0000–11.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.14 (J)	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-5185	21-601099	8.0000–9.0000	SOIL	—	—	—	—	0.546 (U)	—	—	—	—	—	NA	—	NA	—	6.2 (J-)	—	3	—	—	—
RE21-07-5186	21-601099	10.0000–11.0000	SOIL	—	—	—	—	0.554 (U)	—	—	—	—	—	NA	—	NA	—	4.71 (J-)	—	3.68	—	—	—
RE21-07-5187	21-601100	3.5000–4.5000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—	NA	—	1.43 (J-)	—	0.992 (J)	—	—	—
RE21-07-5188	21-601100	5.5000–6.5000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—	NA	—	1.78 (J-)	—	1.44 (J)	—	—	—
RE21-07-5189	21-601101	3.5000–4.5000	SOIL	—	—	—	—	0.628 (U)	—	—	—	—	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-5190	21-601101	5.5000–6.5000	QBT3	—	3.27	—	—	—	—	13.7	—	—	—	—	—	NA	—	1.24 (J)	—	1.89 (U)	—	—	—
RE21-07-5191	21-601102	2.7500–3.7500	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	—	1.8 (U)	—	—	—
RE21-07-5192	21-601102	4.7500–5.7500	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	NA	—	—	—	1.83 (U)	—	—	—
RE21-07-5195	21-601104	9.0000–10.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—	NA	—	—	—	1.22 (J)	—	—	—
RE21-07-5196	21-601104	14.0000–15.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—	NA	—	—	—	1.77	—	—	—
RE21-07-5197	21-601104	19.0000–20.0000	QBT3	—	—	—	—	—	—	—	—	1.23 (J)	—	NA	—	NA	—	—	0.000741 (J)	1.69	—	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.15-2
Summary of Organic Chemicals Detected at SWMU 21-024(h)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate
Residential SSL				**3440**	**1720**[a]	**67500**	**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]	**347**
Industrial SSL				**36700**	**18300**[a]	**851000**	**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]	**1370**
Construction Worker SSL				**18600**	**6680**[a]	**263000**	**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**952000**[c]	**4760**
RE21-07-246	21-600059	1.0000–2.0000	SOIL	—[d]	—	—	—	—	0.142	0.2 (J)	—	0.0322 (J)	—	0.0736 (J)
RE21-07-247	21-600059	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-248	21-600060	1.5000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-249	21-600060	3.5000–4.5000	QBT3	—	—	—	—	0.0234 (J)	—	—	—	—	—	—
RE21-07-250	21-600061	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-252	21-600062	0.0000–1.0000	SOIL	—	—	NA[e]	—	—	—	—	—	—	—	1.4
RE21-07-373	21-600062	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-377	21-600075	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-378	21-600075	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-381	21-600077	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-3345	21-600077	2.0000–3.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-382	21-600077	2.0000–3.0000	SOIL	0.0247 (J)	—	—	0.0287 (J)	0.0492	—	0.147	—	—	—	—
RE21-07-383	21-600078	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	0.0885 (J)
RE21-07-384	21-600078	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	0.131 (J)
RE21-07-386	21-600079	2.0000–3.0000	SOIL	—	—	—	0.0124 (J)	0.0378	0.0366	0.0422	0.135 (J)	0.0232 (J)	—	—
RE21-07-387	21-600080	0.0000–0.5000	SOIL	—	—	NA	0.0108 (J)	—	—	—	—	—	—	—
RE21-07-388	21-600080	2.0000–3.0000	QBT3	0.0169 (J)	—	—	0.0188 (J)	0.0553	0.121	0.162	—	—	—	—
RE21-07-389	21-600081	0.0000–0.5000	SOIL	—	—	NA	—	—	—	0.157	—	—	—	—
RE21-07-391	21-600082	0.0000–0.5000	SOIL	—	—	NA	—	—	—	0.121 (J)	—	0.0458 (J)	—	—
RE21-07-392	21-600082	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-397	21-600085	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-398	21-600085	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-5177	21-601095	3.5000–4.5000	QBT3	—	0.0135 (J)	—	0.0344 (J)	0.175	0.176 (J)	0.246 (J)	0.119 (J)	—	0.613 (J)	0.232
RE21-07-5178	21-601095	5.5000–6.5000	QBT3	—	—	—	—	—	0.0264 (J)	0.034 (J)	—	0.0166 (J)	—	—
RE21-07-5183	21-601098	3.0000–4.0000	QBT3	—	—	0.00495 (J)	—	—	—	—	—	—	—	—
RE21-07-5184	21-601098	5.0000–6.0000	QBT3	—	—	0.00497 (J)	—	—	—	—	—	—	—	—
RE21-07-5197	21-601104	19.0000–20.0000	QBT3	—	—	0.00346 (J)	—	—	—	—	—	—	—	—

Table 6.15-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chloroform	Chrysene	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)
Residential SSL				**5.72**	**621**	**6110**	**32.2**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**
Industrial SSL				**31.9**	**2340**	**68400**	**180**	**24400**	**24400**	**na**	**na**	**na**	**na**
Construction Worker SSL				**671**	**20600**	**23800**	**3780**	**8910**	**8910**	**na**	**na**	**na**	**na**
RE21-07-246	21-600059	1.0000–2.0000	SOIL	—	0.0355 (J)	0.187 (J)	—	0.0342 (J)	—	NA	NA	NA	NA
RE21-07-247	21-600059	3.0000–4.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-248	21-600060	1.5000–2.5000	QBT3	0.000225 (J)	—	0.194 (J)	—	0.0113 (J)	—	NA	NA	NA	NA
RE21-07-249	21-600060	3.5000–4.5000	QBT3	—	0.0215 (J)	0.0827 (J)	0.000396 (J)	0.0132 (J)	—	NA	NA	NA	NA
RE21-07-250	21-600061	3.0000–4.0000	QBT3	—	—	0.187 (J)	—	0.0139 (J)	—	NA	NA	NA	NA
RE21-07-252	21-600062	0.0000–1.0000	SOIL	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-373	21-600062	5.0000–6.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-377	21-600075	0.0000–0.5000	SOIL	NA	—	—	—	0.0133 (J)	—	NA	NA	NA	NA
RE21-07-378	21-600075	2.0000–3.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-381	21-600077	0.0000–0.5000	SOIL	NA	—	—	—	0.0236 (J)	—	NA	NA	NA	NA
RE21-07-3345	21-600077	2.0000–3.0000	SOIL	NA	NA	NA	NA	NA	NA	0.0000018 (J)	3.38E-06	0.000000654 (J)	1.14E-06
RE21-07-382	21-600077	2.0000–3.0000	SOIL	0.000246 (J)	0.0477	—	—	0.11	0.0152 (J)	NA	NA	NA	NA
RE21-07-383	21-600078	0.0000–0.5000	SOIL	NA	—	—	—	0.0264 (J)	—	NA	NA	NA	NA
RE21-07-384	21-600078	2.0000–3.0000	QBT3	—	—	0.0392 (J)	—	—	—	NA	NA	NA	NA
RE21-07-386	21-600079	2.0000–3.0000	SOIL	—	0.0384	—	—	0.0794	—	NA	NA	NA	NA
RE21-07-387	21-600080	0.0000–0.5000	SOIL	NA	—	—	—	0.0138 (J)	—	NA	NA	NA	NA
RE21-07-388	21-600080	2.0000–3.0000	QBT3	—	0.0602	—	—	0.117	—	NA	NA	NA	NA
RE21-07-389	21-600081	0.0000–0.5000	SOIL	NA	0.0179 (J)	—	—	0.0359 (J)	—	NA	NA	NA	NA
RE21-07-391	21-600082	0.0000–0.5000	SOIL	NA	—	—	—	0.045	—	NA	NA	NA	NA
RE21-07-392	21-600082	2.0000–3.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-397	21-600085	0.0000–0.5000	SOIL	NA	0.0164 (J)	—	—	0.0254 (J)	—	NA	NA	NA	NA
RE21-07-398	21-600085	2.0000–3.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-5177	21-601095	3.5000–4.5000	QBT3	—	0.162	1.32	—	0.259	—	NA	NA	NA	NA
RE21-07-5178	21-601095	5.5000–6.5000	QBT3	—	0.0213 (J)	0.118 (J)	—	0.0389	—	NA	NA	NA	NA
RE21-07-5183	21-601098	3.0000–4.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-5184	21-601098	5.0000–6.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA
RE21-07-5197	21-601104	19.0000–20.0000	QBT3	—	—	—	—	—	—	NA	NA	NA	NA

Table 6.15-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[g]	**45**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[g]	**252**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[g]	**702**	**na**	**na**	**na**
RE21-07-246	21-600059	1.0000–2.0000	SOIL	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-247	21-600059	3.0000–4.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-248	21-600060	1.5000–2.5000	QBT3	NA	NA	NA	NA	—	0.000586 (J)	—	NA	NA	NA
RE21-07-249	21-600060	3.5000–4.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-250	21-600061	3.0000–4.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-252	21-600062	0.0000–1.0000	SOIL	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-373	21-600062	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-377	21-600075	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-378	21-600075	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-381	21-600077	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-3345	21-600077	2.0000–3.0000	SOIL	6.79E-07	0.0000000633 (J)	0.0000000877 (J)	8.44E-07	NA	NA	NA	1.23E-05	0.000000973 (J)	4.04E-07
RE21-07-382	21-600077	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	0.015 (J)	NA	NA	NA
RE21-07-383	21-600078	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-384	21-600078	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-386	21-600079	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.104 (J)	—	—	NA	NA	NA
RE21-07-387	21-600080	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-388	21-600080	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	0.000446 (J)	—	NA	NA	NA
RE21-07-389	21-600081	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-391	21-600082	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-392	21-600082	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-397	21-600085	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	—	NA	NA	NA
RE21-07-398	21-600085	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-5177	21-601095	3.5000–4.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-5178	21-601095	5.5000–6.5000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-5183	21-601098	3.0000–4.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-5184	21-601098	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA
RE21-07-5197	21-601104	19.0000–20.0000	QBT3	NA	NA	NA	NA	—	—	—	NA	NA	NA

Table 6.15-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Phenanthrene	Pyrene	Tetrachlorodibenzo dioxins (Total)	Tetrachlorodibenzo furans (Totals)	Tetrachloroethene	Toluene	Trimethylbenzene [1,2,4-]	Trimethylbenzene [1,3,5-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**1830**	**1720**	**na**	**na**	**6.99**	**5570**	**62**[b]	**780**[a]	**9550**	**1090**[h]
Industrial SSL				**20500**	**18300**	**na**	**na**	**36.4**	**57900**	**260**[b]	**10000**[a]	**31500**	**3610**[h]
Construction Worker SSL				**7150**	**6680**	**na**	**na**	**338**	**21100**	**688**[c]	**10000**[b]	**27500**	**3130**[h]
RE21-07-246	21-600059	1.0000–2.0000	SOIL	0.011 (J)	0.0511	NA	NA	—	0.0004 (J)	—	—	—	0.000421 (J)
RE21-07-247	21-600059	3.0000–4.0000	QBT3	—	—	NA	NA	—	—	—	—	—	0.000294 (J)
RE21-07-248	21-600060	1.5000–2.5000	QBT3	0.012 (J)	0.0139 (J)	NA	NA	0.000249 (J)	—	—	—	—	—
RE21-07-249	21-600060	3.5000–4.5000	QBT3	—	0.0194 (J)	NA	NA	—	—	0.00035 (J)	0.000252 (J)	0.00024 (J)	—
RE21-07-250	21-600061	3.0000–4.0000	QBT3	0.0212 (J)	0.0151 (J)	NA	NA	—	—	—	—	—	—
RE21-07-252	21-600062	0.0000–1.0000	SOIL	—	—	NA	NA	—	—	—	—	—	—
RE21-07-373	21-600062	5.0000–6.0000	QBT3	—	—	NA	NA	—	—	—	—	0.000278 (J)	0.000547 (J)
RE21-07-377	21-600075	0.0000–0.5000	SOIL	—	0.0167 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-378	21-600075	2.0000–3.0000	QBT3	—	—	NA	NA	—	0.000447 (J)	—	—	—	—
RE21-07-381	21-600077	0.0000–0.5000	SOIL	0.0283 (J)	0.0186 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3345	21-600077	2.0000–3.0000	SOIL	NA	NA	4.35E-07	2.25E-07	NA	NA	NA	NA	NA	NA
RE21-07-382	21-600077	2.0000–3.0000	SOIL	0.108	0.139	NA	NA	—	—	—	—	—	—
RE21-07-383	21-600078	0.0000–0.5000	SOIL	0.0141 (J)	0.0296 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-384	21-600078	2.0000–3.0000	QBT3	—	—	NA	NA	—	0.00049 (J)	—	—	—	—
RE21-07-386	21-600079	2.0000–3.0000	SOIL	0.0542	0.0721	NA	NA	—	—	—	—	—	—
RE21-07-387	21-600080	0.0000–0.5000	SOIL	—	0.0164 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-388	21-600080	2.0000–3.0000	QBT3	0.101	0.151	NA	NA	—	0.00243	—	—	—	—
RE21-07-389	21-600081	0.0000–0.5000	SOIL	—	0.0386 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-391	21-600082	0.0000–0.5000	SOIL	0.0332 (J)	0.0551	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-392	21-600082	2.0000–3.0000	QBT3	—	—	NA	NA	—	0.00113	—	—	—	—
RE21-07-397	21-600085	0.0000–0.5000	SOIL	0.0158 (J)	0.0336 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-398	21-600085	2.0000–3.0000	QBT3	—	—	NA	NA	—	0.000374 (J)	—	—	—	—
RE21-07-5177	21-601095	3.5000–4.5000	QBT3	0.106	0.235	NA	NA	—	0.000816 (J)	—	—	—	—
RE21-07-5178	21-601095	5.5000–6.5000	QBT3	—	0.0264 (J)	NA	NA	—	—	—	—	—	—
RE21-07-5183	21-601098	3.0000–4.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—
RE21-07-5184	21-601098	5.0000–6.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—
RE21-07-5197	21-601104	19.0000–20.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—

Source: SSLs from NMED (2009, 108070).

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

[a] Pyrene SSLs used as surrogates based on structural similarity.

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

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA= Not analyzed.

[f] na = Not available.

[g] Isopropylbenzene used as surrogate based on structural similarity.

[h] SSLs for xylenes used as surrogates based on structural similarity.

Table 6.15-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(h)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-246	21-600059	1.0000–2.0000	SOIL	0.0702	0.124	—[c]	1.94	1.17279	3.08	—	2.91
RE21-07-247	21-600059	3.0000–4.0000	QBT3	—	—	—	0.838	1.53333	—	0.105	—
RE21-07-248	21-600060	1.5000–2.5000	QBT3	0.0777	0.332	—	3.04	0.031654	—	0.108	—
RE21-07-249	21-600060	3.5000–4.5000	QBT3	—	0.25	—	1.1	0.038938	—	—	—
RE21-07-250	21-600061	3.0000–4.0000	QBT3	0.167	—	0.0575	7.4	0.041392	—	0.0929	—
RE21-07-251	21-600061	5.0000–6.0000	QBT3	—	—	—	2.33	0.096281	—	—	—
RE21-07-252	21-600062	0.0000–1.0000	SOIL	—	0.076	—	0.802	—	—	—	—
RE21-07-253	21-600062	2.0000–3.0000	QBT3	—	—	—	0.061	0.114623	—	0.096	—
RE21-07-373	21-600062	5.0000–6.0000	QBT3	—	—	—	0.0308	0.364162	—	—	—
RE21-07-377	21-600075	0.0000–0.5000	SOIL	0.0296	—	—	0.36	0.020711	—	—	—
RE21-07-378	21-600075	2.0000–3.0000	QBT3	—	—	—	0.0437	0.195695	—	—	—
RE21-07-379	21-600076	0.0000–0.5000	QBT3	0.0399	0.383	—	0.824	0.074036	—	—	—
RE21-07-380	21-600076	2.0000–3.0000	QBT3	—	—	—	0.309	0.043359	—	0.106	—
RE21-07-381	21-600077	0.0000–0.5000	SOIL	0.106	—	—	4.09	0.026484	—	—	—
RE21-07-382	21-600077	2.0000–3.0000	SOIL	0.083	0.257	—	1.75	0.066188	—	—	—
RE21-07-383	21-600078	0.0000–0.5000	SOIL	0.253	—	0.0485	1.41	0.182447	—	—	—
RE21-07-384	21-600078	2.0000–3.0000	QBT3	—	0.138	—	1.21	0.237125	—	0.0979	—

Table 6.15-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-385	21-600079	0.0000–0.5000	SOIL	—	—	—	0.183	0.049521	—	—	—
RE21-07-386	21-600079	2.0000–3.0000	SOIL	0.0985	0.142	—	0.846	0.033624	—	—	—
RE21-07-387	21-600080	0.0000–0.5000	SOIL	0.0293	—	—	0.542	0.272984	—	—	—
RE21-07-388	21-600080	2.0000–3.0000	QBT3	0.0575	0.119	—	0.651	10.3982	—	—	—
MD21-09-8737	21-600080	4.0000–5.0000	QBT3	—	NA[d]	—	1.73	0.550592	NA	NA	NA
MD21-09-12449	21-600080	9.0000–10.0000	SOIL	NA	NA	—	0.343	NA	NA	NA	NA
RE21-07-389	21-600081	0.0000–0.5000	SOIL	0.241	—	0.051	2.71	0.71399	—	—	—
RE21-07-390	21-600081	2.0000–3.0000	QBT3	—	—	—	0.312	0.105983	—	—	—
RE21-07-391	21-600082	0.0000–0.5000	SOIL	0.203	—	0.0242	3.85	0.04509	—	—	—
RE21-07-392	21-600082	2.0000–3.0000	QBT3	—	—	—	0.15	0.027271	—	—	—
RE21-07-393	21-600083	0.0000–0.5000	SOIL	0.111	—	—	2.39	0.036072	—	—	—
RE21-07-394	21-600083	2.0000–3.0000	QBT3	—	—	—	0.0417	0.093462	—	—	—
RE21-07-395	21-600084	0.0000–0.5000	SOIL	—	—	—	0.133	0.012587	—	—	—
RE21-07-396	21-600084	2.0000–3.0000	QBT3	—	—	—	0.518	0.062116	—	—	—
MD21-09-8746	21-600084	4.0000–5.0000	QBT3	NA	NA	—	1.78	NA	NA	NA	NA
MD21-09-12450	21-600084	9.0000–10.0000	SOIL	NA	NA	—	0.04	NA	NA	NA	NA
RE21-07-397	21-600085	0.0000–0.5000	SOIL	0.199	—	0.0426	3.59	0.089064	—	—	—
RE21-07-398	21-600085	2.0000–3.0000	QBT3	—	—	—	0.062	0.058126	—	—	—

Table 6.15-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-5177	21-601095	3.5000–4.5000	QBT3	—	—	—	0.908	6.05358	2.05	0.0962	1.97
RE21-07-5178	21-601095	5.5000–6.5000	QBT3	—	—	—	0.23	4.04916	—	0.123	—
RE21-07-5179	21-601096	8.5000–9.5000	SOIL	—	—	—	—	2.06169	—	—	—
RE21-07-5180	21-601096	10.5000–11.5000	SOIL	—	—	—	0.0396	1.93144	—	—	—
RE21-07-5181	21-601097	5.0000–6.0000	QBT3	—	—	—	0.0435	0.393725	—	0.0974	—
RE21-07-5182	21-601097	7.0000–8.0000	QBT3	—	—	—	0.0277	0.385644	—	0.108	—
RE21-07-5184	21-601098	5.0000–6.0000	QBT3	—	—	—	—	0.104286	—	—	—
RE21-07-5185	21-601099	8.0000–9.0000	SOIL	—	—	—	—	0.810298	—	—	—
RE21-07-5186	21-601099	10.0000–11.0000	SOIL	—	—	—	—	0.82791	—	—	—
RE21-07-5187	21-601100	3.5000–4.5000	QBT3	—	—	—	—	1.28277	—	—	—
RE21-07-5188	21-601100	5.5000–6.5000	QBT3	—	—	—	—	1.28666	—	—	—
RE21-07-5189	21-601101	3.5000–4.5000	SOIL	—	—	—	—	0.35383	—	—	—
RE21-07-5190	21-601101	5.5000–6.5000	QBT3	—	—	—	—	0.247721	—	—	—
RE21-07-5191	21-601102	2.7500–3.7500	QBT3	—	—	—	—	0.495612	—	—	—
RE21-07-5192	21-601102	4.7500–5.7500	QBT3	—	—	—	—	0.404432	—	—	—
RE21-07-5195	21-601104	9.0000–10.0000	QBT3	—	—	—	—	0.314518	—	—	—
RE21-07-5196	21-601104	14.0000–15.0000	QBT3	—	—	—	—	0.199496	—	—	—
RE21-07-5197	21-601104	19.0000–20.0000	QBT3	—	—	—	—	0.268511	—	—	—

Table 6.15-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-09-8740	21-605241	2.0000–3.0000	QBT3	—	NA	—	0.077	0.13572	NA	NA	NA
MD21-09-8741	21-605241	4.0000–5.0000	QBT3	NA	NA	NA	NA	0.135087	NA	NA	NA
MD21-09-8742	21-605242	0.0000–0.5000	SOIL	NA	NA	0.061	1.82	NA	NA	NA	NA
MD21-09-8743	21-605243	0.0000–0.5000	SOIL	NA	NA	0.032	1.74	NA	NA	NA	NA
MD21-09-8744	21-605244	0.0000–0.5000	SOIL	NA	NA	—	1.77	NA	NA	NA	NA
MD21-09-8745	21-605244	4.0000–5.0000	QBT3	NA	NA	—	1.74	NA	NA	NA	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.16-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(i)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**na**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
AAA4129	21-01672	0.0000–5.0000	QBT3	13100	NA[e]	3.8	235	—[f]	—	74400	—	—	8.2	—	15.7
AAA4131	21-01672	5.0000–10.0000	QBT3	—	NA	—	157	—	—	67000	—	—	—	—	—
AAA4132	21-01672	10.0000–15.0000	QBT3	9290	NA	—	271	—	—	123000	—	—	6.7	—	12.3
AAA4133	21-01672	15.0000–20.0000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	—	—	—	—	—	0.881	—	44.7	—	21.2	—	115
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	—	—	—	—	—	0.748	—	—	—	—	—	46.8
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	—	—	—	—	—	0.981	—	35.5	—	18.8	—	93.4
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	22.6
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	—	—	—	—	—	0.683	—	—	—	—	—	33
0121-97-1236	21-05355	0.0000–0.5000	SOIL	—	5.8 (U)	—	—	—	0.87 (U)	—	30.2	—	15	—	97.4
0121-97-1238	21-05355	0.5000–1.0000	SOIL	—	5.5 (U)	—	304	—	0.98 (J)	—	36.9	—	22.2	—	107
0121-97-1226	21-05357	0.0000–0.5000	SOIL	—	5.9 (U)	—	—	—	0.89 (U)	—	—	—	—	—	—
0121-97-1231	21-05357	0.5000–1.0000	SOIL	—	6.1 (U)	—	—	—	0.92 (U)	—	—	—	—	—	—
0121-97-1221	21-05362	0.0000–0.5000	SOIL	—	6.6 (J)	—	—	—	1 (J)	—	42.5	—	17.1	—	144
0121-97-1223	21-05362	0.5000–1.0000	SOIL	—	5.5 (U)	—	—	—	0.82 (U)	—	25	—	—	—	83.6
0121-97-1224	21-05379	0.0000–0.5000	SOIL	—	5.7 (U)	—	—	—	0.86 (U)	—	26.5	—	—	—	76.9
0121-97-1225	21-05379	0.5000–1.0000	SOIL	—	5.9 (U)	—	—	—	0.89 (U)	—	—	—	—	—	—
0121-97-1230	21-05389	0.0000–0.5000	SOIL	—	5.9 (U)	—	—	—	0.89 (U)	—	—	—	—	—	—
0121-97-1229	21-05389	0.5000–1.0000	SOIL	—	6.1 (U)	—	—	—	0.91 (U)	—	—	—	—	—	—
0121-97-1228	21-05404	0.0000–0.5000	SOIL	—	6 (U)	—	—	—	0.89 (U)	—	—	—	—	—	—
0121-97-1235	21-05404	0.5000–1.0000	SOIL	—	5.9 (U)	—	—	—	0.88 (U)	—	—	—	—	—	—
0121-97-1239	21-05404	1.0000–1.5000	SOIL	—	5.9 (U)	—	—	—	0.89 (U)	—	—	—	—	—	—
0121-97-1237	21-05418	0.0000–0.5000	SOIL	—	5.7 (U)	—	—	—	0.85 (U)	—	—	—	—	—	—
0121-97-1241	21-05418	0.5000–1.0000	SOIL	—	7.3 (U)	—	—	—	0.7	—	—	—	—	—	—
0121-97-1227	21-05422	0.0000–0.5000	SOIL	—	5.7 (U)	—	—	—	0.86 (U)	—	—	—	—	—	—
0121-97-1240	21-05422	0.5000–1.0000	SOIL	—	5.7 (U)	—	—	—	0.85 (U)	—	—	—	—	—	—
0121-97-1232	21-05425	0.0000–0.5000	SOIL	—	5.6 (U)	—	—	—	0.84 (U)	—	—	—	—	—	—
0121-97-1234	21-05425	0.5000–1.0000	SOIL	—	5.7 (U)	—	—	—	0.85 (U)	—	—	—	—	—	—
0121-97-1233	21-05425	1.0000–1.5000	SOIL	—	5.7 (U)	—	—	—	0.85 (U)	—	—	—	—	—	—

Table 6.16-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**na**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
0121-97-1222	21-05425	1.5000–2.0000	SOIL	—	5.6 (U)	—	—	—	0.85 (U)	—	—	—	—	—	—
0121-97-1453	21-05512	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
0121-97-1454	21-05513	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
MD21-98-0049	21-10501	0.0000–0.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	—	NA	—	—	—	0.56	—	—	—	—	—	—
MD21-98-0047	21-10503	0.0000–0.5000	SOIL	—	NA	—	—	—	0.57 (U)	—	—	—	—	—	—
MD21-98-0045	21-10504	0.0000–0.5000	QBT3	14000	NA	5.6	54	—	—	—	8.1	3.3	5.3	—	—
MD21-98-0046	21-10505	0.0000–0.5000	SOIL	—	NA	—	—	—	0.56 (U)	—	—	—	—	—	—
MD21-98-0044	21-10506	0.0000–0.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-98-0043	21-10507	0.0000–0.5000	QBT3	15000	NA	5.6	62	—	—	—	8.5	—	6.5	—	—
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	—	NA	8.3	—	—	0.54 (U)	—	—	—	—	—	—
MD21-98-0041	21-10509	0.0000–0.5000	SOIL	—	NA	—	—	—	0.55 (U)	6700	—	—	—	—	—
MD21-98-0040	21-10510	0.0000–0.5000	QBT3	—	NA	4.5	—	—	—	—	—	—	—	—	—
MD21-98-0039	21-10511	0.0000–0.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	13
MD21-98-0038	21-10512	0.0000–0.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-98-0037	21-10513	0.0000–0.5000	QBT3	25000	NA	8.2	110	1.8	—	3100	16	5.7	8	17000	26
MD21-98-0036	21-10514	0.0000–0.5000	SOIL	—	NA	—	—	—	0.56 (U)	—	—	—	—	—	—
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-98-0034	21-10516	0.0000–0.5000	SOIL	—	NA	—	—	—	0.53 (U)	—	—	—	—	—	—
MD21-01-0001	21-11191	0.5000–1.1667	FILL	—	NA	—	—	—	—	—	20	—	—	—	50
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	12
MD21-01-0002	21-11192	0.5000–1.0000	FILL	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	—	NA	—	—	—	—	3300	9.2 (J)	—	—	—	14
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	—	—	—	—	—	—	—	—	—	6	—	—
MD21-01-0008	21-11194	0.8333–1.3333	FILL	—	—	—	—	—	—	7700	—	—	—	—	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	—	—	—	—	—	—	—	7.7	—	—	—	—
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	—	NA	—	58	—	—	3600	—	—	—	—	—
MD21-01-0014	21-11196	4.5000–5.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-01-0015	21-11197	2.3333–3.3333	QBT3	—	NA	—	—	—	—	—	13	—	—	—	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—

Table 6.16-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**54800**	**400**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**na**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	—	—	3.6	160	—	—	73000	—	—	—	—	—
MD21-01-0018	21-11198	5.3333–6.3333	QBT3	—	NA	—	—	—	—	—	11	—	—	—	—
MD21-01-0019	21-11199	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0020	21-11199	12.0000–13.0000	QBT3	—	NA	—	—	—	—	—	17	—	—	—	—
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	—	NA	—	—	—	—	—	11	—	—	—	18
MD21-01-0055	21-11200	12.0000–13.0000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	—	NA	—	—	—	—	—	13	—	—	—	19
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	—	0.82 (U)	—	—	—	—	—	19.9	—	—	—	—
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	—	0.82 (U)	—	—	—	—	—	21.2	—	—	—	—
MD21-01-0309	21-11216	17.1700–18.0000	QBT3	—	0.82 (UJ)	—	—	—	—	—	39.6	—	—	—	—
MD21-01-0308	21-11217	8.0000–9.1700	QBT3	—	0.89 (UJ)	—	—	—	—	5090	23.6	—	—	—	—
MD21-01-0313	21-11217	12.0000–13.0000	QBT3	—	0.82 (UJ)	—	—	—	—	—	27.4	—	—	—	—
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	—	0.89 (U)	—	—	—	—	—	9.8	—	15.1 (J)	—	—
MD21-01-0314	21-11218	8.0000–9.0000	QBT3	—	0.82 (UJ)	—	—	—	—	—	21.8	—	—	—	—
MD21-01-0315	21-11218	12.0000–13.0000	QBT3	—	0.82 (UJ)	—	—	—	—	—	48.6	—	—	—	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	—	0.82 (U)	—	—	—	—	—	74.5	—	5.3 (J)	—	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	—	0.86 (U)	—	48.7	—	—	11300	—	—	—	—	—
MD21-01-0301	21-11219	12.0000–13.0000	QBT3	—	0.83 (U)	—	—	—	—	—	56.9	—	—	—	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	—	0.84 (U)	—	—	—	—	2940	77.5	—	—	—	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	—	0.85 (U)	—	—	—	—	—	—	—	—	—	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	—	0.85 (U)	—	—	—	—	—	—	—	—	—	—
MD21-01-0311	21-11221	4.0000–5.0000	QBT3	—	0.87 (U)	—	54	—	—	6880	—	—	—	—	—
MD21-01-0304	21-11221	7.0000–8.0000	QBT3	—	0.82 (U)	—	—	—	—	—	—	—	—	—	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	—	NA	2.85	—	—	—	—	—	—	—	—	—
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-08-7190	21-603023	8.5000–9.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-08-7191	21-603023	10.5000–11.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-08-7192	21-603024	7.5000–8.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-08-7193	21-603024	9.5000–10.5000	QBT3	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-08-7194	21-603025	7.5000–8.5000	QBT3	—	NA	4	—	—	—	2820 (J+)	—	—	—	—	16.9
RE21-08-7195	21-603025	9.5000–10.5000	QBT3	8680 (J+)	NA	6.91	88.3	—	—	22800 (J+)	—	—	6.22	—	21.6

Table 6.16-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lithium	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Thallium	Vanadium	Zinc
QBT3 Background Value				**na**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**1.1**	**17**	**63.5**
SOIL Background Value				**na**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**0.73**	**39.6**	**48.8**
Residential SSL				**160**[c]	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**5.16**	**391**	**23500**
Industrial SSL				**2000**[c]	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**74.9**	**5680**	**341000**
Construction Worker SSL				**619**[d]	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**20.4**	**1550**	**92900**
AAA4129	21-01672	0.0000–5.0000	QBT3	14.8	6440	NA	14.8	NA	NA	0.52 (J-)	1.2 (U)	223	—	—	—
AAA4131	21-01672	5.0000–10.0000	QBT3	7.4 (J)	5660	NA	—	NA	NA	0.43 (UJ)	1.1 (U)	262	—	—	—
AAA4132	21-01672	10.0000–15.0000	QBT3	13.1	8840	NA	—	NA	NA	0.45 (UJ)	1.1 (U)	415	—	—	—
AAA4133	21-01672	15.0000–20.0000	QBT3	1.7 (J)	—	NA	—	NA	NA	0.41 (UJ)	—	1.4 (J)	—	—	—
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	NA	—	10.9	—	NA	—	—	—	NA	—	—	267
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	NA	—	6.17	—	NA	—	—	—	NA	—	—	114
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	NA	—	0.172	—	NA	0.0532 (J)	—	—	NA	—	—	—
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	NA	—	9.93	—	NA	—	—	—	NA	—	—	226
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	NA	—	0.791	—	NA	—	—	—	NA	—	—	51.6
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	NA	—	2.91	—	NA	—	—	—	NA	—	—	108
0121-97-1236	21-05355	0.0000–0.5000	SOIL	NA	—	5.5	—	NA	NA	—	1.5 (U)	NA	—	—	236
0121-97-1238	21-05355	0.5000–1.0000	SOIL	NA	—	14.7	—	NA	NA	—	1.4 (U)	NA	—	—	316
0121-97-1226	21-05357	0.0000–0.5000	SOIL	NA	—	—	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1231	21-05357	0.5000–1.0000	SOIL	NA	—	—	—	NA	NA	—	1.6 (U)	NA	—	—	—
0121-97-1221	21-05362	0.0000–0.5000	SOIL	NA	—	9.1	—	NA	NA	—	1.4 (U)	NA	—	—	199
0121-97-1223	21-05362	0.5000–1.0000	SOIL	NA	—	5.1	—	NA	NA	—	1.4 (U)	NA	—	—	128
0121-97-1224	21-05379	0.0000–0.5000	SOIL	NA	—	7.2	—	NA	NA	—	1.5 (U)	NA	—	—	162
0121-97-1225	21-05379	0.5000–1.0000	SOIL	NA	—	2.4	—	NA	NA	—	1.5 (U)	NA	—	—	58.3
0121-97-1230	21-05389	0.0000–0.5000	SOIL	NA	—	0.27	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1229	21-05389	0.5000–1.0000	SOIL	NA	—	0.17	—	NA	NA	—	1.6 (U)	NA	—	—	—
0121-97-1228	21-05404	0.0000–0.5000	SOIL	NA	—	0.16	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1235	21-05404	0.5000–1.0000	SOIL	NA	—	—	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1239	21-05404	1.0000–1.5000	SOIL	NA	—	—	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1237	21-05418	0.0000–0.5000	SOIL	NA	—	—	—	NA	NA	—	1.4 (U)	NA	—	—	—
0121-97-1241	21-05418	0.5000–1.0000	SOIL	NA	—	—	—	NA	NA	—	—	NA	—	—	—
0121-97-1227	21-05422	0.0000–0.5000	SOIL	NA	—	0.78	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1240	21-05422	0.5000–1.0000	SOIL	NA	—	0.2	—	NA	NA	—	1.4 (U)	NA	—	—	—
0121-97-1232	21-05425	0.0000–0.5000	SOIL	NA	—	0.11	—	NA	NA	—	1.4 (U)	NA	—	—	—
0121-97-1234	21-05425	0.5000–1.0000	SOIL	NA	—	—	—	NA	NA	—	1.4 (U)	NA	—	—	—
0121-97-1233	21-05425	1.0000–1.5000	SOIL	NA	—	—	—	NA	NA	—	1.5 (U)	NA	—	—	—
0121-97-1222	21-05425	1.5000–2.0000	SOIL	NA	—	—	—	NA	NA	—	1.4 (U)	NA	—	—	—

Table 6.16-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lithium	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Thallium	Vanadium	Zinc
QBT3 Background Value				**na**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**1.1**	**17**	**63.5**
SOIL Background Value				**na**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**0.73**	**39.6**	**48.8**
Residential SSL				**160**[c]	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**5.16**	**391**	**23500**
Industrial SSL				**2000**[c]	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**74.9**	**5680**	**341000**
Construction Worker SSL				**619**[d]	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**20.4**	**1550**	**92900**
0121-97-1453	21-05512	0.0000–0.5000	SOIL	NA	—	0.11	—	NA	NA	—	—	NA	0.98 (U)	—	—
0121-97-1454	21-05513	0.0000–0.5000	SOIL	NA	—	—	—	NA	NA	—	—	NA	0.96 (U)	—	—
MD21-98-0049	21-10501	0.0000–0.5000	QBT3	NA	—	0.12	—	NA	NA	1 (U)	2 (U)	NA	2 (U)	—	—
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	NA	—	0.13	—	NA	NA	—	2.2 (U)	NA	2.2 (U)	—	57
MD21-98-0047	21-10503	0.0000–0.5000	SOIL	NA	—	0.11 (U)	—	NA	NA	—	2.3 (U)	NA	2.3 (U)	—	53
MD21-98-0045	21-10504	0.0000–0.5000	QBT3	NA	1700	0.13	—	NA	NA	1.1 (U)	2.2 (U)	NA	2.2 (U)	20	77
MD21-98-0046	21-10505	0.0000–0.5000	SOIL	NA	—	0.16	—	NA	NA	—	2.2 (U)	NA	2.2 (U)	—	60
MD21-98-0044	21-10506	0.0000–0.5000	QBT3	NA	—	—	—	NA	NA	1 (U)	2.1 (U)	NA	2.1 (U)	—	—
MD21-98-0043	21-10507	0.0000–0.5000	QBT3	NA	1700	0.11 (U)	—	NA	NA	1.1 (U)	2.2 (U)	NA	2.2 (U)	19	150
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	NA	—	1.7	—	NA	NA	—	2.2 (U)	NA	2.2 (U)	—	93
MD21-98-0041	21-10509	0.0000–0.5000	SOIL	NA	—	0.14	—	NA	NA	—	2.2 (U)	NA	2.2 (U)	—	67
MD21-98-0040	21-10510	0.0000–0.5000	QBT3	NA	—	0.11 (U)	—	NA	NA	1.1 (U)	2.2 (U)	NA	2.2 (U)	—	140
MD21-98-0039	21-10511	0.0000–0.5000	QBT3	NA	—	—	—	NA	NA	1 (U)	2.1 (U)	NA	2.1 (U)	—	—
MD21-98-0038	21-10512	0.0000–0.5000	QBT3	NA	—	—	—	NA	NA	1 (U)	2 (U)	NA	2 (U)	—	—
MD21-98-0037	21-10513	0.0000–0.5000	QBT3	NA	2900	0.18	8.3	NA	NA	1.1 (U)	2.2 (U)	NA	2.2 (U)	28	—
MD21-98-0036	21-10514	0.0000–0.5000	SOIL	NA	—	0.11 (U)	—	NA	NA	—	2.2 (U)	NA	2.2 (U)	—	54
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	NA	—	—	—	NA	NA	1 (U)	2 (U)	NA	2 (U)	—	—
MD21-98-0034	21-10516	0.0000–0.5000	SOIL	NA	—	0.22	—	NA	NA	—	2.1 (U)	NA	2.1 (U)	—	—
MD21-01-0001	21-11191	0.5000–1.1667	FILL	NA	—	0.45	—	NA	NA	—	—	NA	—	—	76
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	NA	—	—	—	NA	NA	0.358	—	NA	—	—	—
MD21-01-0002	21-11192	0.5000–1.0000	FILL	NA	—	0.11 (J)	—	NA	NA	1.67	—	NA	—	—	—
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	NA	—	—	—	NA	NA	0.367	—	NA	—	—	—
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	NA	NA	—	—	NA	NA	0.308	—	NA	—	—	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	NA	—	—	—	NA	NA	0.756	—	NA	—	—	—
MD21-01-0008	21-11194	0.8333–1.3333	FILL	NA	—	—	—	NA	NA	—	—	NA	—	—	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	NA	—	—	—	NA	NA	0.7	—	NA	—	—	—
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	NA	—	0.25	—	NA	NA	0.327 (J)	—	NA	—	—	—
MD21-01-0014	21-11196	4.5000–5.5000	QBT3	NA	—	—	—	NA	NA	0.658	—	NA	—	—	—
MD21-01-0015	21-11197	2.3333–3.3333	QBT3	NA	—	—	9.7	NA	NA	0.577	—	NA	—	—	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	NA	—	—	—	NA	NA	0.533	—	NA	—	—	—
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	NA	2400	—	—	NA	NA	0.681	—	NA	—	—	—

Table 6.16-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lithium	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Thallium	Vanadium	Zinc
QBT3 Background Value				**na**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**1.1**	**17**	**63.5**
SOIL Background Value				**na**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**0.73**	**39.6**	**48.8**
Residential SSL				**160**[c]	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**5.16**	**391**	**23500**
Industrial SSL				**2000**[c]	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**74.9**	**5680**	**341000**
Construction Worker SSL				**619**[d]	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**20.4**	**1550**	**92900**
MD21-01-0018	21-11198	5.3333–6.3333	QBT3	NA	—	—	—	NA	NA	0.448	—	NA	—	—	—
MD21-01-0019	21-11199	8.0000–9.0000	QBT3	NA	—	—	—	NA	NA	0.582	—	NA	—	—	—
MD21-01-0020	21-11199	12.0000–13.0000	QBT3	NA	—	—	8.4	NA	NA	0.571	—	NA	—	—	—
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	NA	—	—	—	NA	NA	0.664	—	NA	—	—	—
MD21-01-0055	21-11200	12.0000–13.0000	QBT3	NA	—	—	—	NA	NA	0.554	—	NA	—	—	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	NA	—	—	7.7	NA	NA	0.582	—	NA	—	—	—
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	NA	—	—	9.4	NA	NA	—	—	NA	—	—	—
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	NA	—	—	10.5	NA	NA	—	—	NA	—	—	—
MD21-01-0309	21-11216	17.1700–18.0000	QBT3	NA	—	—	18.9	NA	NA	0.32 (J)	—	NA	—	—	—
MD21-01-0308	21-11217	8.0000–9.1700	QBT3	NA	—	—	13.6	NA	NA	—	—	NA	—	—	—
MD21-01-0313	21-11217	12.0000–13.0000	QBT3	NA	—	—	13.2	NA	NA	—	—	NA	—	—	—
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	NA	—	—	—	NA	NA	0.4 (J)	—	NA	—	—	—
MD21-01-0314	21-11218	8.0000–9.0000	QBT3	NA	—	—	11.2	NA	NA	0.38 (J)	—	NA	—	—	—
MD21-01-0315	21-11218	12.0000–13.0000	QBT3	NA	—	—	23.3	NA	NA	—	—	NA	—	—	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	NA	—	—	33.2	NA	NA	0.46 (J)	—	NA	1.6 (J-)	—	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	NA	—	—	—	NA	NA	—	—	NA	—	—	—
MD21-01-0301	21-11219	12.0000–13.0000	QBT3	NA	—	—	28	NA	NA	0.32 (J)	—	NA	—	—	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	NA	—	—	35.4	NA	NA	—	—	NA	—	—	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	NA	—	0.36	—	NA	NA	—	—	NA	—	—	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	NA	—	0.63	—	NA	NA	—	—	NA	—	—	—
MD21-01-0311	21-11221	4.0000–5.0000	QBT3	NA	—	—	—	NA	NA	0.41 (J)	—	NA	—	—	—
MD21-01-0304	21-11221	7.0000–8.0000	QBT3	NA	—	—	—	NA	NA	0.38 (J)	—	NA	—	—	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	NA	—	0.658	—	—	0.000667 (J)	4.17	—	NA	—	—	—
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	NA	—	0.197	—	—	—	4.07	—	NA	—	—	—
RE21-08-7190	21-603023	8.5000–9.5000	QBT3	NA	—	—	—	—	—	3.16	—	NA	—	—	—
RE21-08-7191	21-603023	10.5000–11.5000	QBT3	NA	—	0.105	—	—	0.00054 (J)	4.43	—	NA	—	—	—
RE21-08-7192	21-603024	7.5000–8.5000	QBT3	NA	—	—	—	—	—	3.96	—	NA	—	—	—
RE21-08-7193	21-603024	9.5000–10.5000	QBT3	NA	—	—	—	—	—	4.16	—	NA	—	—	—

Table 6.16-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lithium	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Thallium	Vanadium	Zinc
QBT3 Background Value				**na**	**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**1.1**	**17**	**63.5**
SOIL Background Value				**na**	**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**0.73**	**39.6**	**48.8**
Residential SSL				**160**[c]	**na**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**5.16**	**391**	**23500**
Industrial SSL				**2000**[c]	**na**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**74.9**	**5680**	**341000**
Construction Worker SSL				**619**[d]	**na**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**20.4**	**1550**	**92900**
RE21-08-7194	21-603025	7.5000–8.5000	QBT3	NA	—	—	—	1.89	—	6.23	—	NA	—	—	—
RE21-08-7195	21-603025	9.5000–10.5000	QBT3	NA	3080	—	6.88 (J-)	2.83	—	15.6	—	NA	—	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] NA = Not analyzed.

[f] — = Not detected or not detected above BV.

Table 6.16-2
Summary of Organic Chemicals Detected at SWMU 21-024(i)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aldrin	Anthracene	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	BHC[alpha-]	BHC[delta-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate
Residential SSL				**3440**	**67500**	**0.284**	**17200**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**1720**[c]	**62.1**	**240000**	**0.772**	**5.17**[d]	**5.17**	**347**
Industrial SSL				**36700**	**851000**	**1.12**	**183000**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**18300**[c]	**234**	**2500000**	**3.04**	**22.9**[d]	**22.9**	**1370**
Construction Worker SSL				**18600**	**263000**	**7.15**	**66800**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**6680**[c]	**2060**	**2500000**	**26.3**	**83**[d]	**83**	**4760**
AAA4131	21-01672	5.0000–10.0000	QBT3	—[a]	NA[b]	NA	—	NA	NA	NA	—	—	—	—	—	—	NA	NA	NA	0.11 (J)
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	—	NA	NA	—	0.906	0.4	NA	—	—	—	—	—	—	NA	NA	NA	—
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	—	NA	NA	—	0.371	0.176	NA	—	—	—	—	—	—	NA	NA	NA	—
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	—	NA	NA	—	0.0214	0.0128	NA	—	—	—	—	—	—	NA	NA	NA	—
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	—	NA	NA	—	0.85	0.365	NA	—	—	—	—	—	—	NA	NA	NA	—
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	—	NA	NA	—	0.0672	0.0379	NA	—	—	—	—	—	—	NA	NA	NA	0.0447 (J)
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	—	NA	NA	—	0.558	0.267	NA	—	—	—	—	—	—	NA	NA	NA	—
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	—	NA	—	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	—	NA	—	—	0.091	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	—	NA	—	—	0.11	—	NA	—	—	—	—	—	—	—	—	—	—
MD21-01-0001	21-11191	0.5000–1.1667	FILL	—	0.081 (J)	—	—	0.071	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	—	0.021 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0002	21-11192	0.5000–1.0000	FILL	0.044 (J)	0.2 (J)	—	0.045 (J)	—	—	—	0.082 (J)	0.074 (J)	0.078 (J)	—	0.078 (J)	0.18 (J)	—	—	—	0.055 (J)
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	—	0.078 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	—	0.035 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	—	0.022 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	—	0.024 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0011	21-11195	2.6667–4.0000	FILL	—	0.014 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0012	21-11195	5.6667–6.6667	FILL	—	0.02 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0526	21-11195	12.0000–13.0000	QBT3	—	0.0118	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0119 (J)
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	—	0.022 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	—	0.023 (J+)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0522	21-11199	17.0000–18.0000	QBT3	—	0.0083	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0112 (J)
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	—	0.017 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.16-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Aldrin	Anthracene	Aroclor-1254	Aroclor-1260	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	BHC[alpha-]	BHC[delta-]	BHC[gamma-]	Bis(2-ethylhexyl)phthalate
Residential SSL				**3440**	**67500**	**0.284**	**17200**	**1.12**	**2.22**	**15.5**	**6.21**	**0.621**	**6.21**	**1720**[c]	**62.1**	**240000**	**0.772**	**5.17**[d]	**5.17**	**347**
Industrial SSL				**36700**	**851000**	**1.12**	**183000**	**8.26**	**8.26**	**85.4**	**23.4**	**2.34**	**23.4**	**18300**[c]	**234**	**2500000**	**3.04**	**22.9**[d]	**22.9**	**1370**
Construction Worker SSL				**18600**	**263000**	**7.15**	**66800**	**4.36**	**75.8**	**471**	**213**	**21.3**	**213**	**6680**[c]	**2060**	**2500000**	**26.3**	**83**[d]	**83**	**4760**
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.11 (J)	—	—	—	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	0.099 (J)	—	—	—	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	—	0.016 (J)	—	—	—	—	—	—	—	—	—	—	0.089 (J)	—	—	—	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	—	0.016 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0523	21-11222	12.0000–15.0000	FILL	—	0.0079	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0525	21-11222	17.0000–18.0000	FILL	—	0.0255	0.00027 (J-)	—	—	—	0.00035 (J)	—	—	—	—	—	—	0.00022 (J-)	0.00024 (J-)	0.00024 (J-)	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	0.147	—	NA	0.261	NA	NA	—	0.395	0.389	0.496	0.357 (J)	—	—	NA	NA	NA	—
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	0.126	—	NA	0.191	NA	NA	—	0.349	0.306	0.396	0.265 (J)	—	—	NA	NA	NA	—

Table 6.16-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Bromomethane	Butanone[2-]	Chrysene	DDD[4,4'-]	DDT[4,4'-]	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dieldrin	Endosulfan Sulfate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Isopropylbenzene	Methylnaphthalene[2-]	Naphthalene	Phenanthrene	Pyrene
Residential SSL				**22.3**	**39600**	**621**	**20.3**	**17.2**	**6110**	**32.2**	**0.304**	**367**[e]	**2290**	**2290**	**6.21**	**3210**	**310**[f]	**45**	**1830**	**1720**
Industrial SSL				**83.6**	**369000**	**2340**	**79.8**	**78.1**	**68400**	**180**	**1.2**	**4100**[e]	**24400**	**24400**	**23.4**	**14900**	**4100**[f]	**252**	**20500**	**18300**
Construction Worker SSL				**67.1**	**148000**	**20600**	**695**	**142**	**23800**	**3780**	**10.3**	**1430**[e]	**8910**	**8910**	**213**	**10300**	**1240**[g]	**702**	**7150**	**6680**
AAA4131	21-01672	5.0000–10.0000	QBT3	NA	NA	—	NA	NA	—	—	NA	NA	—	—	—	NA	—	—	—	—
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	NA	NA	—	NA	NA	0.0408 (J)	—	NA	NA	0.0244 (J)	—	—	NA	—	—	—	0.0345
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	NA	NA	—	NA	NA	—	—	NA	NA	—	—	—	NA	—	—	—	—
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	NA	NA	—	NA	NA	—	—	NA	NA	—	—	—	NA	—	—	—	—
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	NA	NA	—	NA	NA	0.0432 (J)	—	NA	NA	0.0534	—	—	NA	—	—	0.0409	0.0655
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	NA	NA	—	NA	NA	—	—	NA	NA	—	—	—	NA	—	—	—	—
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	NA	NA	—	NA	NA	—	—	NA	NA	—	—	—	NA	—	—	—	—
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	NA	NA	—	—	—	—	—	—	—	0.57	—	—	NA	—	—	0.66	0.52
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	NA	NA	—	—	—	—	—	—	—	—	—	—	NA	—	—	—	—
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	NA	NA	—	—	—	—	—	—	—	—	—	—	NA	—	—	—	—
MD21-01-0001	21-11191	0.5000–1.1667	FILL	—	0.012 (J)	—	—	—	—	0.0039 (J)	—	—	—	—	—	—	—	—	—	—
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0002	21-11192	0.5000–1.0000	FILL	—	0.056	0.089 (J)	—	—	—	—	—	—	0.31 (J)	—	—	—	—	—	0.26 (J)	0.23 (J)
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	—	0.0083 (J)	—	—	—	—	—	—	—	—	—	—	0.0025 (J)	—	—	—	—
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	—	0.014 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	—	0.0095 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	—	0.011 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0011	21-11195	2.6667–4.0000	FILL	0.0034 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0012	21-11195	5.6667–6.6667	FILL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0526	21-11195	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	—	0.0042 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	—	0.0054 (J)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	—	0.0051 (J+)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0522	21-11199	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	0.0043 (J)	—	—	—	—	—	—	—
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 6.16-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Bromomethane	Butanone[2-]	Chrysene	DDD[4,4'-]	DDT[4,4'-]	Di-n-butylphthalate	Dichlorobenzene[1,4-]	Dieldrin	Endosulfan Sulfate	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Isopropylbenzene	Methylnaphthalene[2-]	Naphthalene	Phenanthrene	Pyrene
Residential SSL				**22.3**	**39600**	**621**	**20.3**	**17.2**	**6110**	**32.2**	**0.304**	**367**[e]	**2290**	**2290**	**6.21**	**3210**	**310**[f]	**45**	**1830**	**1720**
Industrial SSL				**83.6**	**369000**	**2340**	**79.8**	**78.1**	**68400**	**180**	**1.2**	**4100**[e]	**24400**	**24400**	**23.4**	**14900**	**4100**[f]	**252**	**20500**	**18300**
Construction Worker SSL				**67.1**	**148000**	**20600**	**695**	**142**	**23800**	**3780**	**10.3**	**1430**[e]	**8910**	**8910**	**213**	**10300**	**1240**[g]	**702**	**7150**	**6680**
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	—	—	—	—	0.0028 (J)	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	—	—	—	—	0.0022 (J)	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0523	21-11222	12.0000–15.0000	FILL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0525	21-11222	17.0000–18.0000	FILL	—	—	—	0.00029 (J-)	—	—	—	0.0003 (J-)	0.00023 (J-)	—	—	—	—	—	—	—	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	—	—	0.412	NA	NA	—	—	NA	NA	1.2	0.136	0.273 (J)	—	0.0342	0.0861	0.972	0.9
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	—	—	0.304	NA	NA	—	—	NA	NA	0.996	—	0.204 (J)	—	0.0272 (J)	0.0835	0.813	0.781

Table 6.16-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Tetrachloroethene	Toluene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
Residential SSL				**6.99**	**5570**	**2010**	**62**[f]
Industrial SSL				**36.4**	**57900**	**6760**	**260**[f]
Construction Worker SSL				**338**	**21100**	**5820**	**688**[g]
AAA4131	21-01672	5.0000–10.0000	QBT3	NA	NA	NA	NA
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	NA	NA	NA	NA
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	NA	NA	NA	NA
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	NA	NA	NA	NA
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	NA	NA	NA	NA
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	NA	NA	NA	NA
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	NA	NA	NA	NA
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	NA	NA	NA	NA
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	NA	NA	NA	NA
MD21-98-0035	21-10515	0.0000–0.5000	QBT3	NA	NA	NA	NA
MD21-01-0001	21-11191	0.5000–1.1667	FILL	—	0.0024 (J)	—	—
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	—	—	—	—
MD21-01-0002	21-11192	0.5000–1.0000	FILL	—	0.0022 (J)	—	0.0024 (J)
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	—	0.006	—	0.003 (J)
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	—	—	—	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	—	—	0.0018 (J)	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	—	—	0.0016 (J)	—
MD21-01-0011	21-11195	2.6667–4.0000	FILL	—	—	—	—
MD21-01-0012	21-11195	5.6667–6.6667	FILL	—	—	—	—
MD21-01-0526	21-11195	12.0000–13.0000	QBT3	—	0.00036 (J)	—	—
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	—	—	—	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	—	—	—	—
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	—	—	—	—
MD21-01-0522	21-11199	17.0000–18.0000	QBT3	—	0.00044 (J)	—	—
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	—	—	0.0014 (J)	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	—	—	—	—
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	0.003 (J)	—	—	—

Table 6.16-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Tetrachloroethene	Toluene	Trichlorofluoromethane	Trimethylbenzene[1,2,4-]
Residential SSL				**6.99**	**5570**	**2010**	**62**[f]
Industrial SSL				**36.4**	**57900**	**6760**	**260**[f]
Construction Worker SSL				**338**	**21100**	**5820**	**688**[g]
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	0.0022 (J)	—	—	—
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	—	—	—	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	—	—	—	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	—	—	—	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	—	—	—	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	—	—	—	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	—	—	—	—
MD21-01-0523	21-11222	12.0000–15.0000	FILL	—	0.00038 (J)	—	—
MD21-01-0525	21-11222	17.0000–18.0000	FILL	—	—	—	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	—	—	—	—
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	—	—	—	—

Source: SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] — = Not detected.
[b] NA = Not analyzed.
[c] Pyrene SSLs used as surrogate based on structural similarity.
[d] BHC(gamma-) SSLs used as surrogate based on structural similarity.
[e] Endrin SSLs used as surrogate based on structural similarity.
[f] PA regional screening levels (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table 6.16-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(i)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Thorium-228	Thorium-230	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**2.52**[b]	**1.98b**[a]	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**2.28**[b]	**2.29**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**2.3**	**5**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**9**	**5**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**6.8**	**5**	**320000**	**220**	**43**	**160**
AAA4129	21-01672	0.0000–5.0000	QBT3	—[c]	NA[d]	—	—	—	—	—	100.473	—	—	—
AAA4131	21-01672	5.0000–10.0000	QBT3	0.01	NA	—	—	—	—	—	989.753	—	—	—
AAA4132	21-01672	10.0000–15.0000	QBT3	—	NA	—	—	—	—	—	1335.58	—	—	—
AAA4133	21-01672	15.0000–20.0000	QBT3	0.008	NA	—	—	—	—	—	776.894	—	—	—
MD21-02-49585	21-02-21261	0.0000–0.5000	SOIL	0.0616	NA	NA	—	1.9	NA	NA	NA	NA	NA	NA
MD21-02-49586	21-02-21261	0.5000–0.6667	SOIL	0.0566	NA	NA	—	1.42	NA	NA	NA	NA	NA	NA
MD21-02-49587	21-02-21262	0.0000–0.5000	SOIL	—	NA	NA	—	0.112	NA	NA	NA	NA	NA	NA
MD21-02-49589	21-02-21263	0.0000–0.5000	SOIL	—	NA	NA	—	0.229	NA	NA	NA	NA	NA	NA
MD21-02-49591	21-02-21264	0.0000–0.5000	SOIL	0.0577	NA	NA	—	2.94	NA	NA	NA	NA	NA	NA
MD21-02-49592	21-02-21264	0.5000–1.0000	SOIL	—	NA	NA	—	0.937	NA	NA	NA	NA	NA	NA
MD21-02-49599	21-02-21268	0.0000–0.5000	SOIL	—	NA	NA	—	1.3	NA	NA	NA	NA	NA	NA
0121-97-1236	21-05355	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	2.12	4.38	0.216	—
0121-97-1238	21-05355	0.5000–1.0000	SOIL	—	—	0.2941	NA	NA	—	—	2.4	6.21	0.266	2.69
0121-97-1226	21-05357	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.11	—	—	—
0121-97-1231	21-05357	0.5000–1.0000	SOIL	—	—	—	NA	NA	—	—	0.1	—	—	—
0121-97-1221	21-05362	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.61	7.25	0.306	3.45
0121-97-1223	21-05362	0.5000–1.0000	SOIL	—	—	0.1531	NA	NA	—	—	0.41	4.95	—	2.39
0121-97-1224	21-05379	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.45	4.93	—	—
0121-97-1225	21-05379	0.5000–1.0000	SOIL	—	—	—	NA	NA	—	—	0.23	—	—	—
0121-97-1230	21-05389	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.11	—	—	—
0121-97-1229	21-05389	0.5000–1.0000	SOIL	—	—	0.2037	NA	NA	—	—	0.11	—	—	—
0121-97-1228	21-05404	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.1	—	—	—
0121-97-1235	21-05404	0.5000–1.0000	SOIL	—	—	—	NA	NA	—	—	0.11	—	—	—
0121-97-1239	21-05404	1.0000–1.5000	SOIL	—	—	—	NA	NA	—	—	0.15	—	—	—
0121-97-1237	21-05418	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.07	—	—	—
0121-97-1241	21-05418	0.5000–1.0000	SOIL	—	—	—	NA	NA	—	—	0.1	—	—	—
0121-97-1227	21-05422	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.16	—	—	—
0121-97-1240	21-05422	0.5000–1.0000	SOIL	—	—	—	NA	NA	—	—	0.15	—	—	—

Table 6.16-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Thorium-228	Thorium-230	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**2.52**[b]	**1.98b**[a]	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**2.28**[b]	**2.29**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**2.3**	**5**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**9**	**5**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**6.8**	**5**	**320000**	**220**	**43**	**160**
0121-97-1222	21-05425	1.5000–2.0000	SOIL	—	—	—	NA	NA	—	—	0.05	—	—	—
MD21-98-0049	21-10501	0.0000–0.5000	QBT3	—	—	—	NA	NA	—	—	0.07	—	NA	—
MD21-98-0048	21-10502	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.18	—	NA	—
MD21-98-0047	21-10503	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	1.03	—	NA	—
MD21-98-0045	21-10504	0.0000–0.5000	QBT3	—	—	—	NA	NA	—	—	0.53	—	NA	—
MD21-98-0046	21-10505	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.25	—	NA	—
MD21-98-0043	21-10507	0.0000–0.5000	QBT3	—	NA	—	NA	NA	—	—	0.23	—	NA	—
MD21-98-0042	21-10508	0.0000–0.5000	SOIL	NA	—	—	NA	NA	—	—	0.37	3.32	NA	—
MD21-98-0041	21-10509	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.23	—	NA	—
MD21-98-0039	21-10511	0.0000–0.5000	QBT3	—	—	—	NA	NA	—	—	0.1	—	NA	—
MD21-98-0038	21-10512	0.0000–0.5000	QBT3	—	—	—	NA	NA	—	—	0.09	—	NA	—
MD21-98-0037	21-10513	0.0000–0.5000	QBT3	NA	—	—	NA	NA	—	—	0.25	—	NA	—
MD21-98-0036	21-10514	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.63	—	NA	—
MD21-98-0034	21-10516	0.0000–0.5000	SOIL	—	—	—	NA	NA	—	—	0.11	—	NA	—
MD21-01-0001	21-11191	0.5000–1.1667	FILL	—	—	—	—	0.176	—	—	—	—	—	—
MD21-01-0003	21-11191	3.0000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0002	21-11192	0.5000–1.0000	FILL	—	—	—	—	—	—	—	0.63	—	—	—
MD21-01-0004	21-11192	3.0000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0005	21-11193	0.8333–1.3333	QBT3	—	—	—	—	—	—	—	—	—	—	—
MD21-01-0007	21-11193	4.0000–5.5000	QBT3	—	—	—	—	—	—	—	0.076701	—	—	—
MD21-01-0008	21-11194	0.8333–1.3333	FILL	—	—	—	—	0.0362	—	—	1.58667	—	—	—
MD21-01-0009	21-11194	4.0000–4.5000	QBT3	—	—	—	—	—	—	—	0.347895	—	—	—
MD21-01-0011	21-11195	2.6667–4.0000	FILL	—	—	—	—	—	—	—	147.048	—	—	—
MD21-01-0012	21-11195	5.6667–6.6667	FILL	—	—	—	—	—	—	—	186.476	—	—	—
MD21-01-0526	21-11195	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	849.865	—	—	—
MD21-01-0013	21-11196	3.0000–3.5000	QBT3	—	—	—	—	0.059	2.56	2.27	1.82667	—	—	—
MD21-01-0014	21-11196	4.5000–5.5000	QBT3	—	—	—	—	0.024	—	—	3.84146	—	—	—
MD21-01-0015	21-11197	2.3333–3.3333	QBT3	—	—	—	—	—	—	—	1.43029	—	—	—
MD21-01-0016	21-11197	5.3333–6.3333	QBT3	—	—	—	—	—	—	—	3.3	—	—	—

Table 6.16-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Thorium-228	Thorium-230	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**2.52**[b]	**1.98b**[a]	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**2.28**[b]	**2.29**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**2.3**	**5**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**9**	**5**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**6.8**	**5**	**320000**	**220**	**43**	**160**
MD21-01-0017	21-11198	2.3333–3.3333	QBT3	—	—	—	—	—	—	—	3.6	—	—	—
MD21-01-0018	21-11198	5.3333–6.3333	QBT3	—	—	—	—	—	—	—	0.255578	—	—	—
MD21-01-0019	21-11199	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	299.702	—	—	—
MD21-01-0020	21-11199	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	562.5	—	—	—
MD21-01-0522	21-11199	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	154.603	—	—	—
MD21-01-0054	21-11200	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	12.3711	—	—	—
MD21-01-0055	21-11200	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	30.4737	—	—	—
MD21-01-0056	21-11200	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	20.5833	—	—	—
MD21-01-0302	21-11216	8.2500–9.0000	QBT3	—	—	—	—	—	—	—	1220	—	—	—
MD21-01-0303	21-11216	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	653	—	—	—
MD21-01-0309	21-11216	17.1700–18.0000	QBT3	—	0.106	—	—	—	—	—	134.118	—	—	—
MD21-01-0308	21-11217	8.0000–9.1700	QBT3	—	—	—	—	—	—	—	4233.18	—	—	—
MD21-01-0313	21-11217	12.0000–13.0000	QBT3	—	0.0981	—	—	—	—	—	741.004	—	—	—
MD21-01-0299	21-11217	17.0000–17.7500	QBT3	—	—	—	—	—	—	—	935.618	—	—	—
MD21-01-0314	21-11218	8.0000–9.0000	QBT3	—	0.0831	—	—	0.0323	—	—	1297.91	—	—	—
MD21-01-0315	21-11218	12.0000–13.0000	QBT3	—	0.0656	—	—	—	—	—	2251.78	—	—	—
MD21-01-0298	21-11218	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	1027.23	—	—	—
MD21-01-0300	21-11219	8.0000–9.0000	QBT3	—	0.122	—	—	—	—	—	1328.42	—	—	—
MD21-01-0301	21-11219	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	592.534	—	—	—
MD21-01-0306	21-11219	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	1444.46	—	—	—
MD21-01-0307	21-11220	2.0000–3.0000	FILL	—	—	—	—	0.0994	—	—	97.7586	—	—	—
MD21-01-0310	21-11220	5.0000–6.0000	FILL	—	—	—	—	0.205	—	—	63.8108	—	—	—
MD21-01-0311	21-11221	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	72.0044	—	—	—
MD21-01-0304	21-11221	7.0000–8.0000	QBT3	—	0.0872	—	—	—	—	—	13.7615	—	—	—
MD21-01-0523	21-11222	12.0000–15.0000	FILL	—	—	—	0.09	—	—	—	5.55386	—	—	—
MD21-01-0525	21-11222	17.0000–18.0000	FILL	0.0198	—	—	—	—	—	—	5.49006	—	—	—
RE21-08-7188	21-603022	12.0000–13.0000	QBT3	—	NA	—	—	—	NA	NA	1.23172	—	0.0925	—
RE21-08-7189	21-603022	14.0000–15.0000	QBT3	—	NA	—	—	—	NA	NA	3.45235	—	—	—
RE21-09-87239	21-603022	19.0000–20.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	1.08556	NA	NA	NA

Table 6.16-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Thorium-228	Thorium-230	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**2.52**[b]	**1.98b**[a]	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**2.28**[b]	**2.29**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**2.3**	**5**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**9**	**5**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**6.8**	**5**	**320000**	**220**	**43**	**160**
RE21-08-7190	21-603023	8.5000–9.5000	QBT3	—	NA	—	—	—	NA	NA	3.49205	—	—	—
RE21-08-7191	21-603023	10.5000–11.5000	QBT3	—	NA	—	—	—	NA	NA	3.07895	—	—	—
RE21-08-7192	21-603024	7.5000–8.5000	QBT3	—	NA	—	—	—	NA	NA	0.032996	—	—	—
RE21-08-7193	21-603024	9.5000–10.5000	QBT3	—	—	—	—	—	NA	NA	0.024938	—	—	—
RE21-08-7194	21-603025	7.5000–8.5000	QBT3	—	—	—	—	—	NA	NA	16.9046	—	—	—
RE21-08-7195	21-603025	9.5000–10.5000	QBT3	—	—	—	—	—	NA	NA	29.4052	—	—	—
MD21-09-8722	21-603025	14.5000–15.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	0.453771	NA	NA	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.17-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(j)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Lead	Manganese	Nickel	Nitrate	Perchlorate	Selenium	Zinc
QBT3 Background Value				**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**11.2**	**482**	**6.58**	**na**[a]	**na**	**0.3**	**63.5**
SOIL Background Value				**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**22.3**	**671**	**15.4**	**na**	**na**	**1.52**	**48.8**
Residential SSL				**3.9**	**15600**	**77.9**	**na**	**219**[b]	**3130**	**400**	**10700**	**1560**	**125000**	**54.8**	**391**	**23500**
Industrial SSL				**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**800**	**145000**	**22700**	**1820000**	**795**	**5680**	**341000**
Construction Worker SSL				**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**800**	**463**	**6190**	**496000**	**217**	**1550**	**92900**
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	—[c]	—	—	—	—	—	—	—	—	—	0.000861 (J-)	1.56 (U)	—
RE21-07-2286	21-600514	2.0000–3.0000	QBT3	—	—	—	2710	8.55	—	—	818 (J)	—	—	—	1.5 (U)	98.2 (J-)
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	—	—	0.498 (U)	—	—	—	—	—	—	—	—	—	—
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	—	49.6 (J)	—	5000	7.78	—	—	—	—	—	—	0.633 (J)	—
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	1.25	—	—	—
RE21-07-2290	21-600516	2.0000–3.0000	QBT3	—	—	—	3680 (J+)	—	—	—	—	—	1.16	—	1.48 (U)	—
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	—	—	—	—	—	—	36.5	—	—	1.67	—	—	154 (J+)
RE21-07-2292	21-600517	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	1.14	—	0.707 (J)	—
RE21-07-2293	21-600518	0.0000–0.5000	SOIL	—	—	0.497 (U)	—	—	—	—	—	—	1.88	—	—	—
RE21-07-2294	21-600518	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	1.05	—	1.51 (U)	—
RE21-07-2295	21-600519	0.0000–0.5000	SOIL	—	—	0.504 (U)	—	—	—	—	—	—	1.25	—	—	—
RE21-07-2296	21-600519	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	1.17	—	0.623 (J)	—
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	1.27	—	—	685 (J-)
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	—	77.3 (J)	—	8490	—	8.37	—	—	—	—	0.0014 (J-)	1.53 (U)	90.8 (J-)
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	2.98	78.2 (J)	—	3440	—	5.59	—	—	8.14	—	—	1.59 (U)	—
RE21-07-6180	21-601290	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	5.26	—
RE21-07-6181	21-601290	14.0000–15.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.65	—
RE21-07-6182	21-601291	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.04	—
RE21-07-6183	21-601291	14.0000–15.0000	QBT3	—	—	—	—	7.37	—	—	—	—	—	—	5.34	—
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	—	—	0.508 (U)	—	—	—	35.7	—	—	—	0.000754 (J)	—	NA[d]
RE21-07-6185	21-601292	3.0000–4.0000	QBT3	—	—	—	—	10.9	—	19.3	—	—	—	0.000567 (J)	1.11 (J)	NA
RE21-07-6186	21-601293	1.0000–2.0000	QBT3	—	—	—	—	8.24	—	—	—	—	—	—	0.789 (J)	NA
RE21-07-6187	21-601293	3.0000–4.0000	QBT3	—	—	—	—	7.52	—	—	—	—	—	—	0.683 (J)	NA
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	—	—	0.509 (U)	—	—	—	—	—	—	5.43 (J-)	0.0161	—	NA
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	—	—	0.56 (U)	—	—	—	—	—	—	3.23 (J-)	0.00218 (J-)	1.68 (U)	NA
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	—	—	0.571 (U)	—	—	—	—	—	—	—	—	8.79	—
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	3.99	88	—	—	—	—	15.9 (J)	569	6.72	—	—	8.76	—

Table 6.17-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Lead	Manganese	Nickel	Nitrate	Perchlorate	Selenium	Zinc
QBT3 Background Value				**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**11.2**	**482**	**6.58**	**na**[a]	**na**	**0.3**	**63.5**
SOIL Background Value				**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**22.3**	**671**	**15.4**	**na**	**na**	**1.52**	**48.8**
Residential SSL				**3.9**	**15600**	**77.9**	**na**	**219**[b]	**3130**	**400**	**10700**	**1560**	**125000**	**54.8**	**391**	**23500**
Industrial SSL				**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**800**	**145000**	**22700**	**1820000**	**795**	**5680**	**341000**
Construction Worker SSL				**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**800**	**463**	**6190**	**496000**	**217**	**1550**	**92900**
RE21-07-6192	21-601296	5.0000–6.0000	QBT3	6.22	53.7	—	—	—	5.52	—	—	—	—	—	7.69	—
RE21-07-6193	21-601296	7.0000–8.0000	QBT3	5.19	61.8	—	—	—	—	—	—	—	—	—	6.71	—
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	11.6	57.2
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	4.08	75.5	—	—	7.24	9.71	45 (J)	—	—	—	—	9.4	164
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	5.42	—
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	—	—	—	—	—	—	11.3 (J)	—	6.65	—	—	5.93	—
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	11.4	58.2
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	—	—	0.588 (U)	—	—	—	76.3 (J)	—	—	—	0.000841 (J-)	6.7	122
RE21-07-6200	21-601300	2.0000–3.0000	SOIL	—	—	0.594 (U)	—	—	—	—	—	—	—	—	10.9	—
RE21-07-6201	21-601300	4.0000–5.0000	QBT3	4.28	99.5	—	3590 (J+)	19.8	—	—	—	—	—	—	5.95	—
RE21-07-6202	21-601301	2.0000–3.0000	SOIL	—	—	0.505 (U)	—	—	—	—	—	—	—	—	3.89	—
RE21-07-6203	21-601301	4.0000–5.0000	SOIL	—	—	0.52 (U)	—	—	—	—	—	—	—	—	3.22	—
RE21-07-6204	21-601302	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.41	—
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	5.08	—
RE21-07-6206	21-601302	22.0000–23.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.87	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

Table 6.17-2
Summary of Organic Chemicals Detected at SWMU 21-024(j)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Bis(2-ethylhexyl) phthalate	Carbon Disulfide
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**347**	**1940**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**1370**	**7540**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**4760**	**5890**
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	—[b]	NA[c]	—	NA	NA	—	0.0166 (J)	0.0324 (J)	—	—	NA
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	0.0479	NA	0.0738	NA	NA	0.15	—	0.215	0.109	—	NA
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	NA
RE21-08-10292	21-600516	0.0000–0.5000	SOIL	NA	NA	NA	0.0047	0.0041	NA	NA	NA	NA	NA	NA
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	—	NA	—	NA	NA	0.0216 (J)	—	—	—	—	NA
RE21-08-10294	21-600517	0.0000–0.5000	SOIL	NA	NA	NA	0.0368	0.0238	NA	NA	NA	NA	NA	NA
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	—	NA	0.011 (J)	NA	NA	—	—	0.0719	—	—	NA
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	—	—	0.00981 (J)	NA	NA	—	—	0.0236 (J)	—	—	—
RE21-07-2253	21-600524	5.0000–6.0000	QBT3	NA	NA	NA	0.941	0.369 (J)	NA	NA	NA	NA	NA	NA
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	—	0.0099	—	NA	NA	—	—	—	—	—	—
RE21-08-10300	21-600524	6.0000–7.0000	QBT3	NA	NA	NA	0.0039	0.0021 (J)	NA	NA	NA	NA	NA	NA
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	—	—	—	NA	NA	—	—	0.0245 (J)	0.0131 (J)	—	—
RE21-08-10286	21-601292	1.0000–2.0000	SOIL	NA	NA	NA	0.326	0.26	NA	NA	NA	NA	NA	NA
RE21-08-10287	21-601292	3.0000–4.0000	QBT3	NA	NA	NA	0.0394	0.0326	NA	NA	NA	NA	NA	NA
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	0.0406	—	0.0627	NA	NA	0.099	0.102	0.155	0.0666	—	—
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	—	—	—	NA	NA	—	—	—	—	—	—
RE21-08-10288	21-601297	3.0000–4.0000	SOIL	NA	NA	NA	0.013	0.0086	NA	NA	NA	NA	NA	NA
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—
RE21-08-10289	21-601297	5.0000–6.0000	QBT3	NA	NA	NA	0.0027 (J)	0.0024 (J)	NA	NA	NA	NA	NA	NA
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—
RE21-08-10291	21-601298	4.5000–5.5000	QBT3	NA	NA	NA	0.0016 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	—	—	—	NA	NA	—	—	—	—	0.0878 (J)	—
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	—	—	—	NA	NA	—	—	—	—	—	—
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	0.00287 (J)

Table 6.17-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chloroform	Chrysene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]
Residential SSL				**5.72**	**621**	**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**31.9**	**2340**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**671**	**20600**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	NA	—	0.0377	—	NA	NA	NA	NA	NA	NA
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	NA	0.154	0.387	0.0363	NA	NA	NA	NA	NA	NA
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	NA	—	0.0139 (J)	—	NA	NA	NA	NA	NA	NA
RE21-08-10292	21-600516	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	NA	0.0236 (J)	0.0368	—	NA	NA	NA	NA	NA	NA
RE21-08-10294	21-600517	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	NA	0.0513	0.0892	—	NA	NA	NA	NA	NA	NA
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	0.000281 (J)	—	0.042	—	NA	NA	NA	NA	NA	NA
RE21-07-2253	21-600524	5.0000–6.0000	QBT3	NA	NA	NA	NA	1.08E-05	2.08E-05	4.43E-06	7.68E-06	0.0000006 (J)	0.000000426 (J)
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	0.000237 (J)	—	—	—	NA	NA	NA	NA	NA	NA
RE21-08-10300	21-600524	6.0000–7.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	—	0.0129 (J)	0.0184 (J)	—	NA	NA	NA	NA	NA	NA
RE21-08-10286	21-601292	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10287	21-601292	3.0000–4.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	—	0.108	0.298	0.027 (J)	NA	NA	NA	NA	NA	NA
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	—	—	0.0234 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-08-10288	21-601297	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-08-10289	21-601297	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA
RE21-08-10291	21-601298	4.5000–5.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	—	—	0.0263 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	—	0.0118 (J)	0.0197 (J)	—	NA	NA	NA	NA	NA	NA
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	—	—	—	—	NA	NA	NA	NA	NA	NA

Table 6.17-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[e]	**199**	**45**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[e]	**1090**	**252**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[e]	**10600**	**702**	**na**	**na**
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0867	NA	NA	0.0102 (J)	NA	NA
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA
RE21-08-10292	21-600516	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA
RE21-08-10294	21-600517	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	0.000368 (J)	—	—	NA	NA
RE21-07-2253	21-600524	5.0000–6.0000	QBT3	4.38E-06	0.000000886 (J)	0.000000175 (J)	4.33E-06	NA	NA	NA	NA	8.51E-05	1.03E-05
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	0.00762	—	—	NA	NA
RE21-08-10300	21-600524	6.0000–7.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA
RE21-08-10286	21-601292	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10287	21-601292	3.0000–4.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	NA	NA	NA	NA	0.0599	—	—	0.0122 (J)	NA	NA
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	NA	NA	NA	NA	—	—	0.00387 (J)	—	NA	NA
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	—	0.00299 (J)	—	NA	NA
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	NA	NA	NA	NA	—	—	0.00353 (J)	—	NA	NA
RE21-08-10288	21-601297	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	—	0.0034 (J)	—	NA	NA
RE21-08-10289	21-601297	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	NA	NA	NA	NA	—	—	0.00302 (J)	—	NA	NA
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	NA	NA	NA	NA	—	—	0.00331 (J)	—	NA	NA
RE21-08-10291	21-601298	4.5000–5.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	NA	NA	NA	NA	—	—	0.00312 (J)	—	NA	NA
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	NA	NA	NA	NA	—	—	0.00348 (J)	—	NA	NA
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA

Table 6.17-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzo dioxin[1,2,3,7,8-]	Pentachlorodibenzo dioxins (Total)	Pentachlorodibenzo furan[1,2,3,7,8-]	Pentachlorodibenzo furan[2,3,4,7,8-]	Pentachlorodibenzo furans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzo furan[2,3,7,8-]	Tetrachlorodibenzo furans (Totals)	Toluene
Residential SSL				**na**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0229 (J)	0.0346 (J)	NA	NA	NA
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.291	0.345	NA	NA	NA
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	0.000673 (J)
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-08-10292	21-600516	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0164 (J)	0.0276 (J)	NA	NA	NA
RE21-08-10294	21-600517	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0491	0.0964	NA	NA	NA
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	0.0355	0.0348 (J)	NA	NA	0.00177
RE21-07-2253	21-600524	5.0000–6.0000	QBT3	0.000000159 (J)	1.59E-07	0.000000463 (J)	0.00000035 (J)	3.5E-06	NA	NA	0.000000476 (J)	2.25E-06	NA
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	0.00127
RE21-08-10300	21-600524	6.0000–7.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	—	0.0139 (J)	NA	NA	—
RE21-08-10286	21-601292	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10287	21-601292	3.0000–4.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	NA	NA	NA	NA	NA	0.223	0.212	NA	NA	—
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	NA	NA	NA	NA	NA	0.0198 (J)	0.0193 (J)	NA	NA	—
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-08-10288	21-601297	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-08-10289	21-601297	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	—
RE21-08-10291	21-601298	4.5000–5.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	—	0.0318 (J)	NA	NA	—

Table 6.17-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzo dioxin[1,2,3,7,8-]	Pentachlorodibenzo dioxins (Total)	Pentachlorodibenzo furan[1,2,3,7,8-]	Pentachlorodibenzo furan[2,3,4,7,8-]	Pentachlorodibenzo furans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzo furan[2,3,7,8-]	Tetrachlorodibenzo furans (Totals)	Toluene
Residential SSL				**na**	**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	NA	NA	NA	NA	NA	—	0.0195 (J)	NA	NA	—
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	NA	NA	NA	NA	NA	—	—	NA	NA	—

Source: SSLs from NMED (2009, 108070).

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

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

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table 6.17-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(j)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**33**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**210**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**36**	**320000**	**220**	**43**
RE21-07-2285	21-600514	0.0000–0.5000	SOIL	0.122	—[c]	0.176	0.033319	—	—
RE21-07-2286	21-600514	2.0000–3.0000	QBT3	—	NA[d]	0.0904	0.017719	—	—
RE21-07-2287	21-600515	0.0000–0.5000	SOIL	0.0386	—	0.102	0.009152	—	—
RE21-07-2288	21-600515	2.0000–3.0000	QBT3	—	—	—	0.027559	—	—
RE21-07-2289	21-600516	0.0000–0.5000	SOIL	0.0592	—	0.423	0.004254	—	—
RE21-07-2291	21-600517	0.0000–0.5000	SOIL	—	—	0.0838	—	2.74	—
RE21-07-2292	21-600517	2.0000–3.0000	QBT3	—	—	—	0.009617	3.43	0.251
RE21-07-2293	21-600518	0.0000–0.5000	SOIL	—	—	0.0939	—	—	—
RE21-07-2294	21-600518	2.0000–3.0000	QBT3	—	—	0.0391	—	—	—
RE21-07-2305	21-600524	0.0000–0.5000	SOIL	0.145	NA	0.158	0.032207	7.79	0.488
RE21-07-2306	21-600524	2.0000–3.0000	QBT3	—	NA	0.0413	0.030735	21.3	1.4
RE21-07-2307	21-600524	5.0000–6.0000	QBT3	—	—	—	0.058103	5.96	0.327
RE21-07-6180	21-601290	12.0000–13.0000	QBT3	—	—	—	0.127778	—	—
RE21-07-6181	21-601290	14.0000–15.0000	QBT3	—	—	—	0.138053	—	—
RE21-07-6182	21-601291	12.0000–13.0000	QBT3	—	—	—	0.354324	5.68	0.247
RE21-07-6183	21-601291	14.0000–15.0000	QBT3	—	—	—	0.384583	7.17	0.296
RE21-07-6184	21-601292	1.0000–2.0000	SOIL	—	—	—	0.05631	21.7	0.799
RE21-07-6185	21-601292	3.0000–4.0000	QBT3	—	—	—	—	3.56	0.215
RE21-07-6186	21-601293	1.0000–2.0000	QBT3	—	—	—	0.024857	—	—
RE21-07-6187	21-601293	3.0000–4.0000	QBT3	—	—	—	0.022489	—	—
RE21-07-6188	21-601294	0.5000–1.5000	SOIL	—	NA	0.0766	0.026355	8.7	0.557
RE21-07-6189	21-601294	2.5000–3.5000	SOIL	—	0.144	—	0.161198	4.57	0.222
RE21-07-6190	21-601295	3.0000–4.0000	SOIL	—	—	—	0.412994	—	—
RE21-07-6191	21-601295	5.0000–6.0000	QBT3	—	—	—	0.329569	—	—
RE21-07-6192	21-601296	5.0000–6.0000	QBT3	—	—	—	0.276403	—	—
RE21-07-6193	21-601296	7.0000–8.0000	QBT3	—	—	—	0.220721	—	—

Table 6.17-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**33**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**210**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**36**	**320000**	**220**	**43**
RE21-07-6194	21-601297	3.0000–4.0000	SOIL	—	—	—	0.183452	—	—
RE21-07-6195	21-601297	5.0000–6.0000	QBT3	—	—	—	0.225421	—	—
RE21-07-6196	21-601298	2.5000–3.5000	QBT3	—	—	—	0.221317	—	—
RE21-07-6197	21-601298	4.5000–5.5000	QBT3	—	—	—	0.266766	—	—
RE21-07-6198	21-601299	3.0000–4.0000	SOIL	—	NA	0.07	0.094419	—	—
RE21-07-6199	21-601299	5.0000–6.0000	SOIL	—	—	0.0582	0.203102	—	—
RE21-07-6200	21-601300	2.0000–3.0000	SOIL	—	—	—	0.147285	—	—
RE21-07-6201	21-601300	4.0000–5.0000	QBT3	—	—	—	0.128408	—	—
RE21-07-6202	21-601301	2.0000–3.0000	SOIL	—	—	—	0.768421	—	—
RE21-07-6203	21-601301	4.0000–5.0000	SOIL	—	—	—	0.142641	—	—
RE21-07-6204	21-601302	12.0000–13.0000	QBT3	—	—	—	0.387928	—	—
RE21-07-6205	21-601302	17.0000–18.0000	QBT3	—	—	—	0.418153	—	—
RE21-07-6206	21-601302	22.0000–23.0000	QBT3	—	—	—	0.280522	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.18-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(k)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Lithium
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**na**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**160**[c]
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**619**[d]
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	—[e]	—	—	—	—	—	—	—	—	—	—	7.08 (J+)
RE21-07-3840	21-600843	2.0000–3.0000	QBT3	—	—	56.3 (J+)	—	—	3420	8.73	—	—	—	—	10.2 (J+)
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	—	—	—	—	0.499 (U)	—	—	—	—	—	—	9.74 (J+)
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	—	—	—	—	—	3510	—	—	—	—	—	8.77 (J+)
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	—	—	—	—	0.518 (U)	—	—	—	—	0.618	—	9.13 (J+)
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	9200	6.85	104 (J+)	2.65	—	14000	17.5	4.83	10.6	—	13.7	16.4 (J+)
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	—	—	—	—	0.492 (U)	—	—	—	—	—	—	6.76 (J+)
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	—	—	—	—	—	—	8.43	—	—	—	38.5	3.76 (J+)
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	—	—	—	—	0.495 (U)	—	—	—	—	—	—	5.33 (J)
RE21-07-3848	21-600847	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.7 (J)
RE21-07-3849	21-600848	0.0000–0.5000	SOIL	—	—	—	—	0.503 (U)	—	—	—	—	—	—	4.95 (J)
RE21-07-3850	21-600848	2.0000–3.0000	QBT3	—	—	—	—	—	3290	—	—	—	—	—	3.46 (J)
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	—	—	—	—	0.492 (U)	—	—	—	—	—	—	6.8 (J)
RE21-07-3852	21-600849	2.0000–3.0000	QBT3	—	—	—	—	—	2520	—	—	—	—	—	7.81 (J)
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	—	—	—	—	0.508 (U)	—	—	—	—	—	—	11.6 (J)
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.59 (J)
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	—	—	—	—	0.497 (U)	—	—	—	—	—	—	5.02 (J)
RE21-07-3856	21-600851	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	6.59 (J)
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	—	—	—	—	0.483 (U)	—	—	—	—	—	—	5.82 (J)
RE21-07-3858	21-600852	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.63 (J)
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	—	—	—	—	0.488 (U)	—	—	—	—	—	—	7.57 (J)
RE21-07-3860	21-600853	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	4.39 (J)
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	—	—	—	—	0.507 (U)	—	—	—	—	—	—	7.48 (J)
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	—	—	49.4	—	—	4070	7.64	—	—	—	—	8.51 (J)
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	—	—	—	—	0.528 (U)	—	—	—	—	0.543	—	5.6 (J+)
RE21-07-3873	21-600859	2.0000–3.0000	SOIL	—	—	—	—	0.562 (U)	—	—	—	—	—	—	18.3 (J+)
RE21-07-3874	21-600859	5.0000–6.0000	QBT3	11100	5.22	162 (J+)	2.39	—	34000	15.4	4.38	10.8	—	14.1	19.1 (J+)

Table 6.18-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Lithium
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**na**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**160**[c]
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**619**[d]
MD21-09-8718	21-600859	10.0000–11.0000	QBT3	7500	3.6	220	—	—	55000	—	—	7.9	NA	—	NA
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	—	—	—	—	0.503 (U)	—	—	—	—	—	—	5.66 (J+)
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	—	3.38	—	—	—	—	—	—	—	—	—	9.68 (J+)
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	—	2.86	—	1.42	—	3470	—	—	5.74	—	—	11.5 (J+)
RE21-08-7241	21-603037	8.5000–9.5000	QBT3	—	3.31	—	—	—	—	—	—	—	0.625	16.8	7.27
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	6.11
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	—	—	—	1.95	0.596 (U)	—	—	—	—	—	—	28.8
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	10000	6.24	101	1.34	—	2830	8.08	3.26	7.86	—	16.8	17.6
RE21-08-7245	21-603039	7.5000–8.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	8.89
RE21-08-7246	21-603039	9.5000–10.5000	QBT3	—	3.88	—	—	—	2600	—	—	—	—	—	5.79
RE21-08-7247	21-603040	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	10.3
RE21-08-7248	21-603040	7.0000–8.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	2.74
RE21-08-7249	21-603041	5.5000–6.5000	SOIL	—	—	—	—	—	6190	—	—	—	—	—	10.8
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	9.18
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	—	5.1	53.3	—	—	5450	—	—	—	—	17	10.2
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	—	4.81	—	—	—	4710	—	—	—	—	—	9.92
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	6.48
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	5.4
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	—	3.28	—	—	—	—	7.37	—	—	—	—	7.16
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	6.97
RE21-08-7257	21-603045	11.0000–12.0000	QBT3	—	—	—	—	—	—	7.2	—	—	—	—	7.41 (J+)
RE21-08-7258	21-603045	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	7.42 (J+)
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	—	—	88	—	—	3390 (J)	—	—	15.7	—	13.4	9.06
RE21-08-7260	21-603046	4.0000–5.0000	QBT3	—	—	91	—	—	6760 (J)	9.22	—	—	—	—	9.66
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	—	—	—	—	—	—	—	—	4.76	—	—	9.23
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	—	—	—	—	—	—	—	—	5.32	—	—	8.83
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	—	—	69.4	—	—	3890	—	—	—	—	—	19.7 (J+)
RE21-08-7276	21-603054	15.0000–16.0000	QBT3	—	—	—	—	—	—	9.8	—	—	—	—	4.44 (J+)
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	5.76 (J+)
RE21-08-7281	21-603056	11.0000–12.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	3.68 (J+)

Table 6.18-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Lithium
QBT3 Background Value				**7340**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**na**
Residential SSL				**78100**	**3.9**	**15600**	**156**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**1560**	**400**	**160**[c]
Industrial SSL				**1130000**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**800**	**619**[d]
RE21-08-7282	21-603056	16.0000–17.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	3.52 (J+)
RE21-08-7283	21-603056	21.0000–22.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	3.9 (J+)
RE21-08-7284	21-603056	26.0000–27.0000	QBT3	—	—	—	—	—	3930 (J)	—	—	—	—	—	16.2 (J+)
RE21-08-7285	21-603056	31.0000–32.0000	QBT3	—	—	—	—	—	3000 (J)	—	—	—	—	—	37.3 (J+)

Table 6.18-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**1550**	**92900**
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	—	—	—	—	1.01 (J)	—	—	—	27.4	—	132
RE21-07-3840	21-600843	2.0000–3.0000	QBT3	—	—	—	—	1.15	—	1.26 (J)	—	18.4	—	—
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	—	—	—	—	4.76	—	—	—	24.4	—	—
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	—	—	—	—	1.26	—	0.946 (J)	—	14.2	—	—
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	—	—	—	—	1.2	—	1.55 (U)	—	16.3	—	—
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	2210	—	—	18.4	—	—	1.52 (J)	—	46.7	—	—
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	—	—	—	—	1.84	—	—	—	17.9	—	—
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	—	—	—	—	1.82	—	1.51 (U)	—	0.661	—	—
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	—	—	—	—	2.46 (J+)	—	—	—	10.3	—	62.2
RE21-07-3848	21-600847	2.0000–3.0000	QBT3	—	—	—	—	1.88 (J+)	—	1.49 (U)	—	3.74	—	—
RE21-07-3849	21-600848	0.0000–0.5000	SOIL	—	—	—	—	3.87 (J+)	—	—	—	13.9	—	—
RE21-07-3850	21-600848	2.0000–3.0000	QBT3	—	—	—	—	1.89 (J+)	—	1.49 (U)	—	8.06	—	—
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	—	—	—	—	3.42 (J+)	—	—	—	33.1	—	—

Table 6.18-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**1550**	**92900**
RE21-07-3852	21-600849	2.0000–3.0000	QBT3	—	—	—	—	2.58 (J+)	—	1.47 (U)	—	15.4	—	—
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	—	—	—	—	4.03 (J+)	0.00181 (J)	—	—	26	—	—
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	—	—	—	—	2.78 (J+)	—	0.898 (J)	—	9.6	—	—
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	—	—	—	—	1.17 (J+)	—	—	—	6.26	—	—
RE21-07-3856	21-600851	2.0000–3.0000	QBT3	—	—	—	—	3.73 (J+)	—	0.606 (J)	—	4.62	—	—
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	—	—	—	—	2.3 (J+)	0.000537 (J-)	—	—	8.68	—	—
RE21-07-3858	21-600852	2.0000–3.0000	QBT3	—	—	—	—	2.46 (J+)	—	0.528 (J)	—	5.02	—	—
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	—	—	—	—	1.81 (J+)	—	—	—	16.8	—	52.5
RE21-07-3860	21-600853	2.0000–3.0000	QBT3	—	—	—	—	3.37 (J+)	—	1.5 (U)	—	7.03	—	—
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	—	—	—	—	4.58 (J+)	—	—	—	11.6	—	—
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	—	—	—	—	3.48 (J+)	0.00464	0.877 (J)	—	20.3	—	—
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	—	—	—	—	1.73	0.00492	1.59 (U)	—	30.1	—	—
RE21-07-3873	21-600859	2.0000–3.0000	SOIL	—	—	—	—	—	0.00227 (J)	1.8	—	36.8	—	—
RE21-07-3874	21-600859	5.0000–6.0000	QBT3	3840	—	—	18	—	0.00241	1.18 (J)	—	98.7	19.2	—
MD21-09-8718	21-600859	10.0000–11.0000	QBT3	2900	—	—	8.2	NA[f]	NA	0.56 (U)	1.1 (U)	120	—	—
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	—	—	—	—	1.23 (J+)	—	—	—	12.3	—	—
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	—	—	—	—	2.01 (J+)	—	1.58 (U)	—	14.2	—	—
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	—	—	—	8.64	—	—	0.737 (J)	—	15.4	—	—
RE21-08-7241	21-603037	8.5000–9.5000	QBT3	—	—	—	—	3.61 (J+)	—	1.6 (U)	—	9.1	—	—
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	—	—	—	—	3.88 (J+)	—	1.62 (U)	—	5.89	—	—
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	—	—	—	—	7.43 (J+)	—	1.79 (U)	—	17.7	—	—
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	2510 (J+)	552	—	11.4	5.75 (J+)	—	1.42 (J)	—	29.6	—	—
RE21-08-7245	21-603039	7.5000–8.5000	QBT3	—	—	—	—	5.28 (J+)	—	1.53 (U)	—	5.35	—	—
RE21-08-7246	21-603039	9.5000–10.5000	QBT3	—	—	—	—	3.52 (J+)	—	1.54 (U)	—	4.87	—	—
RE21-08-7247	21-603040	5.0000–6.0000	QBT3	—	—	—	—	3.46 (J+)	—	1.66 (U)	—	1.28	—	—
RE21-08-7248	21-603040	7.0000–8.0000	QBT3	—	—	—	—	2.81 (J+)	—	1.64 (U)	—	1.67	—	—
RE21-08-7249	21-603041	5.5000–6.5000	SOIL	—	—	—	—	39.5	0.0041 (J-)	1.55 (U)	—	20.9	—	—
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	—	—	—	—	21.9	0.00465 (J-)	1.56 (U)	—	14.1	—	—
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	—	—	—	—	16.3	0.025 (J-)	0.949 (J)	—	18.4	—	—
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	—	—	—	—	13.5	0.0112 (J-)	1.56 (U)	—	15.8	—	—
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	—	—	—	—	6.67	0.000703 (J-)	1.5 (U)	—	4.81	—	—
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	—	—	—	—	4.91	0.00056 (J-)	1.5 (U)	—	3.21	—	—
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	—	—	—	—	0.977 (J)	0.000752 (J-)	1.5 (U)	—	7.5	—	—

Table 6.18-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Strontium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**na**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**na**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**46900**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**186000**	**1550**	**92900**
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	—	—	—	—	0.987 (J)	0.000729 (J-)	1.5 (U)	—	4.9	—	—
RE21-08-7257	21-603045	11.0000–12.0000	QBT3	—	—	—	—	—	—	0.873 (J)	—	4.47	—	—
RE21-08-7258	21-603045	13.0000–14.0000	QBT3	—	—	—	—	—	—	0.661 (J)	—	6.49	—	—
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	—	—	1.74	—	6.8 (J-)	0.00194 (J)	1.57 (U)	—	20	—	—
RE21-08-7260	21-603046	4.0000–5.0000	QBT3	—	—	0.136	—	15.6 (J-)	0.00514	0.798 (J)	—	23.4	—	—
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	—	—	—	—	—	—	2.37	—	7.34	—	—
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	—	—	—	—	—	—	3.26	—	8.75	—	—
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	—	—	—	8.09	1.52 (J-)	—	1.98	—	24.4	—	—
RE21-08-7276	21-603054	15.0000–16.0000	QBT3	—	—	—	—	2.3 (J-)	—	1.64	—	3.84	—	—
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	—	—	—	—	2.72 (J-)	—	1.21 (J)	—	5.09	—	—
RE21-08-7281	21-603056	11.0000–12.0000	QBT3	—	—	—	—	0.871 (J)	—	1.45 (U)	—	0.823 (J+)	—	—
RE21-08-7282	21-603056	16.0000–17.0000	QBT3	—	—	—	—	0.937 (J)	—	1.48 (U)	—	0.3 (J+)	—	—
RE21-08-7283	21-603056	21.0000–22.0000	QBT3	—	—	—	—	—	—	1.51 (U)	—	0.684 (J+)	—	—
RE21-08-7284	21-603056	26.0000–27.0000	QBT3	—	—	—	—	0.945 (J)	0.000731 (J)	1.13 (J)	—	22.1 (J+)	—	—
RE21-08-7285	21-603056	31.0000–32.0000	QBT3	—	—	—	—	0.954	—	0.598 (J)	—	14.1 (J+)	—	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.18-2
Summary of Organic Chemicals Detected at SWMU 21-024(k)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dichlorobenzene[1,4-]
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**621**	**32.2**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2340**	**180**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**20600**	**3780**
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	—[b]	NA[c]	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	0.0587	NA	0.0873	NA	NA	0.186	—	0.261	0.216 (J)	—	0.199	—
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	0.0123 (J)	—	0.018 (J)	NA	NA	—	—	0.0292 (J)	—	0.0194 (J)	0.0304 (J)	—
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	0.0267 (J)	—	—	0.0202 (J)	—
RE21-08-10365	21-600847	0.0000–0.5000	SOIL	NA	NA	NA	0.0065	0.006	NA	NA	NA	NA	NA	NA	NA
RE21-07-3848	21-600847	2.0000–3.0000	QBT3	—	0.0146	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	0.0338 (J)	—	—	0.0353	—
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	—	0.00442 (J)	—	NA	NA	—	—	0.0118 (J)	—	—	—	—
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	0.0217 (J)	—
RE21-08-10367	21-600851	0.0000–0.5000	SOIL	NA	NA	NA	0.0094	0.0097	NA	NA	NA	NA	NA	NA	NA
RE21-07-3893	21-600851	2.0000–3.0000	QBT3	NA	NA	NA	0.0012 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	0.0341	—	—	0.0241 (J)	—
RE21-07-3860	21-600853	2.0000–3.0000	QBT3	—	0.0141	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	—	0.0142	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	—	NA	0.0106 (J)	NA	NA	—	0.0349 (J)	0.045	—	—	0.0335 (J)	—
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	0.0141 (J)	—
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	—	0.00419 (J)	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	—	—	—	NA	NA	—	—	—	—	—	—	—

Table 6.18-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dichlorobenzene[1,4-]
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**621**	**32.2**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2340**	**180**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**20600**	**3780**
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	—	—	—	NA	NA	0.0177 (J)	0.139	0.02 (J)	—	—	0.0164 (J)	—
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	—	—	—	NA	NA	0.0105 (J)	—	—	—	—	—	—
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	—	—	0.00905 (J)	NA	NA	0.0182 (J)	0.123	0.0207 (J)	—	—	0.0174 (J)	—
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	—	—	0.0251 (J)	NA	NA	—	0.136	0.069	0.0148 (J)	—	0.0509	—
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	—	—	—	NA	NA	—	0.113	—	—	—	—	—
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	—	—	—	NA	NA	—	0.107	0.0139 (J)	—	—	0.00985 (J)	—
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	—	—	—	NA	NA	—	0.112	—	—	—	—	—
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	0.0149 (J)	0.0165 (J)	0.0164 (J)	—	0.0148 (J)	—
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	—	—	0.0194 (J)	NA	NA	—	0.0248 (J)	0.0337 (J)	0.0175 (J)	—	0.0302 (J)	—
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	—	—	0.0213 (J)	NA	NA	0.0441	0.0357 (J)	0.044	0.0263 (J)	0.0183 (J)	0.0408	0.000358 (J)
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	0.057	—	0.127	NA	NA	0.131	0.107	0.121	0.0895	—	0.121	—

Table 6.18-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8—]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8—]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,7,8,9—]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8—]	Hexachlorodibenzofuran [1,2,3,6,7,8—]	Hexachlorodibenzofuran [2,3,4,6,7,8—]	Hexachlorodibenzofurans (Total)
Residential SSL				**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	0.0473	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	0.0316 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	0.0604	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	0.516	0.0405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	0.0902	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	0.0345	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10365	21-600847	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3848	21-600847	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	0.0182 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	0.0241 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	0.0357	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10367	21-600851	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3893	21-600851	2.0000–3.0000	QBT3	NA	NA	8.63E-06	1.59E-05	3.57E-06	6.58E-06	0.000000367 (J)	2.54E-06	0.000000301 (J)	0.000000207 (J)	0.000000229 (J)	3.2E-06
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	0.0119 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	0.0493	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3860	21-600853	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	0.0107 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	0.0608	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	0.0262 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	0.0995	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	0.115	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.18-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8—]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8—]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,7,8,9—]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8—]	Hexachlorodibenzofuran [1,2,3,6,7,8—]	Hexachlorodibenzofuran [2,3,4,6,7,8—]	Hexachlorodibenzofurans (Total)
Residential SSL				**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	0.141	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7249	21-603041	5.5000–6.5000	SOIL	0.104	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	0.109	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	0.129	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	0.209	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	0.106	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	0.106	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	0.103	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	0.0993	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	0.041	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	0.0761	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	0.0212 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	0.117	—	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	0.402	0.0576	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.18-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Indeno (1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylnaphthalene[2-]	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trimethylbenzene[1,2,4-]
Residential SSL				**6.21**	**3210**[e]	**310**[f]	**na**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**	**62**[f]
Industrial SSL				**23.4**	**14900**[e]	**4100**[f]	**na**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**	**260**[f]
Construction Worker SSL				**213**	**10300**[e]	**1240**[g]	**na**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**	**688**[g]
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0221 (J)	0.0431	NA	NA	NA	NA
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	—	—	NA	NA	NA	NA
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	0.000394 (J)	—
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.035 (J)	0.0631	NA	NA	NA	NA
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	0.000857 (J)	—
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	0.186 (J)	NA	0.00858 (J)	NA	NA	NA	0.377	0.485	NA	NA	NA	NA
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	0.0724	0.0779	NA	NA	—	—
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0197 (J)	0.0276 (J)	NA	NA	NA	NA
RE21-08-10365	21-600847	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3848	21-600847	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0113 (J)	0.0163 (J)	NA	NA	NA	NA
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0144 (J)	0.0194 (J)	NA	NA	NA	NA
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0166 (J)	0.0339	NA	NA	NA	NA
RE21-08-10367	21-600851	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3893	21-600851	2.0000–3.0000	QBT3	NA	NA	NA	5.21E-05	8.8E-06	7.29E-07	NA	NA	0.000000154 (J)	3.78E-07	NA	NA
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	—	0.0137 (J)	NA	NA	NA	NA
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0272 (J)	0.0403	NA	NA	NA	NA
RE21-07-3860	21-600853	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	—	—	NA	NA	NA	NA
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	0.000539 (J)	—
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.0426	0.0491	NA	NA	NA	NA
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	—	NA	—	NA	NA	NA	0.017 (J)	0.0241 (J)	NA	NA	NA	NA
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	0.000583 (J)	—
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	—	0.000969 (J)	—	NA	NA	NA	—	—	NA	NA	0.00123	—
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	—	—	—	NA	NA	NA	—	—	NA	NA	—	—

Table 6.18-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Indeno (1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylnaphthalene[2-]	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trimethylbenzene[1,2,4-]
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	0.0198 (J)	—	—	NA	NA	NA	0.021 (J)	0.0275 (J)	NA	NA	—	—
RE21-08-7249	21-603041	5.5000–6.5000	SOIL	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	0.0137 (J)	—	—	NA	NA	NA	0.0128 (J)	0.0128 (J)	NA	NA	—	—
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	0.0171 (J)	—	—	NA	NA	NA	0.0316 (J)	0.0357	NA	NA	—	—
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	0.0248 (J)	—	—	NA	NA	NA	0.107	0.118	NA	NA	—	—
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	0.0138 (J)	—	—	NA	NA	NA	—	0.0137 (J)	NA	NA	—	—
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	0.0139 (J)	—	—	NA	NA	NA	0.0181 (J)	0.0215 (J)	NA	NA	—	—
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	—	—	—	NA	NA	NA	—	—	NA	NA	—	—
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	0.0117 (J)	—	—	NA	NA	NA	0.0198 (J)	0.0316 (J)	NA	NA	—	—
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	0.0156 (J)	—	—	NA	NA	NA	0.0622	0.0608	NA	NA	—	—
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	—	—	—	NA	NA	NA	0.0175 (J)	0.018 (J)	NA	NA	—	—
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	0.0247 (J)	—	—	NA	NA	NA	0.0826	0.115	NA	NA	—	0.000463 (J)
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	0.0792	—	0.0152 (J)	NA	NA	NA	0.399	0.327	NA	NA	—	—

Source: SSLs from NMED (2009, 108070).

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

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

[b] — = Not detected.

[c] NA = Not analyzed.

[d] na = Not available.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

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

[g] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table 6.18-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(k)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-07-3839	21-600843	0.0000–0.5000	SOIL	0.127	—[c]	0.096	0.14	0.022441	—	—
RE21-07-3840	21-600843	2.0000–3.0000	QBT3	—	NA[d]	—	0.0485	0.032091	—	—
RE21-07-3841	21-600844	0.0000–0.5000	SOIL	0.0588	—	—	0.638	0.021163	—	—
RE21-07-3842	21-600844	2.0000–3.0000	QBT3	—	NA	—	0.0457	0.037146	—	—
RE21-07-3843	21-600845	0.0000–0.5000	SOIL	0.205	1.78	—	1.13	0.029631	—	—
RE21-07-3844	21-600845	2.0000–3.0000	QBT3	—	—	—	—	0.171589	—	—
RE21-07-3845	21-600846	0.0000–0.5000	SOIL	0.161	NA	—	0.0927	0.004391	—	—
RE21-07-3846	21-600846	2.0000–3.0000	QBT3	—	—	—	—	0.01776	—	—
RE21-07-3847	21-600847	0.0000–0.5000	SOIL	0.0396	—	—	0.0636	—	—	—
RE21-07-3849	21-600848	0.0000–0.5000	SOIL	—	NA	—	—	0.010816	—	—
RE21-07-3850	21-600848	2.0000–3.0000	QBT3	—	—	—	—	0.007052	—	—
RE21-07-3851	21-600849	0.0000–0.5000	SOIL	—	—	—	0.175	—	4.92	—
RE21-07-3852	21-600849	2.0000–3.0000	QBT3	—	NA	—	—	—	3.79	0.191
RE21-07-3853	21-600850	0.0000–0.5000	SOIL	0.0483	—	—	0.372	0.016578	3.88	—
RE21-07-3854	21-600850	2.0000–3.0000	QBT3	—	0.281	—	0.273	0.013773	2.16	0.131
RE21-07-3855	21-600851	0.0000–0.5000	SOIL	0.0614	—	—	0.109	—	—	—
RE21-07-3856	21-600851	2.0000–3.0000	QBT3	—	0.177	—	—	—	—	—
RE21-07-3857	21-600852	0.0000–0.5000	SOIL	—	—	—	0.0703	—	—	—
RE21-07-3859	21-600853	0.0000–0.5000	SOIL	0.0731	—	—	0.478	0.005449	—	—
RE21-07-3861	21-600854	0.0000–0.5000	SOIL	—	—	—	0.143	0.008225	—	—
RE21-07-3862	21-600854	2.0000–3.0000	QBT3	—	—	—	—	0.023017	—	—
RE21-07-3872	21-600859	0.0000–0.5000	SOIL	0.094	—	—	0.784	—	—	—
RE21-07-3873	21-600859	2.0000–3.0000	SOIL	—	—	—	—	0.087833	—	—
RE21-07-3874	21-600859	5.0000–6.0000	QBT3	—	—	—	—	0.029032	—	—
RE21-07-3875	21-600860	0.0000–0.5000	SOIL	0.0399	—	—	0.059	0.010881	—	—
RE21-07-3876	21-600860	2.0000–3.0000	QBT3	—	NA	—	2.45	0.05254	—	—
RE21-07-3877	21-600860	5.0000–6.0000	QBT3	—	0.114	—	0.269	0.058092	—	—
RE21-08-7241	21-603037	8.5000–9.5000	QBT3	—	—	—	—	0.351798	—	—

Table 6.18-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-08-7242	21-603037	10.5000–11.5000	QBT3	—	—	—	—	0.307618	—	—
RE21-08-7243	21-603038	6.5000–7.5000	SOIL	—	—	—	—	0.754058	—	—
RE21-08-7244	21-603038	8.5000–9.5000	QBT3	—	—	—	0.0352	0.798753	—	—
RE21-08-7245	21-603039	7.5000–8.5000	QBT3	—	—	—	—	0.072731	—	0.112
RE21-08-7246	21-603039	9.5000–10.5000	QBT3	—	—	—	—	0.07338	—	0.0924
RE21-08-7247	21-603040	5.0000–6.0000	QBT3	—	—	—	—	0.985475	—	—
RE21-08-7248	21-603040	7.0000–8.0000	QBT3	—	—	—	—	0.045388	—	—
RE21-08-7249	21-603041	5.5000–6.5000	SOIL	—	—	—	0.0542	0.276183	—	—
RE21-08-7250	21-603041	7.5000–8.5000	SOIL	—	—	—	0.0572	0.148363	—	—
RE21-08-7251	21-603042	5.5000–6.5000	QBT3	—	—	—	0.0463	0.083042	—	0.0972
RE21-08-7252	21-603042	7.5000–8.5000	QBT3	—	—	—	0.0331	0.086465	—	—
RE21-08-7253	21-603043	9.0000–10.0000	QBT3	—	—	—	0.0332	0.010094	—	—
RE21-08-7254	21-603043	11.0000–12.0000	QBT3	—	—	—	0.0291	0.011427	—	—
RE21-08-7255	21-603044	11.0000–12.0000	QBT3	—	—	—	—	0.031763	2.64	0.157
RE21-08-7256	21-603044	13.0000–14.0000	QBT3	—	—	—	—	0.025924	2.57	0.11
RE21-08-7257	21-603045	11.0000–12.0000	QBT3	—	—	—	—	0.019177	—	—
RE21-08-7258	21-603045	13.0000–14.0000	QBT3	—	—	—	—	0.025065	—	—
RE21-08-7259	21-603046	2.0000–3.0000	QBT3	—	—	—	0.0342	0.122281	—	—
RE21-08-7260	21-603046	4.0000–5.0000	QBT3	—	—	—	—	0.202979	—	—
RE21-08-7261	21-603047	10.0000–10.5000	QBT3	—	—	—	—	0.027581	—	—
RE21-08-7262	21-603047	12.5000–14.5000	QBT3	—	—	—	—	0.037928	—	—
RE21-08-7275	21-603054	10.0000–11.0000	QBT3	—	—	—	0.0496 (J-)	0.182405	—	—
RE21-08-7276	21-603054	15.0000–16.0000	QBT3	—	—	—	—	0.012516	—	0.114
RE21-08-7277	21-603054	20.0000–21.0000	QBT3	—	—	—	—	0.051539	—	—
RE21-08-7285	21-603056	31.0000–32.0000	QBT3	—	—	—	—	—	—	0.107

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.19-1
Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-024(l)-99

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**	**619**[d]
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	—[e]	—	—	—	—	—	—	NA[f]	—	—	13.6
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	—	—	—	—	—	—	—	NA	—	225(J)	13.7
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	46800(J+)	—	—	2.74(U)	—	24.9(J)	—	NA	27900	24.2(J)	16.2
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	—	—	—	—	—	—	—	NA	—	—	12.1
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	—	—	—	0.519(U)	—	—	—	NA	—	—	3.98
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	—	—	—	0.526(U)	—	—	—	NA	—	—	10
RE21-07-75345	21-27441	5.0000–5.5000	SOIL	—	—	—	0.549(U)	—	—	—	NA	—	—	3.52
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	—	—	—	0.536(U)	—	—	—	NA	—	—	12.2
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	—	—	—	0.501(U)	—	—	—	NA	—	—	7.25
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	—	—	—	0.522(U)	—	—	—	NA	—	—	11.7
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	—	—	—	0.544(U)	—	—	—	NA	—	42.1(J)	14
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	—	—	—	—	—	10.3	—	—	—	13(J)	5.4(J+)
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	—	—	—	—	—	7.64	—	—	—	13.9(J)	29.6(J+)
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	—	—	—	—	—	8.1	—	—	—	25.1(J)	9.7(J+)
RE21-07-75619	21-27515	10.0000–11.0000	QBT3	—	—	—	—	—	7.72	—	—	—	—	13
RE21-07-75620	21-27515	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—	—	14.7
RE21-07-75621	21-27515	20.0000–21.0000	QBT3	—	—	—	—	—	7.38	—	—	—	—	6.61
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	—	—	—	0.526(U)	—	—	—	—	—	—	11.6
RE21-07-75623	21-27516	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	16.8	2.3
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	—	2.85	—	—	—	7.18	—	—	—	—	3.07
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	—	—	—	0.545(U)	—	—	—	—	—	35	10.5
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	—	—	—	0.549(U)	—	—	—	—	—	53.8	12.4
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	—	—	—	0.565(U)	—	—	—	—	—	—	12.6
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	—	—	—	0.539(U)	—	—	—	—	—	—	5.29
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	—	—	—	0.562(U)	—	—	—	—	—	—	13.2
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	—	—	—	0.572(U)	—	—	—	—	—	—	14.4
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	—	—	—	0.55(U)	—	—	—	32.7	—	45.3	9.45(J+)

Table 6.19-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**	**619**[d]
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	—	—	—	0.618(U)	—	—	—	—	—	—	17.8(J+)
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	—	—	—	0.549(U)	—	—	—	—	—	—	10.3(J+)
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	—	—	—	0.523(U)	—	—	—	—	—	—	7.72(J+)
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	—	—	342	0.703	—	—	—	—	—	41.1	12(J+)
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	—	3.09	—	—	—	13.6	—	—	—	59.8	6.24(J+)
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	—	—	—	0.556(U)	—	—	—	—	—	53.6(J)	11.8(J+)
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	—	—	—	0.563(U)	—	—	—	—	—	—	9.67(J+)
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	—	—	—	0.578(U)	—	—	—	36.4	—	312	10.9(J+)
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	—	—	—	0.562(U)	6130	—	—	30.9	—	—	10.8(J+)
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	8950	3.56	137	—	2800	7.53	3.43	6.74	—	23.5	12.4(J+)
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	—	3.09	66.4	—	—	—	—	—	—	11.4	11.2(J+)
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	—	—	—	0.553(U)	—	—	—	—	—	970(J)	10.5(J+)
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	—	—	—	—	—	11.3	—	—	—	—	8.9(J+)
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	10.9(J+)
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	—	—	—	0.537(U)	—	—	—	—	—	—	7.49(J+)
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	—	—	—	0.55(U)	—	—	—	—	—	—	10.1(J+)
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	—	—	48.7	—	—	11.3	—	11.8	—	12	5.1(J+)
RE21-07-75673	21-27533	2.0000–3.0000	QBT3	—	—	—	—	—	7.81	—	—	—	—	3.4(J+)
RE21-07-75674	21-27534	0.0000–0.5000	SOIL	—	—	—	0.449(J)	9590	—	—	—	—	—	11.6(J+)
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	—	—	—	0.527(U)	—	—	—	—	—	—	7.1(J+)
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	—	—	—	0.486(U)	—	—	—	—	—	—	8.7(J+)
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	—	—	—	0.54(U)	—	—	—	—	—	—	10.5(J+)
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	—	—	—	0.526(U)	—	—	—	—	—	—	15.3(J+)
RE21-07-75679	21-27536	2.0000–3.0000	QBT3	—	—	—	—	—	8.32	—	—	—	—	12.4(J+)
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	—	—	—	0.531(U)	—	—	—	—	—	—	9.64(J+)
RE21-07-75681	21-27537	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	12.5(J+)
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	—	—	—	0.55(U)	—	—	—	—	—	24.6	11.3(J+)
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	—	—	—	0.518(U)	—	—	—	—	—	—	13.5(J+)
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	—	—	—	0.542(U)	—	—	—	—	—	—	11(J+)
RE21-07-75685	21-27539	5.0000–6.0000	QBT3	—	—	—	—	2940	15	4.03	6.9	—	23.6	13.6(J+)

Table 6.19-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium
QBT3 Background Value				**7340**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**14500**	**11.2**	**na**[a]
SOIL Background Value				**29200**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**21500**	**22.3**	**na**
Residential SSL				**78100**	**3.9**	**15600**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**54800**	**400**	**160**[c]
Industrial SSL				**1130000**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**795000**	**800**	**2000**[c]
Construction Worker SSL				**40700**	**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**217000**	**800**	**619**[d]
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	—	—	—	0.546(U)	—	—	—	—	—	22.8	9.5(J+)
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	—	—	—	0.511(U)	—	—	—	—	—	—	12(J+)
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	—	—	—	0.551(U)	—	—	—	—	—	—	12.7(J+)
RE21-07-75691	21-27542	2.0000–3.0000	QBT3	—	—	—	—	—	12	—	—	—	—	3.7(J+)
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	—	—	—	0.531(U)	—	—	—	—	—	38	10.6(J+)
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	—	—	51.4	—	—	13.6	—	4.96	—	—	8.6(J+)
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	8930	2.97	104	—	3540	7.97	4.03	7.64	—	11.7	12.9(J+)
RE21-07-75695	21-27544	4.0000–5.0000	QBT3	—	—	—	—	—	16.8	—	—	—	—	14.3(J+)
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	—	—	—	0.991	9710(J)	—	—	—	—	488(J)	12.8(J+)
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	—	—	68.6(J-)	—	2330(J)	14.4	—	5.48	—	—	9.72(J+)
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	—	—	—	0.546(U)	—	—	—	—	—	34.3(J)	12.4(J+)
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	—	—	—	0.549(U)	—	—	—	—	—	34.3(J)	13.4(J+)
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	—	—	—	0.526(U)	—	—	—	—	—	—	11.6(J+)
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	—	—	—	0.566(U)	6370(J)	—	—	—	—	—	11.9(J+)

Table 6.19-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Potassium	Selenium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**3500**	**0.3**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**3460**	**1.52**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**na**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**na**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**na**	**1550**	**929**	**1550**	**92900**
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	—	—	—	—	—	0.00144(J+)	—	1.55(U)	—	—	—
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	—	—	0.179	—	6.1(J-)	0.00492(J+)	—	—	—	—	50(J)
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	5470	—	—	—	2.12(J-)	0.0057(J+)	4300	8.22(U)	—	50	61.6(J)
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	—	—	—	—	—	0.00199(J+)	—	—	—	—	—
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	—	—	—	—	—	0.000626(J+)	—	1.56(U)	—	—	—
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	—	—	—	—	0.864(J-)	0.00632(J+)	—	1.58(U)	—	—	—
RE21-07-75345	21-27441	5.0000–5.5000	SOIL	—	—	—	—	—	—	—	1.65(U)	—	—	—
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	—	—	0.628	—	—	0.00325(J+)	—	—	—	—	—
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	—	—	—	—	2.76(J-)	0.00307(J+)	—	—	—	—	—
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	—	—	—	—	0.694(J-)	0.00244(J+)	—	—	—	—	—
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	—	—	—	—	—	0.00273(J+)	—	1.63(U)	—	—	—
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	1.19(J)	—	—	—
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	—	—	—	—	1.41	—	—	0.935(J)	—	—	—
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	—	—	—	—	3.8	—	—	0.953(J)	—	—	—
RE21-07-75619	21-27515	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	1.54(U)	—	—	—
RE21-07-75620	21-27515	15.0000–16.0000	QBT3	—	—	—	—	2.2(J-)	—	—	1.58(U)	—	—	—
RE21-07-75621	21-27515	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	1.59(U)	—	—	—
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	—	—	—	—	—	0.00131(J)	—	—	—	—	—
RE21-07-75623	21-27516	4.0000–5.0000	QBT3	—	—	—	—	1.17(J-)	—	—	1.57(U)	—	—	—
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	—	—	—	—	1.56(J-)	—	—	1.58(U)	—	—	—
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	75
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	—	—	0.192	—	—	—	—	—	—	—	104
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	—	—	—	—	1.58	—	—	—	—	—	—
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	—	—	—	—	0.996(J)	—	—	—	—	—	—
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	—	—	—	—	1.13	—	—	—	—	—	—
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	—	—	—	—	1.21	—	—	—	—	—	—
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	—	—	—	—	1.34	—	—	—	—	—	108
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	—	—	—	—	1.58	—	—	—	—	—	53.5
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	—	—	—	—	1.5(J-)	—	—	—	—	—	53.9
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	—	—	—	—	1.26(J-)	—	—	1.79	—	—	384

Table 6.19-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Potassium	Selenium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**3500**	**0.3**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**3460**	**1.52**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**na**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**na**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**na**	**1550**	**929**	**1550**	**92900**
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	—	—	—	—	—	0.000609(J)	—	1.74	—	—	949
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	—	—	—	—	1(J-)	—	—	1.13(J)	—	—	97
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	—	—	—	—	1.53	0.000948(J)	—	1.53(J)	—	—	59.2(J)
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	—	—	—	—	—	0.00119(J)	—	—	—	—	—
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	—	—	—	—	1.06	—	—	—	—	—	192
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	—	—	—	—	1.15	—	—	—	—	—	—
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	1720(J+)	—	—	6.78	—	—	—	1.09(J)	—	18.1	222
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	—	—	—	—	1.1(J-)	—	—	1.21(J)	—	—	227
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	—	—	—	—	—	—	—	—	—	—	56.3(J)
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	—	—	—	—	1.38	—	—	1.64(U)	—	—	—
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	74.2(J)
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	—	—	—	—	1.19	—	—	—	—	—	115(J)
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	—	—	—	—	1.3	0.0012(J)	—	—	—	—	65.7(J)
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	—	—	—	—	1.72	—	—	1(J)	—	—	—
RE21-07-75673	21-27533	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	0.764(J)	—	—	—
RE21-07-75674	21-27534	0.0000–0.5000	SOIL	—	—	—	—	2.02	—	—	—	—	—	91.5
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	—	—	—	—	1.25	0.000867(J-)	—	1.58(U)	—	—	—
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	—	—	—	—	1.65	0.00154(J-)	—	—	—	—	53.2
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	—	—	—	—	1.26	—	—	—	—	—	—
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	—	—	—	—	1.57	0.000823(J-)	—	—	—	—	—
RE21-07-75679	21-27536	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	0.669(J)	—	—	—
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	—	—	—	—	2.27	0.000628(J-)	—	—	—	—	—
RE21-07-75681	21-27537	2.0000–3.0000	QBT3	—	—	—	—	1.12(J)	—	—	1.7(U)	—	—	—
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	—	—	—	—	—	0.00128(J-)	—	1.59	—	—	—
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75685	21-27539	5.0000–6.0000	QBT3	—	549	—	—	—	—	—	0.726(J)	—	—	117
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	77.4
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	—	—	—	—	2.21	—	—	—	—	—	—

Table 6.19-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Potassium	Selenium	Uranium	Vanadium	Zinc
QBT3 Background Value				**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**3500**	**0.3**	**2.4**	**17**	**63.5**
SOIL Background Value				**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**3460**	**1.52**	**1.82**	**39.6**	**48.8**
Residential SSL				**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**na**	**391**	**235**	**391**	**23500**
Industrial SSL				**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**na**	**5680**	**3410**	**5680**	**341000**
Construction Worker SSL				**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**na**	**1550**	**929**	**1550**	**92900**
RE21-07-75691	21-27542	2.0000–3.0000	QBT3	—	—	—	—	1.26	—	—	1.57(U)	—	—	—
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	2.03	—	—
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.55(U)	—	—	—
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	1850(J+)	—	—	—	NA	0.00106(J-)	—	0.962(J)	—	19.3	—
RE21-07-75695	21-27544	4.0000–5.0000	QBT3	—	—	—	—	NA	—	—	1.56(U)	—	—	—
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	—	—	—	—	1.51	—	—	1.67(U)	—	—	552(J)
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	—	—	—	—	1.57	—	—	1.67(U)	—	—	—
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	—	—	—	—	1.31	—	—	—	—	—	84.9(J)
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	—	—	—	—	—	0.000731(J)	—	—	—	—	92.4(J)
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	—	—	—	—	1.28	—	—	—	—	—	—
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	—	—	—	—	1.43	—	—	1.59(J)	—	—	—

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

Table 6.19-2
Summary of Organic Chemicals Detected at Consolidated Unit 21-024(I)-99

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Carbazole	Chloroform
Residential SSL				**3440**	**1720**	**67500**	**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**240**[b]	**5.72**
Industrial SSL				**36700**	**18300**	**851000**	**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**960**[b]	**31.9**
Construction Worker SSL				**18600**	**6680**	**263000**	**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**10800**[c]	**671**
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	—[d]	—	—	—	—	0.0429(J)	0.0163(J)	—	—	—	NA[e]	—
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	—	—	—	0.0172(J)	—	0.0879	0.15	0.106	—	—	NA	—
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	—	—	—	0.0142(J)	—	0.0848(J)	0.098(J)	—	—	—	NA	—
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	—	—	—	0.00847(J)	—	0.078	0.0681	—	0.0559	—	NA	0.000215(J)
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	—	—	0.00613	0.00868(J)	0.17	0.148	0.158	0.118	0.117	—	NA	—
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	0.204	—	0.00532(J)	0.382	1.47	0.995	1.61	0.449	0.591	—	NA	—
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	—	—	0.00891	—	—	0.0514	0.0179(J)	—	0.0403	—	NA	—
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	0.0417	—	—	0.0687	0.219(J)	0.223(J)	0.307(J)	0.228(J)	0.111(J)	—	NA	—
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	0.0568	—	—	0.102	0.291(J)	0.301(J)	0.421(J)	0.251(J)	0.149(J)	—	NA	—
MD21-09-8819	21-27514	25.0000–26.0000	QBT3	—	—	NA	—	0.11(J)	0.085(J)	0.11(J)	—	—	—	—	NA
RE21-07-3963	21-27515	15.0000–16.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	—	—	—	—	—	—	0.033(J)	—	—	—	NA	—
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	—	—	NA	0.00773(J)	0.0621	0.0518(J)	0.121(J)	0.0381(J)	—	—	NA	NA
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	—	—	—	0.0149(J)	0.0746(J)	0.0627(J)	0.163(J)	—	—	—	NA	—
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	—	—	NA	—	0.0249(J)	0.031(J)	0.0631	0.0246(J)	—	—	NA	NA
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	—	—	NA	—	—	—	—	—	—	0.0876(J)	NA	NA
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	—	—	—	0.0104(J)	—	0.0373(J)	0.0761	0.0173(J)	—	—	NA	—
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	0.833	—	—	1.37	3.2	2.99	3.92	1.24	1.8(J)	—	NA	—
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	0.102	—	—	0.217	0.598	0.577	0.713	0.318	—	—	NA	—
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	1.02	—	—	1.49	3.19	3.12(J)	4.8(J)	1.29(J)	—	—	NA	—

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Carbazole	Chloroform
Residential SSL				**3440**	**1720**	**67500**	**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**240**[b]	**5.72**
Industrial SSL				**36700**	**18300**	**851000**	**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**960**[b]	**31.9**
Construction Worker SSL				**18600**	**6680**	**263000**	**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**10800**[c]	**671**
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	—	—	0.35	0.0195(J)	0.0517	0.0498	0.0758	0.0264(J)	—	—	NA	—
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	0.0367(J)	—	—	0.0494	0.158	0.162(J)	0.279(J)	0.0947(J)	—	—	NA	—
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	—	—	—	0.00888(J)	0.0412	0.0436	0.075	0.0245(J)	—	—	NA	—
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	0.0535	—	—	0.0896	0.217	0.227	0.304	0.2(J)	0.126	—	NA	—
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	—	—	—	0.0201 (J)	—	0.0647 (J)	0.0868 (J)	0.145 (J)	0.0376 (J)	—	NA	—
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	0.0199 (J)	—	—	0.0342 (J)	0.106	0.168	0.228	0.0379 (J)	0.0721 (J)	—	NA	—
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	0.0324 (J)	—	—	0.0551	0.163	0.217	0.337	0.0756	—	—	NA	—
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	0.141	—	—	0.202	0.374	0.34 (J)	0.553 (J)	0.176 (J)	—	—	NA	—
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	0.013 (J)	—	—	0.0175 (J)	—	0.0465	0.0692	0.029 (J)	—	—	NA	—
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	0.293	—	—	0.509	1.59	1.69	2.57	0.797 (J)	0.898	—	NA	—
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	0.108	—	—	0.161	0.573	0.625	0.834	0.378 (J)	0.363	—	NA	—
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	0.0377	—	NA	0.0712	0.236	0.257	0.315	0.257 (J)	0.142	—	NA	NA
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	0.0124 (J)	—	—	0.0227 (J)	—	0.0492	0.0689	—	0.0245 (J)	—	NA	—
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	1.51	—	—	2.38	3.88	3.92	4.6	2.11 (J)	1.8	—	NA	—
MD21-09-8834	21-27530	10.0000–11.0000	QBT3	—	—	NA	—	0.16 (J)	0.13 (J)	0.18 (J)	—	0.081 (J)	—	—	NA
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	—	—	NA	—	0.0242 (J)	—	0.0493	0.018 (J)	0.0189 (J)	—	NA	NA
RE21-07-75674	21-27534	0.0000–0.5000	SOIL	0.143	—	NA	0.231	0.584	0.558	0.84	0.237 (J)	—	—	NA	NA
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	—	—	—	0.00875 (J)	0.0427	0.0348 (J)	0.044	0.0249 (J)	0.0207 (J)	—	NA	—
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	0.0161 (J)	—	NA	0.0301 (J)	0.169	0.19	0.275	0.126 (J)	0.0947	—	NA	NA
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	—	—	—	—	0.0146 (J)	—	0.0135 (J)	—	—	—	NA	—
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	0.0429	—	NA	0.081	0.36	—	0.7	0.209	—	—	NA	NA
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	0.0421	—	NA	0.0633	—	—	0.354	0.0894	—	—	NA	NA
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	0.0186 (J)	—	NA	0.0568	0.267	0.0816	0.368	0.167 (J)	0.166	—	NA	NA
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	NA	—
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	—	—	—	—	—	0.0123 (J)	0.0165 (J)	—	—	—	NA	—
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	0.0191 (J)	—	NA	0.0267 (J)	0.15	0.162	0.257	0.106 (J)	0.12	—	NA	NA
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	—	—	—	—	0.0273 (J)	0.0257 (J)	0.0361	—	0.0124 (J)	—	NA	—
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	—	—	NA	—	0.0404	0.0355 (J)	0.0239 (J)	0.0227 (J)	0.0225 (J)	—	NA	NA
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	—	—	NA	0.00972 (J)	0.0555	0.0728	0.119	0.0438 (J)	—	—	NA	NA
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	NA	—

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Carbazole	Chloroform
Residential SSL				**3440**	**1720**	**67500**	**17200**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**240**[b]	**5.72**
Industrial SSL				**36700**	**18300**	**851000**	**183000**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**960**[b]	**31.9**
Construction Worker SSL				**18600**	**6680**	**263000**	**66800**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**10800**[c]	**671**
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	—	—	—	—	0.0247 (J)	0.0237 (J)	0.0273 (J)	0.0147 (J)	0.0136 (J)	—	NA	—
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	0.357	0.0122 (J)	—	0.764	1.87 (J)	—	2.67 (J)	0.952 (J)	0.962 (J)	—	NA	—
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	—	—	—	0.0139 (J)	—	—	0.0644	—	0.0307 (J)	—	NA	—
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	0.368	—	—	0.871	1.86 (J)	—	2.45 (J)	1.11 (J)	1.02 (J)	—	NA	—
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	0.0242 (J)	—	—	0.0356 (J)	0.134 (J)	—	0.226 (J)	0.192 (J)	0.0805 (J)	—	NA	—
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	0.186	—	—	0.378	1.13	—	1.66	0.704 (J)	0.532	—	NA	—
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	0.167	—	—	0.552	0.637	—	0.731	0.417 (J)	0.321	—	NA	—
MD21-09-8835	21-27547	7.5000–8.5000	SOIL	—	—	NA	0.13 (J)	0.37 (J)	0.29 (J)	0.49	0.18 (J)	0.18 (J)	—	0.12 (J)	NA
MD21-09-8836	21-605278	0.0000–0.5000	SOIL	—	—	NA	—	0.29 (J)	0.29 (J)	0.51 (J)	0.21 (J)	0.21 (J)	0.25 (J)	—	NA

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chrysene	Dibenzofuran	Dichlorobenzene[1,4-]	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Residential SSL				**621**	**78**[f]	**32.2**	**2290**	**2290**	**na**[g]	**na**	**na**	**na**	**na**	**6.21**	**3210**[h]
Industrial SSL				**2340**	**1000**[f]	**180**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**23.4**	**14900**[h]
Construction Worker SSL				**20600**	**238**[i]	**3780**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**213**	**10300**[h]
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	0.0187(J)	—	—	0.0414	—	NA	NA	NA	NA	NA	—	—
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	0.122	—	—	0.225	—	NA	NA	NA	NA	NA	0.128	—
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	0.0732	—	—	0.139	—	NA	NA	NA	NA	NA	0.124(J)	—
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	0.0874	—	0.000316(J)	0.108	—	NA	NA	NA	NA	NA	0.121	—
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	—	—
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	0.157	—	—	0.273	—	NA	NA	NA	NA	NA	0.144	—
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	1.48	0.0754(J)	—	2.92	0.126	NA	NA	NA	NA	NA	0.472	—
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	—	—
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	0.0371	—	—	0.0583	—	NA	NA	NA	NA	NA	—	—
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	—	—
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	0.0156(J)	—	—	0.0387	—	NA	NA	NA	NA	NA	—	—
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	0.241(J)	—	—	0.51	0.0306(J)	NA	NA	NA	NA	NA	0.198(J)	—
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	0.319(J)	—	—	0.698	0.0499	NA	NA	NA	NA	NA	0.224(J)	—
MD21-09-8819	21-27514	25.0000–26.0000	QBT3	0.086(J)	—	—	0.24(J)	—	NA	NA	NA	NA	NA	—	NA
RE21-07-3963	21-27515	15.0000–16.0000	QBT3	NA	NA	NA	NA	NA	0.000000538(J)	1.46E-06	0.000000634(J)	1.18E-06	3.75E-07	NA	NA
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	0.0202(J)	—	—	0.0375	—	NA	NA	NA	NA	NA	—	—
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	—	—	—	0.0115(J)	—	NA	NA	NA	NA	NA	—	—
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	0.0684	—	—	0.126	—	NA	NA	NA	NA	NA	0.0277(J)	NA
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	0.0831(J)	—	—	0.144	—	NA	NA	NA	NA	NA	—	—
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	0.0278(J)	—	—	0.0268(J)	—	NA	NA	NA	NA	NA	0.0214(J)	NA
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	—	—
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	—	NA
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	0.0496	—	—	0.107	—	NA	NA	NA	NA	NA	0.0142(J)	—
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	3.24	0.401	—	8.61	0.724	NA	NA	NA	NA	NA	1.31	—
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	0.529	—	—	1.37	0.0932	NA	NA	NA	NA	NA	0.339	—
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	3	0.596	—	8.24	0.932	NA	NA	NA	NA	NA	1.3(J)	—

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chrysene	Dibenzofuran	Dichlorobenzene[1,4-]	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Residential SSL				**621**	**78**[f]	**32.2**	**2290**	**2290**	**na**[g]	**na**	**na**	**na**	**na**	**6.21**	**3210**[h]
Industrial SSL				**2340**	**1000**[f]	**180**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**23.4**	**14900**[h]
Construction Worker SSL				**20600**	**238**[i]	**3780**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**213**	**10300**[h]
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	0.0581	—	—	0.118	—	NA	NA	NA	NA	NA	0.026(J)	—
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	0.194	—	—	0.409	0.0262(J)	NA	NA	NA	NA	NA	0.0873(J)	—
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	0.0553	—	—	0.102	—	NA	NA	NA	NA	NA	0.022(J)	0.000463(J)
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	0.227	—	—	0.51	0.0463	NA	NA	NA	NA	NA	0.169(J)	—
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	0.0679(J)	—	—	0.14	—	NA	NA	NA	NA	NA	0.12(J)	—
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	0.101	—	—	0.232	0.0146(J)	NA	NA	NA	NA	NA	0.087	—
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	0.152	—	—	0.322	0.024(J)	NA	NA	NA	NA	NA	0.123	—
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	0.382	—	—	0.923	0.1	NA	NA	NA	NA	NA	0.168(J)	0.000443(J)
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	0.0582	—	—	0.107	—	NA	NA	NA	NA	NA	0.0252(J)	—
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	1.78	0.108(J)	—	4.22	0.238	NA	NA	NA	NA	NA	0.801(J)	—
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	0.651	—	—	1.42	0.0903	NA	NA	NA	NA	NA	0.347(J)	—
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	0.242	—	—	0.489	0.0308(J)	NA	NA	NA	NA	NA	0.229(J)	NA
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	0.0466	—	—	0.119	0.0109(J)	NA	NA	NA	NA	NA	—	—
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	3.76	0.694	—	10.5	1.2	NA	NA	NA	NA	NA	2.03(J)	—
MD21-09-8834	21-27530	10.0000–11.0000	QBT3	0.13(J)	—	—	0.3(J)	—	NA	NA	NA	NA	NA	—	NA
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	0.0381	—	—	0.0678	—	NA	NA	NA	NA	NA	0.0188(J)	NA
RE21-07-75674	21-27534	0.0000–0.5000	SOIL	0.584	—	—	1.41	0.114	NA	NA	NA	NA	NA	0.24(J)	NA
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	0.0319(J)	—	—	0.0783	—	NA	NA	NA	NA	NA	0.0231(J)	—
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	0.223	—	—	0.439	0.0114(J)	NA	NA	NA	NA	NA	0.117(J)	NA
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	0.014(J)	—	—	0.0234(J)	—	NA	NA	NA	NA	NA	—	—
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	0.37	—	—	0.803	0.0319(J)	NA	NA	NA	NA	NA	0.226	NA
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	0.174	—	—	0.427	0.0291(J)	NA	NA	NA	NA	NA	0.132	NA
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	0.307	—	—	0.681	0.0123(J)	NA	NA	NA	NA	NA	0.167(J)	NA
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	—	—
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	—	—	—	0.0365(J)	—	NA	NA	NA	NA	NA	—	—
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	0.193	—	—	0.416	0.013(J)	NA	NA	NA	NA	NA	0.103(J)	NA
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	0.0248(J)	—	—	0.0498	—	NA	NA	NA	NA	NA	—	—
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	0.0454	—	—	0.0748	—	NA	NA	NA	NA	NA	0.0208(J)	NA
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	0.0846	—	—	0.156	—	NA	NA	NA	NA	NA	0.0392(J)	NA

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chrysene	Dibenzofuran	Dichlorobenzene[1,4-]	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]
Residential SSL				**621**	**78**[f]	**32.2**	**2290**	**2290**	**na**[g]	**na**	**na**	**na**	**na**	**6.21**	**3210**[h]
Industrial SSL				**2340**	**1000**[f]	**180**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**23.4**	**14900**[h]
Construction Worker SSL				**20600**	**238**[i]	**3780**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**213**	**10300**[h]
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	—	—	—	0.0118(J)	—	NA	NA	NA	NA	NA	—	—
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	0.0231(J)	—	—	0.0504	—	NA	NA	NA	NA	NA	0.0123(J)	—
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	1.94(J)	0.191(J)	—	4.6	0.355	NA	NA	NA	NA	NA	0.947(J)	—
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	0.0583	—	—	0.11	—	NA	NA	NA	NA	NA	—	—
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	1.86(J)	0.263(J)	—	4.69	0.451	NA	NA	NA	NA	NA	1.07(J)	—
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	0.166(J)	—	—	0.354	0.0229(J)	NA	NA	NA	NA	NA	0.157(J)	—
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	1.22	0.117(J)	—	2.67	0.174	NA	NA	NA	NA	NA	0.667(J)	—
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	0.607	0.18(J)	—	1.78	0.288	NA	NA	NA	NA	NA	0.379(J)	—
MD21-09-8835	21-27547	7.5000–8.5000	SOIL	0.41	—	—	1.1	0.097(J)	NA	NA	NA	NA	NA	0.16(J)	NA
MD21-09-8836	21-605278	0.0000–0.5000	SOIL	0.28(J)	—	—	0.71	—	NA	NA	NA	NA	NA	0.17(J)	NA

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**310**[f]	**45**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**	**1090**[j]
Industrial SSL				**1090**	**4100**[f]	**252**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**	**3610**[j]
Construction Worker SSL				**10600**	**1240**[i]	**702**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**	**3130**[j]
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	0.00411(J)	—	—	NA	NA	0.0206(J)	0.0293(J)	NA	NA	—	—
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	—	—	—	NA	NA	0.0746	0.163	NA	NA	0.00092(J)	—
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	—	—	—	NA	NA	0.0632	0.109	NA	NA	0.00515	—
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	—	0.00778(J)	—	NA	NA	0.0323(J)	0.0813	NA	NA	0.0038	—
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	—	—	—	NA	NA	—	—	NA	NA	0.00163	—
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	—	—	—	NA	NA	0.0191(J)	0.17	NA	NA	0.00268	—
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	—	0.0251(J)	—	NA	NA	1.54	2.44	NA	NA	0.00341	—
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	—	—	—	NA	NA	—	—	NA	NA	0.0028	—
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	—	—	—	NA	NA	0.0182(J)	0.0429	NA	NA	0.00245	—
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	—	—	—	NA	NA	—	—	NA	NA	0.00149	—
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	—	—	—	NA	NA	0.0308(J)	0.0377	NA	NA	—	—
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	—	—	—	NA	NA	0.332	0.471(J)	NA	NA	—	—
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	—	0.00913(J)	0.028(J)	NA	NA	0.519	0.659(J)	NA	NA	—	—
MD21-09-8819	21-27514	25.0000–26.0000	QBT3	NA	—	—	NA	NA	0.16(J)	0.16(J)	NA	NA	NA	NA
RE21-07-3963	21-27515	15.0000–16.0000	QBT3	NA	NA	NA	0.00000533(J)	0.000000778(J)	NA	NA	0.000000189(J)	3.32E-07	NA	NA
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	—	—	—	NA	NA	0.0226(J)	0.0346(J)	NA	NA	—	—
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	—	—	—	NA	NA	—	—	NA	NA	—	—
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	NA	—	—	NA	NA	—	0.105	NA	NA	NA	NA
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	—	—	—	NA	NA	—	0.179(J)	NA	NA	0.00144	—
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	NA	—	—	NA	NA	—	0.0246(J)	NA	NA	NA	NA
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	—	—	—	NA	NA	—	—	NA	NA	0.00137	—
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	NA	—	—	NA	NA	—	—	NA	NA	NA	NA
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	—	—	—	NA	NA	—	0.0798	NA	NA	—	—
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	—	0.165	0.44	NA	NA	6.28	7.37	NA	NA	—	—
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	—	0.0161(J)	0.0397(J)	NA	NA	0.908	1.03	NA	NA	—	—
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	—	0.251	0.739	NA	NA	7.01	6.42	NA	NA	—	—

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**310**[f]	**45**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**	**1090**[j]
Industrial SSL				**1090**	**4100**[f]	**252**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**	**3610**[j]
Construction Worker SSL				**10600**	**1240**[i]	**702**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**	**3130**[j]
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	—	—	—	NA	NA	0.0814	0.0815	NA	NA	—	—
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	—	—	0.0165(J)	NA	NA	0.309	0.337	NA	NA	0.000364(J)	—
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	—	—	—	NA	NA	0.064	0.076	NA	NA	—	—
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	—	0.0107(J)	0.0317(J)	NA	NA	0.39	0.403	NA	NA	—	—
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	—	—	—	NA	NA	0.1	0.134(J)	NA	NA	—	—
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	—	—	—	NA	NA	0.145	0.205	NA	NA	—	—
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	—	—	—	NA	NA	0.227	0.295	NA	NA	—	—
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	—	0.024(J)	0.0853	NA	NA	0.871	0.71	NA	NA	—	—
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	—	—	—	NA	NA	0.0846	0.0834	NA	NA	—	—
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	—	0.0383	0.093	NA	NA	2.62	3.71	NA	NA	—	—
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	—	0.0194(J)	0.0537	NA	NA	1	1.35	NA	NA	—	—
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.331	0.463	NA	NA	NA	NA
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	—	—	—	NA	NA	0.0971	0.0904	NA	NA	—	—
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	—	0.321	1.22	NA	NA	9.28	7.26	NA	NA	—	—
MD21-09-8834	21-27530	10.0000–11.0000	QBT3	NA	—	—	NA	NA	0.16(J)	0.22(J)	NA	NA	NA	NA
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	NA	—	—	NA	NA	0.028(J)	0.0601	NA	NA	NA	NA
RE21-07-75674	21-27534	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.972	1.21	NA	NA	NA	NA
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	—	—	—	NA	NA	0.0374	0.057	NA	NA	—	—
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.191	0.351	NA	NA	NA	NA
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	—	—	—	NA	NA	—	0.0162(J)	NA	NA	—	—
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.415	0.673	NA	NA	NA	NA
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.27	0.318	NA	NA	NA	NA
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.293	0.603	NA	NA	NA	NA
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	—	—	—	NA	NA	—	—	NA	NA	0.000602(J)	—
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	—	—	—	NA	NA	0.0346(J)	0.0228(J)	NA	NA	—	—
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.193	0.349	NA	NA	NA	NA
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	—	—	—	NA	NA	0.0218(J)	0.0421	NA	NA	0.00178	0.000381(J)
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.0237(J)	0.0681	NA	NA	NA	NA
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.0742	0.136	NA	NA	NA	NA

Table 6.19-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**199**	**310**[f]	**45**	**na**	**na**	**1830**	**1720**	**0.000374**	**na**	**5570**	**1090**[j]
Industrial SSL				**1090**	**4100**[f]	**252**	**na**	**na**	**20500**	**18300**	**0.00147**	**na**	**57900**	**3610**[j]
Construction Worker SSL				**10600**	**1240**[i]	**702**	**na**	**na**	**7150**	**6680**	**0.0127**	**na**	**21100**	**3130**[j]
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	NA	NA	0.000411(J)	—
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	—	—	—	NA	NA	0.0253(J)	0.0376	NA	NA	—	—
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	—	0.0745	0.173	NA	NA	3.67	3.87(J)	NA	NA	—	—
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	—	—	—	NA	NA	0.0735	0.098	NA	NA	—	—
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	—	0.116(J)	0.355(J)	NA	NA	4.19	3.82(J)	NA	NA	—	—
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	—	—	—	NA	NA	0.268	0.374(J)	NA	NA	—	—
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	—	0.0534	0.16	NA	NA	1.85	2.75	NA	NA	—	—
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	—	0.112	0.3	NA	NA	1.89	1.36	NA	NA	—	—
MD21-09-8835	21-27547	7.5000–8.5000	SOIL	NA	—	—	NA	NA	0.81	0.63	NA	NA	NA	NA
MD21-09-8836	21-605278	0.0000–0.5000	SOIL	NA	—	—	NA	NA	0.36(J)	0.62(J)	NA	NA	NA	NA

Source: SSLs from NMED (2009, 108070).

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

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

[b] EPA Region 6 SSL (EPA 2007, 099314).

[c] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

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

[g] na = Not available.

[h] Isopropylbenzene SSL used as a surrogate based on structural similarity.

[i] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[j] Xylenes SSL used as a surrogate based on structural similarity.

Table 6.19-3
Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-024(I)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-07-75339	21-27439	0.0000–0.5000	SOIL	—[c]	—	—	0.214(J-)	0.193801	—	—
RE21-07-75340	21-27439	3.5000–4.0000	SOIL	—	0.181	0.341(J-)	0.439(J-)	0.404098	—	—
RE21-07-75341	21-27439	5.0000–5.5000	SOIL	—	—	—	0.203(J-)	0.84779	—	—
RE21-07-75342	21-27440	3.5000–4.0000	SOIL	—	—	—	0.049(J-)	0.329753	—	—
RE21-07-75343	21-27440	5.0000–5.5000	SOIL	—	—	—	0.0967(J-)	0.193216	—	—
RE21-07-75344	21-27441	3.5000–4.0000	SOIL	0.257	—	—	0.545(J-)	0.19127	—	—
RE21-07-75345	21-27441	5.0000–5.5000	SOIL	—	—	—	—	0.298343	—	—
RE21-07-75346	21-27442	3.5000–4.0000	SOIL	—	—	—	0.0744(J-)	0.679784	—	—
RE21-07-75347	21-27442	5.0000–5.5000	SOIL	—	—	—	—	0.291388	—	—
RE21-07-75348	21-27443	3.5000–4.0000	SOIL	—	—	—	0.0745(J-)	0.353546	—	—
RE21-07-75349	21-27443	5.5000–6.0000	SOIL	—	—	0.0765(J-)	0.0358(J-)	0.615081	—	—
RE21-07-75616	21-27514	10.0000–11.0000	QBT3	—	—	—	0.139	0.146117	—	—
RE21-07-75617	21-27514	15.0000–16.0000	QBT3	—	—	—	1.17	0.123685	—	—
RE21-07-75618	21-27514	20.0000–21.0000	QBT3	0.0564	—	—	1.16	0.129763	—	—
MD21-09-8819	21-27514	25.0000–26.0000	QBT3	—	NA[d]	—	0.106	NA	NA	NA
RE21-07-75619	21-27515	10.0000–11.0000	QBT3	—	—	—	0.0472	0.051815	—	0.136

Table 6.19-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-07-75620	21-27515	15.0000–16.0000	QBT3	—	—	—	0.0802	0.063777	—	—
RE21-07-75621	21-27515	20.0000–21.0000	QBT3	—	—	—	0.0356	0.146191	—	—
RE21-07-75622	21-27516	2.0000–3.0000	SOIL	0.217	—	0.0434	9.88	0.022133	—	—
RE21-07-75623	21-27516	4.0000–5.0000	QBT3	1.66	—	0.35	66	0.031319	—	—
RE21-07-75624	21-27516	6.0000–7.0000	QBT3	0.773	—	—	36.2	0.014476	—	—
RE21-07-75625	21-27517	0.0000–0.5000	SOIL	0.21	—	0.0528	0.924	—	2.61	—
RE21-07-75626	21-27517	2.0000–2.5000	SOIL	0.473	0.701	0.0775	1.94	0.025796	—	—
MD21-09-8824	21-27517	7.0000–8.0000	QBT3	—	—	—	0.137	NA	NA	NA
RE21-07-75627	21-27518	0.0000–0.5000	SOIL	0.0716	—	—	0.49	0.028763	—	—
RE21-07-75628	21-27518	2.0000–2.5000	SOIL	—	—	—	0.0695	0.026667	—	—
RE21-07-75629	21-27519	0.0000–0.5000	SOIL	—	NA	—	0.174	0.062908	—	—
RE21-07-75630	21-27519	2.0000–2.5000	SOIL	—	—	—	0.179	0.060706	—	—
RE21-07-75631	21-27520	2.0000–3.0000	SOIL	0.0312	0.207	—	0.724	0.069818	—	—
RE21-07-75632	21-27520	4.0000–5.0000	SOIL	—	—	—	0.174	0.121329	—	—
RE21-07-75633	21-27521	2.5000–3.5000	SOIL	—	—	—	0.137	0.129535	—	—
RE21-07-75634	21-27521	4.5000–5.5000	SOIL	—	—	—	0.064	0.091728	—	—
RE21-07-75635	21-27522	5.0000–6.0000	SOIL	—	—	—	0.515	—	—	—
RE21-07-75636	21-27522	7.0000–8.0000	QBT3	—	—	—	0.226	—	—	—

Table 6.19-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-07-75637	21-27523	3.0000–4.0000	SOIL	—	NA	—	0.218	0.045097	—	—
RE21-07-75638	21-27523	5.0000–6.0000	SOIL	—	—	—	0.189	0.130598	—	—
RE21-07-75639	21-27524	2.0000–3.0000	SOIL	—	—	—	0.871	0.043065	—	—
RE21-07-75640	21-27524	4.0000–5.0000	SOIL	—	—	—	0.331	—	—	—
RE21-07-75641	21-27525	5.0000–6.0000	QBT3	—	—	—	0.0889	0.105094	—	—
RE21-07-75642	21-27525	7.0000–8.0000	QBT3	—	—	—	0.09	0.153594	—	—
RE21-07-75643	21-27526	4.0000–5.0000	SOIL	3.44	NA	—	103	0.091445	—	—
RE21-07-75644	21-27526	6.0000–7.0000	QBT3	0.0532	—	—	3.9	0.110011	—	—
RE21-07-75663	21-27530	0.0000–0.5000	SOIL	0.0611	—	—	0.494	—	—	—
RE21-07-75664	21-27530	2.0000–3.0000	SOIL	—	—	—	0.0813	—	—	—
RE21-07-75665	21-27530	5.0000–6.0000	SOIL	—	—	—	0.252	0.041611	—	—
RE21-07-75672	21-27533	0.0000–0.5000	QBT3	0.108	NA	4.9	0.989	0.037559	—	0.113
RE21-07-75673	21-27533	2.0000–3.0000	QBT3	0.0536	—	0.104	0.351	0.010864	—	—
RE21-07-75675	21-27534	2.0000–3.0000	SOIL	—	—	—	0.157	0.034226	—	—
RE21-07-75676	21-27535	0.0000–0.5000	SOIL	0.0579	—	—	0.244	0.010183	—	—
RE21-07-75677	21-27535	2.0000–3.0000	SOIL	—	—	—	0.215	—	—	—
RE21-07-75678	21-27536	0.0000–0.5000	SOIL	0.0631	—	0.084	0.219	—	—	—
RE21-07-75679	21-27536	2.0000–3.0000	QBT3	—	—	—	0.034	—	—	—

Table 6.19-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-07-75680	21-27537	0.0000–0.5000	SOIL	0.0471	—	0.135	0.156	—	—	—
RE21-07-75682	21-27538	0.0000–0.5000	SOIL	0.0636	—	0.0327	0.691	0.113016	—	—
RE21-07-75683	21-27538	2.0000–3.0000	SOIL	—	—	—	0.0233	0.045188	—	—
RE21-07-75684	21-27539	2.0000–3.0000	SOIL	0.0496	—	—	0.695	0.04014	—	—
RE21-07-75685	21-27539	5.0000–6.0000	QBT3	—	—	—	0.0358	0.020975	—	—
RE21-07-75686	21-27540	0.0000–0.5000	SOIL	0.22	—	—	0.994	—	—	—
RE21-07-75687	21-27540	2.0000–3.0000	SOIL	—	NA	—	0.244	0.01327	—	—
RE21-07-75690	21-27542	0.0000–0.5000	SOIL	0.0398	—	—	0.209	—	3.72	0.276
RE21-07-75691	21-27542	2.0000–3.0000	QBT3	—	—	—	0.149	—	—	—
RE21-07-75692	21-27543	0.0000–0.5000	SOIL	0.22	—	0.109	2.16	—	—	—
RE21-07-75693	21-27543	2.0000–3.0000	QBT3	0.0381	NA	—	0.296	—	—	—
RE21-07-75694	21-27544	2.0000–3.0000	QBT3	—	—	—	0.0664	0.046545	—	—
RE21-07-75695	21-27544	4.0000–5.0000	QBT3	—	—	—	—	0.022532	—	—
RE21-07-75696	21-27545	3.0000–4.0000	SOIL	0.0436	—	—	2.86	0.254764	—	—
RE21-07-75697	21-27545	5.0000–6.0000	QBT3	0.0505	—	—	0.296	2.06204	—	—
RE21-07-75698	21-27546	1.0000–2.0000	SOIL	—	—	—	0.389	0.026311	—	—
RE21-07-75699	21-27546	4.0000–5.0000	SOIL	—	—	—	0.268	0.063433	—	—
RE21-07-75700	21-27547	0.5000–1.5000	SOIL	—	—	—	0.178	0.031992	—	—

Table 6.19-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
RE21-07-75701	21-27547	2.5000–3.5000	SOIL	—	—	—	—	0.10421	—	—
MD21-09-8820	21-605272	0.0000–0.5000	SOIL	0.375	—	0.099	6.23	NA	NA	NA
MD21-09-8821	21-605272	7.0000–8.0000	QBT3	—	—	—	0.327	NA	NA	NA
MD21-09-8822	21-605273	0.0000–0.5000	SOIL	0.0309	—	—	0.428	NA	NA	NA
MD21-09-8823	21-605273	7.0000–8.0000	QBT3	—	—	—	0.301	NA	NA	NA
MD21-09-8825	21-605274	0.0000–0.5000	SOIL	0.078	NA	0.034	0.906	NA	NA	NA
MD21-09-8826	21-605275	0.0000–0.5000	QBT3	0.053(J+)	NA	0.034	0.27	NA	NA	NA
MD21-09-8830	21-605276	0.0000–0.5000	SOIL	NA	NA	0.06	0.251	NA	NA	NA

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.20-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(n)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-3114	21-600667	0.0000–0.5000	SOIL	—[e]	—	—	—	—	0.535 (U)	—	—	—	—	0.61 (J)	—
RE21-07-3115	21-600667	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	10	—	—	—	—
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	—	—	—	—	—	0.554 (U)	—	—	—	—	—	—
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	—	—	—	—	—	0.525 (U)	—	—	—	—	—	—
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	—	—	—	—	—	0.567 (U)	7210	—	—	—	—	—
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	—	—	3.47	99	—	—	2630	48.1	3.2	10.9	—	—
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	—	—	—	—	—	0.529 (U)	—	—	—	—	—	—
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	—	—	—	—	—	0.581 (U)	—	106	—	15.1	—	—
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	—	—	—	—	—	0.599 (U)	—	23.7	—	—	—	—
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	—	—	—	—	—	0.533 (U)	—	45.4	—	—	—	—
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	—	—	—	—	—	0.59 (U)	—	—	—	—	—	—
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	—	—	—	—	—	0.544 (U)	—	—	—	—	—	—
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	—	—	—	—	—	0.577 (U)	—	—	—	—	—	—
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	—	—	—	64.5	—	—	2410	21.9	—	6.87	—	—
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	—	—	—	—	—	0.57 (U)	—	—	—	—	—	—
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	16.6	—	—	—	—
RE21-07-3130	21-600675	0.0000–0.5000	SOIL	—	—	—	—	—	0.541 (U)	—	—	—	—	—	—
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	24.9	—	5.39	—	—
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	—	—	—	—	—	0.557 (U)	—	—	—	—	—	—
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	26.1	—	17.3	—	—
RE21-07-3134	21-600677	0.0000–0.5000	SOIL	—	—	—	—	—	0.536 (U)	—	—	—	18	—	—
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	—	—	—	—	—	0.539 (U)	—	21.5	—	—	—	—
RE21-07-3136	21-600678	0.0000–0.5000	SOIL	—	—	—	—	—	0.541 (U)	—	—	—	—	—	—
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	—	—	2.93	113	—	—	—	26.4	—	18.5	—	—
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	—	—	—	—	—	0.531 (U)	—	—	—	—	—	—
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	—	—	4.65	71.9	—	—	—	149	—	26.9	—	—
RE21-07-3140	21-600680	0.0000–0.5000	SOIL	—	—	—	—	—	0.5 (U)	8860	—	—	—	—	—

Table 6-20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	—	—	3.76	110	—	—	—	14	4.4	15.5	—	—
RE21-07-3142	21-600681	0.0000–0.5000	SOIL	—	—	—	—	—	0.493 (U)	—	—	—	—	—	—
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	—	—	—	—	—	0.587 (U)	—	28.5	—	—	—	—
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	—	—	11.1	—	—	1.12	—	289	—	438	—	—
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	341	—	93.9	—	—
MD21-09-8759	21-600682	7.0000–8.0000	QBT3	NA[f]	NA	NA	NA	NA	NA	NA	62 (J-)	NA	NA	NA	NA
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	—	—	—	—	—	0.545 (U)	—	19.7	—	22.2	—	—
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	—	—	4.11	57.5	—	—	—	22.5	—	11.2	—	—
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	—	—	—	—	—	0.541 (U)	—	—	—	—	—	—
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	20.8	—	43.8	—	—
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	—	—	—	—	—	0.552 (U)	—	—	15.1	—	—	—
RE21-07-3151	21-600685	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	11.7	—	—	—	—
RE21-07-3152	21-600686	0.0000–0.5000	SOIL	—	NA	—	—	—	0.54 (U)	—	—	—	—	—	—
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	9660	NA	3.5	94.2	—	—	—	12.3	—	6.54	—	—
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	—	NA	—	—	—	0.504 (U)	—	—	—	—	—	—
RE21-07-3155	21-600687	2.0000–3.0000	SOIL	—	NA	—	—	—	0.54 (U)	—	—	—	—	—	—
RE21-07-3156	21-600688	0.0000–0.5000	SOIL	—	NA	—	—	—	0.521 (U)	—	—	—	15.8	—	—
RE21-07-3157	21-600688	2.0000–3.0000	SOIL	—	NA	—	—	—	0.54 (U)	—	—	—	—	—	—
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	—	NA	—	—	—	0.538 (U)	—	—	—	—	—	—
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	—	NA	—	—	—	0.542 (U)	—	21	—	—	—	—
RE21-07-3160	21-600690	0.0000–0.5000	SOIL	—	NA	—	—	—	0.53 (U)	—	—	—	—	—	—
RE21-07-3161	21-600690	2.0000–3.0000	QBT3	—	NA	3.33	—	—	—	—	10.9	—	—	—	—
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	—	NA	—	—	—	0.525 (U)	—	—	—	22.4	—	—
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	7470	NA	3.52	73.4	—	—	—	12.6	—	11.7	—	—
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	—	NA	—	—	—	—	—	21	—	—	—	—
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	—	NA	3.48	57.7	—	—	—	25.2	—	—	—	—
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	—	—	—	—	—	0.524 (U)	—	25.1	—	21.7	—	—
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	—	—	16.6	—	—	—	—	27.2	—	43.9	—	—
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	—	—	2.99	46.8 (J)	—	—	—	28.7	—	16.8	—	—
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	—	—	—	—	—	0.551 (U)	—	—	—	17.4	—	—

Table 6-20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	—	—	—	—	—	0.538 (U)	—	43.6	—	—	—	—
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	7600 (J+)	—	3.3	80.5 (J)	1.48	—	2460	55	—	10.4	—	—
MD21-09-8760	21-600695	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	24 (J-)	NA	NA	NA	NA
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	—	—	—	—	—	0.512 (U)	—	—	—	—	—	—
RE21-07-3266	21-600710	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	—	—	—	—	—	0.541 (U)	—	—	—	—	—	—
RE21-07-3268	21-600711	2.0000–3.0000	SOIL	—	—	—	—	—	0.556 (U)	—	—	—	—	—	—
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	—	—	—	—	—	0.58 (U)	—	—	—	—	—	—
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	—	—	—	—	—	0.553 (U)	—	—	—	—	—	—
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	—	—	—	—	—	0.52 (U)	—	—	—	—	—	—
RE21-07-3272	21-600713	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	13.8	—	—	—	—
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	—	—	—	—	—	0.547 (U)	—	—	—	—	—	—
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	—	—	—	69.6	—	—	—	9.49	—	—	—	—
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	—	—	—	—	—	0.561 (U)	—	—	—	—	—	—
RE21-07-3276	21-600715	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	8.33	—	—	—	—
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	—	—	—	—	—	0.533 (U)	—	—	—	—	—	—
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3280	21-600717	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	10.1	—	—	—	—
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	—	—	—	—	—	0.572 (U)	—	—	—	—	—	21700
RE21-07-3282	21-600718	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	7.28	—	—	—	—
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	—	—	—	—	—	3.9	6190 (J)	48.9 (J)	—	156	—	—
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	—	—	—	—	—	0.525 (U)	—	23.8 (J)	—	23.7	—	—
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	21.4	0.663	—
RE21-07-3286	21-600720	2.0000–3.0000	SOIL	—	—	—	—	—	0.547 (U)	—	—	—	—	—	—
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	—	—	—	—	—	0.59 (U)	—	—	—	—	—	—
RE21-07-3288	21-600721	2.0000–3.0000	SOIL	—	—	—	—	—	0.562 (U)	—	—	—	—	—	—
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	—	—	—	—	—	0.715	—	79.7 (J)	—	84.9	—	—
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	—	—	—	—	—	0.546 (U)	—	30.7 (J)	—	18.8	—	—
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	—	—	—	—	—	0.511 (U)	—	—	—	—	—	—

Table 6-20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	—	—	—	—	—	0.524 (U)	—	—	—	—	—	—
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	—	—	—	—	—	0.522 (U)	—	—	—	—	—	—
RE21-07-3294	21-600724	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	7.91 (J)	—	—	—	—
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	—	—	—	—	—	0.566 (U)	—	—	—	—	—	—
RE21-07-3296	21-600725	2.0000–3.0000	QBT3	—	—	4	80.4 (J)	—	—	2250 (J)	22.8 (J)	—	5.96	—	—
RE21-07-3297	21-600726	0.0000–0.5000	SOIL	—	—	—	—	—	0.492 (U)	—	—	—	—	—	—
RE21-07-3298	21-600726	2.0000–3.0000	QBT3	—	—	—	83.3 (J)	—	—	3010 (J)	16.5 (J)	—	—	—	—
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3318	21-600735	2.0000–3.0000	QBT3	11000 (J+)	—	4.21	104	—	—	—	19.1	5.72	6.25	—	14900
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	—	—	—	62.2	—	—	—	22.4	—	—	—	—
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	—	26.1 (J-)	—	—	—	2.29	—	62.8 (J)	—	123	—	—
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	—	—	—	—	—	0.528 (U)	—	46.1 (J)	—	55.4	—	—
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	—	—	3.12	—	—	—	—	25.1 (J)	—	24	—	—
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	—	—	—	—	—	0.555 (U)	—	—	—	—	—	—
RE21-07-3324	21-600737	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	8.67	—	—
RE21-07-3325	21-600737	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	8.27	—	—	—	—
RE21-07-6248	21-601304	2.5000–3.5000	SOIL	—	—	—	—	—	0.604 (U)	—	—	—	—	—	—
RE21-07-6249	21-601304	4.5000–5.5000	QBT3	—	—	—	—	—	—	—	—	—	5.8	—	—
RE21-07-6250	21-601305	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	—	—	5.59	—	—
RE21-07-6251	21-601305	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	7.35	—	—	—	—
RE21-07-6252	21-601306	1.0000–2.0000	QBT3	—	—	—	47	—	—	—	7.51	—	6	—	—
RE21-07-6253	21-601306	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	11.5	—	5.07	—	—
RE21-07-6254	21-601307	3.5000–4.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-6255	21-601307	5.5000–6.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	—	NA	—	—	—	—	—	—	—	18.2	—	—
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	—	NA	—	—	—	—	—	8.82	—	6.64	—	—
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	—	NA	—	63.5	—	—	2730	16.5	—	—	—	—
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	—	NA	—	—	—	—	—	9.64	—	—	—	—
RE21-07-6260	21-601310	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	7.44	—	—	2.52	—
RE21-07-6261	21-601310	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—

Table 6-20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Iron
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**14500**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**21500**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**156**	**77.9**	**na**[a]	**219**[b]	**23**[c]	**3130**	**1560**	**54800**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**2260**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**22700**	**795000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**144**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**6190**	**217000**
RE21-07-6262	21-601311	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	7.84	—	—	—	—
RE21-07-6263	21-601311	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-6264	21-601312	4.0000–5.0000	QBT3	—	—	—	—	—	—	—	10	—	6.42	—	—
RE21-07-6265	21-601312	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	11.6	—	—	—	—
RE21-07-6270	21-601315	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	9.84	—	—	—	—
RE21-07-6271	21-601315	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-6272	21-601315	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—	—
MD21-09-8761	21-605252	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	220 (J-)	NA	180	NA	NA

Table 6.20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-3114	21-600667	0.0000–0.5000	SOIL	—	—	—	—	—	—	0.000582 (J-)	—	—	—	—
RE21-07-3115	21-600667	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	0.872 (J)	—	—	—
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	—	—	—	—	—	1.5 (J-)	—	—	—	—	—
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	—	—	—	—	—	1.42 (J-)	0.000856 (J-)	—	—	—	—
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	52.3
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	12.4	—	—	—	8.72	—	0.000975 (J-)	1.49 (J)	—	—	—
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	1.74 (U)	—	—	—
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	—	—	—	—	—	1.5 (J-)	0.000635 (J-)	—	—	—	—
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	1.6 (U)	—	—	—
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	—	—	—	—	—	1.38 (J-)	—	1.77 (U)	—	—	—
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	1.73 (U)	—	—	—
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	—	—	—	—	7.14	—	—	1.04 (J)	—	—	—
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	—	—	—	—	—	2.25 (J-)	—	—	—	—	—
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	0.659 (J)	—	—	—
RE21-07-3130	21-600675	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	1.62 (U)	—	—	—
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.58 (U)	—	—	—
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	—	—	—	—	—	2.93	—	1.67 (U)	—	—	—
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	12.7	—	—	—	—	—	0.000712 (J)	1.54 (U)	—	—	—
RE21-07-3134	21-600677	0.0000–0.5000	SOIL	—	—	—	—	—	9.68 (J-)	—	—	—	—	—
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	—	—	—	—	—	20.7	0.001 (J)	1.62 (U)	—	—	—
RE21-07-3136	21-600678	0.0000–0.5000	SOIL	—	—	—	—	—	2.61	—	1.62 (U)	—	—	—
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	17.5	—	—	—	—	2.11 (J-)	—	1.64 (U)	—	—	—
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	—	—	—	—	—	2.47	—	1.59 (U)	—	—	—
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	16.3	—	—	—	—	1.12 (J-)	—	1.61 (U)	—	22.7	140
RE21-07-3140	21-600680	0.0000–0.5000	SOIL	—	—	—	—	—	1.01 (J-)	—	—	—	—	—

Table 6.20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	17.4	—	—	—	6.61	3.37	0.000704 (J)	1.63 (U)	—	19.9	—
RE21-07-3142	21-600681	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	—	—	—	—	—	1.5	—	1.76 (U)	—	—	—
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	369	—	—	0.19	—	1.63 (J-)	—	1.82 (U)	—	—	387
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	41.3	—	—	—	—	—	—	1.58 (U)	—	—	119
MD21-09-8759	21-600682	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	23.8	—	—	—	—	—	—	—	—	—	69.3
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	—	—	—	—	—	1.42	—	1.58 (U)	—	—	—
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	—	—	—	—	—	2.33 (J-)	—	—	—	—	104
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	54.5	—	—	—	—	—	—	1.58 (U)	—	—	69.8
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	—	—	1280 (J-)	—	—	—	—	—	—	—	—
RE21-07-3151	21-600685	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.7 (U)	—	—	—
RE21-07-3152	21-600686	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	53.5
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.64 (U)	—	17.5	—
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	—	—	—	—	—	—	0.00085 (J)	—	—	—	—
RE21-07-3155	21-600687	2.0000–3.0000	SOIL	—	—	—	—	—	1.03 (J-)	—	1.62 (U)	—	—	—
RE21-07-3156	21-600688	0.0000–0.5000	SOIL	—	—	—	—	—	1.02 (J-)	—	1.56 (U)	—	—	—
RE21-07-3157	21-600688	2.0000–3.0000	SOIL	—	—	—	—	—	1.65 (J-)	—	1.62 (U)	—	—	—
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	109
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	1.63 (U)	—	—	60.4
RE21-07-3160	21-600690	0.0000–0.5000	SOIL	—	—	—	—	—	1.07 (J-)	0.000941 (J)	1.59 (U)	—	—	—
RE21-07-3161	21-600690	2.0000–3.0000	QBT3	—	—	—	—	—	—	0.000739 (J)	1.62 (U)	—	—	—
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	1.57 (U)	—	—	67.9
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	—	—	—	—	—	1.12	0.00106 (J)	1.7 (U)	—	—	—
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	1.62 (U)	—	—	253
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	—	—	—	—	—	1.09 (J-)	—	1.64 (U)	—	—	—
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	—	—	—	—	—	3.8	—	1.57 (U)	—	—	63.3 (J-)
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	—	—	—	—	—	1.46	—	1.66 (U)	—	—	157 (J-)
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	12.7 (J)	—	—	—	—	—	—	1.58 (U)	—	—	86.7 (J-)
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	—	—	—	—	—	1.55	—	1.65 (U)	—	—	93.2 (J-)
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	101 (J-)

Table 6.20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	—	—	—	—	7.06	—	—	1.7 (U)	—	—	—
MD21-09-8760	21-600695	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	—	—	—	—	—	0.904 (J-)	—	1.53 (U)	—	—	—
RE21-07-3266	21-600710	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.06 (J)	—	—	—
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	—	—	—	—	—	1.38 (J-)	—	—	—	—	101
RE21-07-3268	21-600711	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	1.67 (U)	—	—	—
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	43.9	—	—	—	—	1.13 (J-)	—	1.53 (J)	—	—	115
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	—	—	—	—	—	0.921 (J-)	—	—	—	—	—
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	—	—	—	—	—	—	0.000526 (J)	1.56 (U)	—	—	61.8
RE21-07-3272	21-600713	2.0000–3.0000	QBT3	16	—	655	—	—	—	0.0012 (J)	1.64 (U)	—	—	—
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	26.1	—	—	—	—	—	—	—	—	—	139
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.02 (J)	—	—	—
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	37.4	—	—	—	—	—	—	1.68	—	—	113
RE21-07-3276	21-600715	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.03 (J)	—	—	—
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	—	—	—	—	—	1.43 (J-)	—	—	—	—	—
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	0.652 (J)	—	—	—
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	170
RE21-07-3280	21-600717	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.61 (U)	—	—	—
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	—	—	—	—	—	1.38 (J-)	—	—	—	—	82.3
RE21-07-3282	21-600718	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.6 (U)	—	—	—
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	42.8	—	—	0.154	—	3.93 (J-)	—	—	1.17	—	915 (J)
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	—	—	—	0.115	—	1.46 (J-)	—	—	—	—	102 (J)
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	—	—	—	—	—	2.17 (J-)	—	—	—	—	138 (J)
RE21-07-3286	21-600720	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	26.5	—	—	—	—	1.27 (J-)	—	—	—	—	73.7 (J)
RE21-07-3288	21-600721	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	31.9	—	—	—	—	3.98 (J-)	—	—	—	—	213 (J)
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	61.2 (J)
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	—	—	—	—	—	1.22 (J-)	—	1.53 (U)	—	—	—
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	—	—	—	—	—	1.06 (J-)	—	—	—	—	—
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	—	—	—	—	—	3.12 (J-)	0.000546 (J)	—	—	—	—

Table 6.20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-3294	21-600724	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.64 (U)	—	—	—
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	—	—	—	—	—	4.45 (J-)	—	1.7 (U)	—	—	64.9 (J)
RE21-07-3296	21-600725	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	0.838 (J)	—	—	—
RE21-07-3297	21-600726	0.0000–0.5000	SOIL	—	—	—	—	—	1.53 (J-)	—	—	—	—	—
RE21-07-3298	21-600726	2.0000–3.0000	QBT3	11.7	—	—	—	—	—	—	0.899 (J)	—	—	—
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	25.9	—	—	—	—	—	—	1.59 (U)	—	—	130
RE21-07-3318	21-600735	2.0000–3.0000	QBT3	20.6	1830	—	—	8.49	—	—	1.13 (J)	—	21.5	91.3
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	—	—	—	—	—	—	0.000558 (J)	1.6 (U)	—	—	65.1
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	77.5	—	—	0.207	17 (J-)	1.46 (J-)	—	—	—	—	570 (J)
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	28.2	—	—	—	—	—	—	1.58 (U)	—	—	110 (J)
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	23.3	—	—	—	—	—	—	1.73 (U)	—	—	92.5 (J)
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	—	—	—	—	—	1.72	—	1.67 (U)	—	—	139 (J-)
RE21-07-3324	21-600737	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	1.63 (U)	—	—	74.2 (J-)
RE21-07-3325	21-600737	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	1.64 (U)	—	—	—
RE21-07-6248	21-601304	2.5000–3.5000	SOIL	—	—	—	—	—	0.864 (J-)	—	1.81 (U)	—	—	112
RE21-07-6249	21-601304	4.5000–5.5000	QBT3	—	—	—	—	—	0.741 (J-)	—	0.624 (J)	—	—	—
RE21-07-6250	21-601305	3.0000–4.0000	QBT3	—	—	—	—	—	0.725 (J-)	—	0.68 (J)	—	—	91.6
RE21-07-6251	21-601305	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	0.953 (J)	—	—	152
RE21-07-6252	21-601306	1.0000–2.0000	QBT3	—	—	—	—	—	—	—	1.28 (J)	—	—	—
RE21-07-6253	21-601306	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	0.853 (J)	—	—	—
RE21-07-6254	21-601307	3.5000–4.5000	QBT3	—	—	—	—	—	0.658 (J-)	—	0.785 (J)	—	—	119
RE21-07-6255	21-601307	5.5000–6.5000	QBT3	—	—	—	—	—	—	—	1.72 (U)	—	—	90.8
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	—	—	—	—	—	—	—	2.06	—	—	99.4
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	1.95	—	—	—
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	—	—	—	—	—	1.53	—	2.83	—	—	—
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	—	—	—	—	—	1.23	—	1.86	—	—	—
RE21-07-6260	21-601310	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	1.81 (U)	—	—	—
RE21-07-6261	21-601310	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	1.78 (U)	—	—	—
RE21-07-6262	21-601311	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	1.78 (U)	—	—	—
RE21-07-6263	21-601311	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	0.79 (J)	—	—	—
RE21-07-6264	21-601312	4.0000–5.0000	QBT3	34.7	—	—	—	—	—	—	0.679 (J)	—	—	—

Table 6.20-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lead	Magnesium	Manganese	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Vanadium	Zinc
QBT3 Background Value				**11.2**	**1690**	**482**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**17**	**63.5**
SOIL Background Value				**22.3**	**4610**	**671**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**39.6**	**48.8**
Residential SSL				**400**	**na**	**10700**	**23**[c]	**1560**	**125000**	**54.8**	**391**	**391**	**391**	**23500**
Industrial SSL				**800**	**na**	**145000**	**310**[c]	**22700**	**1820000**	**795**	**5680**	**5680**	**5680**	**341000**
Construction Worker SSL				**800**	**na**	**463**	**92.9**[d]	**6190**	**496000**	**217**	**1550**	**1550**	**1550**	**92900**
RE21-07-6265	21-601312	6.0000–7.0000	QBT3	129	—	—	—	—	—	—	1.67 (U)	—	—	—
RE21-07-6270	21-601315	3.0000–4.0000	QBT3	—	—	—	—	—	—	—	1.79 (U)	—	—	—
RE21-07-6271	21-601315	8.0000–9.0000	QBT3	—	—	—	—	—	—	—	1.78 (U)	—	—	—
RE21-07-6272	21-601315	13.0000–14.0000	QBT3	—	—	—	—	—	—	—	1.69 (U)	—	—	—
MD21-09-8761	21-605252	0.0000–0.5000	SOIL	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	280

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

Table 6.20-2
Summary of Organic Chemicals Detected at SWMU 21-024(n)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloroform	Chrysene	Di-n-butylphthalate
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**2600**[b]	**5.72**	**621**	**6110**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**9100**[b]	**31.9**	**2340**	**68400**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**47600**[c]	**671**	**20600**	**23800**
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	—[d]	NA[e]	0.00992 (J)	NA	—	—	—	—	—	—	—	NA	0.0251 (J)	—
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	—	—	0.011 (J)	NA	—	—	—	—	—	—	—	—	0.0172 (J)	—
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	—	NA	—	NA	—	0.0242 (J)	0.0427	—	—	—	—	NA	0.0251 (J)	—
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	—	0.00418 (J)	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	0.0186 (J)	NA	0.0322 (J)	NA	—	0.0475	0.059	—	0.0257 (J)	—	—	NA	0.0505	—
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	—	NA	0.00958 (J)	NA	—	0.0398 (J)	0.0526	—	0.0197 (J)	—	—	NA	0.0311 (J)	—
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	—	NA	—	NA	0.0265 (J)	—	0.0418 (J)	—	—	—	—	NA	0.0249 (J)	—
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	—	0.00512 (J)	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	—	NA	—	NA	—	0.0184 (J)	0.0305 (J)	—	—	—	—	NA	0.0196 (J)	—
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	—	NA	0.0143 (J)	NA	—	0.0504	0.0841	—	—	—	—	NA	0.0494	—
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	0.00052 (J)	—	—
RE21-07-3188	21-600676	2.0000–3.0000	QBT3	NA	NA	NA	0.0065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	—	0.00332 (J)	—	NA	—	—	0.0291 (J)	—	0.0161 (J)	—	—	—	0.027 (J)	—
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	0.0118 (J)	—	—	—	—	NA	—	—
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	—	—	0.00905 (J)	NA	—	—	0.0337 (J)	—	—	—	—	0.000276 (J)	0.0209 (J)	—
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	—	—	—	NA	—	0.018 (J)	0.0313 (J)	—	—	—	—	—	0.0187 (J)	—
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	—	NA	0.0334 (J)	NA	0.4	0.54 (J)	0.955 (J)	0.353 (J)	—	0.177 (J)	—	NA	0.562	—
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	—	—	0.00765 (J)	NA	0.0416	0.0435 (J)	0.0946 (J)	0.042 (J)	—	—	—	—	0.0496	—

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloroform	Chrysene	Di-n-butylphthalate
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**2600**[b]	**5.72**	**621**	**6110**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**9100**[b]	**31.9**	**2340**	**68400**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**47600**[c]	**671**	**20600**	**23800**
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	—	NA	0.0117 (J)	NA	0.0624	0.138	0.169	0.033 (J)	0.0676 (J)	—	—	NA	0.0778	—
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	—	—	—	NA	—	0.0201 (J)	0.0332 (J)	—	—	—	—	—	0.0226 (J)	—
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	—	NA	—	NA	0.064	0.146	0.216	0.0354 (J)	—	—	—	NA	0.0804	—
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	—	—	0.0222 (J)	NA	0.16	0.163	0.256	0.117 (J)	—	—	—	—	0.19	—
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	0.0112 (J)	—	—	—	—	NA	—	—
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	—	NA	—	NA	—	0.0177 (J)	0.0315 (J)	0.0166 (J)	—	—	—	NA	—	—
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	—	—	0.0101 (J)	NA	—	0.0456	0.0809	0.0527	—	—	—	—	0.0329 (J)	—
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	—	NA	0.0154 (J)	NA	0.0171 (J)	0.0166 (J)	0.0207 (J)	0.0113 (J)	0.0145 (J)	—	—	NA	0.0198 (J)	—
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	—	NA	0.0247 (J)	NA	0.0199 (J)	0.0184 (J)	0.0323 (J)	0.016 (J)	—	—	—	NA	0.0208 (J)	—
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	—	NA	—	NA	—	0.116 (J)	0.161 (J)	—	—	—	—	NA	0.0482	—
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	—	—	0.0134 (J)	NA	0.12	0.214 (J)	0.339 (J)	0.0819 (J)	—	0.122 (J)	—	—	0.154	—
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	—	—	—	NA	0.0479	0.119	0.169	—	—	—	—	—	0.0612	—
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	—	NA	0.00776 (J)	NA	—	—	0.0109 (J)	—	—	—	—	NA	—	—
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	0.0851	—	—	—	—	NA	0.0426	—
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	—	NA	0.00892 (J)	NA	—	0.0805 (J)	0.172 (J)	0.0535 (J)	—	—	—	NA	0.107	—
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	—	—	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	—	NA	—	NA	0.0296 (J)	—	0.0748	—	—	—	—	NA	0.0382	0.0513 (J)
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	—	NA	0.0115 (J)	NA	0.0743	0.117 (J)	0.306 (J)	0.133 (J)	—	—	—	NA	0.172	—
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	—	—	—	NA	—	—	0.0132 (J)	—	—	—	—	—	—	—
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	—	NA	—	NA	0.0575	0.0731 (J)	0.166 (J)	0.0504 (J)	—	—	—	NA	0.1	—
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	0.0507 (J)	—	—	—	—	NA	0.0315 (J)	—
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	—	—	—	NA	0.0803	0.0819 (J)	0.127 (J)	0.0599 (J)	—	—	—	—	0.0889	—

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chloroform	Chrysene	Di-n-butylphthalate
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**2600**[b]	**5.72**	**621**	**6110**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**9100**[b]	**31.9**	**2340**	**68400**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**47600**[c]	**671**	**20600**	**23800**
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	—	NA	—	NA	0.0264 (J)	—	0.0601	—	—	—	—	NA	0.0333 (J)	—
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	0.0186 (J)	—	—	—	—	NA	0.0152 (J)	—
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	—	NA	—	NA	0.753 (J)	—	1.28 (J)	—	—	—	—	NA	0.824 (J)	—
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	0.0448 (J+)	—	0.155 (J+)	NA	1.04 (J+)	—	2.45 (J)	0.761 (J)	—	0.699 (J+)	0.759 (J)	—	1.52 (J+)	0.27 (J+)
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	—	NA	0.0288 (J)	NA	0.278 (J)	—	0.681 (J)	0.271 (J)	—	0.267 (J)	—	NA	0.444 (J)	—
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	—	NA	—	NA	0.0493	—	0.0759	0.0378 (J)	0.0261 (J)	—	—	NA	0.0586	—
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	0.0186 (J)	NA	0.0592	NA	0.558	—	0.962 (J)	0.349 (J)	0.401 (J)	0.409	—	NA	0.698	0.0799 (J)
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	—	—	0.0194 (J)	NA	0.148	—	0.32	0.0892	—	—	—	—	0.194	—
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	—	NA	—	NA	0.0561	—	0.117	0.0538 (J)	—	—	—	NA	0.0642	—
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	—	—	—	NA	—	—	0.0216 (J)	—	—	—	—	—	—	—
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	—	NA	—	NA	0.0291 (J)	—	0.06	—	—	—	—	NA	0.036	—
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	—	NA	—	NA	0.0304 (J)	—	0.0401	—	—	—	—	NA	0.0327 (J)	—
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	—	NA	—	NA	—	0.0933	0.229	0.102	—	—	—	NA	0.0962	—
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	—	—	0.0102 (J)	NA	0.0599	—	0.108	0.0449	—	—	—	—	0.0801	—
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	—	NA	—	NA	0.625	—	1.09	0.474 (J)	0.452	—	—	NA	0.995	—
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	—	—	0.153 (J)	NA	1.12	—	1.87 (J)	1.2 (J)	0.771 (J)	1.12	—	0.000253 (J)	1.62	—
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	0.115	—	0.365	NA	1.01	—	1.6	0.426	—	0.147 (J)	0.182 (J)	—	1.1	—
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	—	—	0.0248 (J)	NA	—	0.21	0.343	0.0973	—	—	—	—	0.203	—
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	—	—	—	NA	—	0.0685	0.112	0.0398	—	—	—	—	0.0742	—
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	—	0.0113 (J)	—	NA	—	—	—	—	—	—	—	—	—	—
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	—	0.0231 (J)	—	NA	—	—	—	—	—	—	—	—	—	—

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorobenzene	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)
Residential SSL				**69.7**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**	**3.04**	**na**	**na**	**na**	**na**
Industrial SSL				**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**12**	**na**	**na**	**na**	**na**
Construction Worker SSL				**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**103**	**na**	**na**	**na**	**na**
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	NA	0.0572	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	—	0.0462	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	NA	0.0487	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	0.00027 (J)	0.0331 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	NA	0.0185 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	—	0.0209 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	NA	0.132	0.0162 (J)	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	NA	0.0796	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	NA	0.049	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	NA	0.0404	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	NA	0.0936	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3188	21-600676	2.0000–3.0000	QBT3	NA	NA	NA	0.000249	0.000421	0.000031	0.00000242 (J)	0.000112	NA	0.00000121 (J)	8.25E-06	0.00000178 (J)	3.41E-05
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	—	0.0455	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	NA	0.0141 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	—	0.037 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	—	0.0283 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	NA	0.588	—	NA	NA	NA	NA	NA	0.0962 (J)	NA	NA	NA	NA
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	—	0.0725	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	NA	0.119	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	—	0.0457	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	NA	0.0987	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorobenzene	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)
Residential SSL				**69.7**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**	**3.04**	**na**	**na**	**na**	**na**
Industrial SSL				**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**12**	**na**	**na**	**na**	**na**
Construction Worker SSL				**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**103**	**na**	**na**	**na**	**na**
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	—	0.287	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	NA	0.0118 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	—	0.0117 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	NA	0.0146 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	—	0.0266 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	NA	0.0353 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	NA	0.0402	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	NA	0.0579	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	—	0.199	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	—	0.0867	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	NA	0.0171 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	—	0.0125 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	NA	0.0167 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	NA	0.0426	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	NA	0.154	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	NA	0.0512	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	NA	0.124	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	NA	0.134	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	NA	0.0391	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	—	0.117	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	NA	0.0389	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	NA	0.0185 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	NA	1.08	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Ethylbenzene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorobenzene	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)
Residential SSL				**69.7**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**	**3.04**	**na**	**na**	**na**	**na**
Industrial SSL				**385**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**12**	**na**	**na**	**na**	**na**
Construction Worker SSL				**6630**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**103**	**na**	**na**	**na**	**na**
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	—	2.04 (J+)	0.0506 (J+)	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	NA	0.502	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	NA	0.0906	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	NA	1.03	0.0177 (J)	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	—	0.303	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	NA	0.0917	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	—	0.0169 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	NA	0.0554	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	NA	0.0497	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	NA	0.0825	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	—	0.0976	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	NA	1.09	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	—	1.76	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	—	2.32	0.112	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	NA	0.0146 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	—	0.275	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	—	0.0904	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	—	0.0125 (J)	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	—	—	—	NA	NA	NA	NA	NA	—	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[g]	**199**	**45**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[g]	**1090**	**252**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[g]	**10600**	**702**	**na**	**na**	**na**	**na**	**na**
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	0.00805	—	—	NA	NA	NA	NA	NA
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	0.000526 (J)	—	—	NA	NA	NA	NA	NA
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	0.00261	—	—	NA	NA	NA	NA	NA
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	0.00469	0.00232 (J)	—	NA	NA	NA	NA	NA
RE21-07-3188	21-600676	2.0000–3.0000	QBT3	0.00000106 (J)	0.000000742 (J)	0.00000139 (J)	0.000041	NA	NA	NA	NA	0.00254	9.04E-05	1.33E-06	0.000000168 (J)	0.000000287 (J)
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	0.000604 (J)	—	—	NA	NA	NA	NA	NA
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.25 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.0329 (J)	—	—	—	NA	NA	NA	NA	NA
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.082	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0811	NA	NA	—	NA	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[g]	**199**	**45**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[g]	**1090**	**252**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[g]	**10600**	**702**	**na**	**na**	**na**	**na**	**na**
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	NA	NA	NA	NA	0.0763 (J)	—	—	—	NA	NA	NA	NA	NA
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.014 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.0427	—	—	—	NA	NA	NA	NA	NA
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	0.0127	—	—	NA	NA	NA	NA	NA
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0144 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.116 (J)	0.000283 (J)	—	0.0145 (J)	NA	NA	NA	NA	NA
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	0.000355 (J)	—	—	NA	NA	NA	NA	NA
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0457 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.109 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.044 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	NA	NA	NA	NA	0.0484 (J)	—	—	—	NA	NA	NA	NA	NA
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Isopropyltoluene[4-]	Methylene Chloride	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]
Residential SSL				**na**	**na**	**na**	**na**	**6.21**	**3210**[g]	**199**	**45**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**23.4**	**14900**[g]	**1090**	**252**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**213**	**10300**[g]	**10600**	**702**	**na**	**na**	**na**	**na**	**na**
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.808 (J)	—	—	—	NA	NA	NA	NA	NA
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.29 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0357 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.336 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.0866	—	—	—	NA	NA	NA	NA	NA
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0489 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0749	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.45 (J)	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	NA	NA	NA	NA	0.854 (J)	—	—	—	NA	NA	NA	NA	NA
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	NA	NA	NA	NA	0.445	—	—	—	NA	NA	NA	NA	NA
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	NA	NA	—	NA	NA	NA	NA	NA
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	NA	NA	NA	NA	0.0926	—	—	—	NA	NA	NA	NA	NA
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	NA	NA	NA	NA	0.0343 (J)	—	—	—	NA	NA	NA	NA	NA
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	NA	NA	NA	NA	—	—	—	—	NA	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trimethylbenzene[1,2,4-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**1830**	**1720**	**8970**	**0.000045**	**na**	**0.000374**	**na**	**5570**	**104000**	**62**[b]	**9550**	**1090**[h]
Industrial SSL				**na**	**20500**	**18300**	**51200**	**0.000204**	**na**	**0.00147**	**na**	**57900**	**339000**	**260**[b]	**31500**	**3610**[h]
Construction Worker SSL				**na**	**7150**	**6680**	**30300**	**0.000284**	**na**	**0.0127**	**na**	**21100**	**298000**	**688**[c]	**27500**	**3130**[h]
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	NA	0.0413	0.0655	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	NA	0.039	0.0422	—	NA	NA	NA	NA	0.000573 (J)	—	—	—	—
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	NA	0.0296 (J)	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	NA	0.0222 (J)	0.0358 (J)	—	NA	NA	NA	NA	0.00647	—	—	0.000318 (J)	0.000822 (J)
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	NA	0.014 (J)	0.0147 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	NA	0.0139 (J)	0.0173 (J)	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	NA	0.114	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	NA	—	—	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	NA	0.0426	0.0738	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	NA	—	—	—	NA	NA	NA	NA	0.00143	—	—	—	—
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	NA	0.0279 (J)	0.0491	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.00207	—	—	—	—
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	NA	0.0184 (J)	0.0408	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.000371 (J)	—	—	—	—
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.000468 (J)	—	—	—	—
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	NA	0.0542	0.121	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.00425	—	—	—	—
RE21-07-3188	21-600676	2.0000–3.0000	QBT3	5.06E-06	NA	NA	NA	0.000000317 (J)	1.2E-06	0.000000208 (J)	1.14E-06	NA	NA	NA	NA	NA
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	NA	0.0264 (J)	0.0565	—	NA	NA	NA	NA	0.000735 (J)	—	—	—	—
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	NA	—	0.0115 (J)	—	NA	NA	NA	NA	0.000524 (J)	—	—	—	—
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	NA	—	0.0137 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	NA	0.0316 (J)	0.055	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	NA	0.0138 (J)	0.0368	—	NA	NA	NA	NA	0.00208	—	—	—	—
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	NA	—	—	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	NA	0.235	0.942	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	NA	0.0331 (J)	0.0855	—	NA	NA	NA	NA	0.000802 (J)	—	—	—	—
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	NA	0.0507	0.145	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	NA	0.0263 (J)	0.0492	—	NA	NA	NA	NA	0.00158	—	—	—	—
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	NA	0.0395	0.136	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trimethylbenzene[1,2,4-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**1830**	**1720**	**8970**	**0.000045**	**na**	**0.000374**	**na**	**5570**	**104000**	**62**[b]	**9550**	**1090**[h]
Industrial SSL				**na**	**20500**	**18300**	**51200**	**0.000204**	**na**	**0.00147**	**na**	**57900**	**339000**	**260**[b]	**31500**	**3610**[h]
Construction Worker SSL				**na**	**7150**	**6680**	**30300**	**0.000284**	**na**	**0.0127**	**na**	**21100**	**298000**	**688**[c]	**27500**	**3130**[h]
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	NA	0.133	0.315	—	NA	NA	NA	NA	0.000545 (J)	—	—	—	—
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	NA	—	0.0143 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	NA	—	0.0191 (J)	—	NA	NA	NA	NA	0.000364 (J)	—	—	—	—
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	NA	—	0.0124 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	NA	—	0.0113 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	NA	—	0.0304 (J)	—	NA	NA	NA	NA	0.00054 (J)	—	—	—	—
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	NA	—	0.0332 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.000753 (J)	—	—	—	—
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	NA	—	0.0356 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.00045 (J)	—	—	—	—
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	NA	0.021 (J)	0.0836	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	NA	0.0765	0.258	—	NA	NA	NA	NA	—	0.00207 (J)	—	—	—
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	NA	0.0287 (J)	0.0895	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	NA	0.0113 (J)	0.0228 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	NA	—	0.0124 (J)	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	0.00672	—	0.000262 (J)	0.00085 (J)	0.000882 (J)
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	NA	—	0.0133 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	NA	0.0129 (J)	0.0467	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	NA	0.0725	0.148	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	NA	—	—	—	NA	NA	NA	NA	0.00102 (J)	—	—	—	—
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	NA	0.0171 (J)	0.0565	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	NA	0.0456	0.142	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	NA	—	—	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	NA	0.0456	0.122	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	NA	0.014 (J)	0.0499	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	NA	0.0382	0.163	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	NA	0.0126 (J)	0.0444	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	NA	—	0.0202 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	NA	0.539 (J)	1.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.20-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Styrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloro-1,2,2-trifluoroethane[1,1,2-]	Trimethylbenzene[1,2,4-]	Xylene[1,2-]	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**	**1830**	**1720**	**8970**	**0.000045**	**na**	**0.000374**	**na**	**5570**	**104000**	**62**[b]	**9550**	**1090**[h]
Industrial SSL				**na**	**20500**	**18300**	**51200**	**0.000204**	**na**	**0.00147**	**na**	**57900**	**339000**	**260**[b]	**31500**	**3610**[h]
Construction Worker SSL				**na**	**7150**	**6680**	**30300**	**0.000284**	**na**	**0.0127**	**na**	**21100**	**298000**	**688**[c]	**27500**	**3130**[h]
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	NA	0.958 (J+)	3.44 (J+)	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	NA	0.229	0.77 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	NA	0.0324 (J)	0.0949	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	NA	0.412	1.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	NA	0.117	0.3	—	NA	NA	NA	NA	—	—	—	—	0.00034 (J)
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	NA	0.0315 (J)	0.118	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	NA	—	0.0219 (J)	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	NA	0.0219 (J)	0.0609	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	NA	0.0284 (J)	0.0782	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	NA	0.0289 (J)	0.0868	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	NA	0.0601	0.113	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	NA	0.497	1.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	NA	0.995	3.56	0.000566 (J)	NA	NA	NA	NA	0.000404 (J)	—	—	—	0.000621 (J)
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	NA	1.64	2.91	—	NA	NA	NA	NA	—	—	—	—	0.000419 (J)
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	NA	—	0.0193 (J)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	NA	0.107	0.327	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	NA	0.0348 (J)	0.101	—	NA	NA	NA	NA	0.000418 (J)	—	—	—	—
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	NA	—	—	—	NA	NA	NA	NA	—	—	—	—	—
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	NA	—	—	—	NA	NA	NA	NA	—	—	—	—	—

Source: SSLs from NMED (2009, 108070).

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

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

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

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

[g] Isopropylbenzene SSL used as surrogate based on structural similarity.

[h] SSLs for xylenes used as surrogate based on structural similarity.

Table 6.20-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(n)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3114	21-600667	0.0000–0.5000	SOIL	0.0383	—[c]	—	0.448	0.08016	—	NA[d]	—
RE21-07-3115	21-600667	2.0000–3.0000	QBT3	—	—	—	0.0222	0.069015	—	—	—
RE21-07-3116	21-600668	0.0000–0.5000	SOIL	—	—	—	0.258	0.056152	—	—	—
RE21-07-3117	21-600668	2.0000–3.0000	SOIL	—	1.08	—	0.227	0.112684	—	—	—
RE21-07-3118	21-600669	0.0000–0.5000	SOIL	0.0301	—	—	0.138	0.083258	—	—	—
RE21-07-3119	21-600669	2.0000–3.0000	QBT3	0.0384	0.177	—	2.5	0.075563	6.54	0.76	—
MD21-09-8765	21-600669	7.0000–8.0000	SOIL	NA	NA	—	0.042	NA	NA	NA	NA
RE21-07-3120	21-600670	0.0000–0.5000	SOIL	—	—	—	0.0763	0.049389	—	—	—
RE21-07-3121	21-600670	2.0000–3.0000	SOIL	0.0512	—	—	0.311	0.129112	8.53	0.463	—
RE21-07-3122	21-600671	0.0000–0.5000	SOIL	0.0514	—	—	0.557	0.095151	3.59	0.228	—
RE21-07-3123	21-600671	2.0000–3.0000	SOIL	—	—	—	0.0394	—	3.71	0.223	—
RE21-07-3124	21-600672	0.0000–0.5000	SOIL	0.0445	—	—	0.21	0.116675	—	—	—
RE21-07-3125	21-600672	2.0000–3.0000	SOIL	—	—	—	0.0311	0.056461	3.32	0.217	—
RE21-07-3126	21-600673	0.0000–0.5000	SOIL	0.0816	—	—	0.852	0.070569	—	—	—
RE21-07-3127	21-600673	2.0000–3.0000	QBT3	—	—	—	0.0729	0.043772	2.88	0.18	—
RE21-07-3128	21-600674	0.0000–0.5000	SOIL	0.119	—	—	1.66	—	—	—	—
RE21-07-3129	21-600674	2.0000–3.0000	QBT3	—	—	—	0.0842	0.081565	—	—	—

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3130	21-600675	0.0000–0.5000	SOIL	—	—	—	0.0547	0.032298	—	—	—
RE21-07-3131	21-600675	2.0000–3.0000	QBT3	—	—	—	0.0855	0.029329	2.2	0.133	—
RE21-07-3132	21-600676	0.0000–0.5000	SOIL	0.103	—	—	0.657	0.096553	—	—	—
RE21-07-3133	21-600676	2.0000–3.0000	QBT3	—	—	—	0.183	0.144569	2.41	0.145	—
RE21-07-3134	21-600677	0.0000–0.5000	SOIL	0.0304	—	—	0.296	0.058481	—	—	—
RE21-07-3135	21-600677	2.0000–3.0000	SOIL	—	NA	—	0.41	0.200209	—	—	—
RE21-07-3136	21-600678	0.0000–0.5000	SOIL	—	NA	—	0.151	0.066854	—	—	—
RE21-07-3137	21-600678	2.0000–3.0000	QBT3	—	—	—	0.337	0.513873	—	0.144	—
RE21-07-3138	21-600679	0.0000–0.5000	SOIL	—	—	—	0.503	0.071522	—	—	—
RE21-07-3139	21-600679	2.0000–3.0000	QBT3	—	—	—	0.248	0.336264	—	—	—
RE21-07-3140	21-600680	0.0000–0.5000	SOIL	—	—	—	0.0566	0.032744	—	—	—
RE21-07-3141	21-600680	2.0000–3.0000	QBT3	—	0.105	—	0.853	0.140089	—	0.0958	—
RE21-07-3142	21-600681	0.0000–0.5000	SOIL	—	NA	—	0.171	0.009338	—	—	—
RE21-07-3143	21-600681	2.0000–3.0000	SOIL	—	0.0698	—	0.243	0.10434	—	—	—
RE21-07-3144	21-600682	0.0000–0.5000	SOIL	0.182	—	0.0312	0.728	0.140544	8.95	0.563	—
RE21-07-3145	21-600682	2.0000–3.0000	SOIL	0.0477	0.218	—	0.387	0.099976	—	—	—
RE21-07-3146	21-600683	0.0000–0.5000	SOIL	0.108	—	0.0232	2.57	0.092021	3.45	—	—
RE21-07-3147	21-600683	2.0000–3.0000	QBT3	—	0.104	—	0.312	0.0727	2.42	0.122	—
RE21-07-3148	21-600684	0.0000–0.5000	SOIL	0.0547	—	—	0.173	0.104942	—	—	—

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3149	21-600684	2.0000–3.0000	QBT3	—	—	—	0.131	0.077003	—	0.0921	—
RE21-07-3150	21-600685	0.0000–0.5000	SOIL	—	NA	—	0.0963	0.065419	—	—	—
RE21-07-3151	21-600685	2.0000–3.0000	QBT3	—	—	—	—	0.244473	—	—	—
RE21-07-3152	21-600686	0.0000–0.5000	SOIL	—	—	—	0.0853	0.109314	—	—	—
RE21-07-3153	21-600686	2.0000–3.0000	QBT3	—	—	—	—	0.194208	—	—	—
RE21-07-3154	21-600687	0.0000–0.5000	SOIL	—	—	—	0.0659	0.063728	—	—	—
RE21-07-3155	21-600687	2.0000–3.0000	SOIL	—	—	—	0.0209	0.291399	—	—	—
RE21-07-3156	21-600688	0.0000–0.5000	SOIL	—	—	—	0.112	0.033012	2.91	—	—
RE21-07-3157	21-600688	2.0000–3.0000	SOIL	—	—	—	—	0.484324	—	—	—
RE21-07-3158	21-600689	0.0000–0.5000	SOIL	—	—	—	0.0801	0.047639	3.08	—	—
RE21-07-3159	21-600689	2.0000–3.0000	SOIL	—	NA	—	0.0862	0.142681	2.93	—	—
RE21-07-3160	21-600690	0.0000–0.5000	SOIL	—	—	—	0.136	0.056511	—	—	—
RE21-07-3161	21-600690	2.0000–3.0000	QBT3	—	—	—	—	0.165152	—	—	—
RE21-07-3162	21-600691	0.0000–0.5000	SOIL	0.115	—	—	0.299	0.066132	—	—	—
RE21-07-3163	21-600691	2.0000–3.0000	QBT3	—	—	—	—	0.146356	—	—	—
RE21-07-3164	21-600692	0.0000–0.5000	SOIL	0.0428	—	—	0.283	0.07852	3.9	0.217	—
RE21-07-3165	21-600692	2.0000–3.0000	QBT3	—	—	—	0.0367	0.044239	5.27	0.414	—
RE21-07-3169	21-600694	0.0000–0.5000	SOIL	0.043	—	—	0.284	0.051653	—	—	—
RE21-07-3170	21-600694	2.0000–3.0000	SOIL	0.0347	—	—	0.46	0.082834	2.89	—	—

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3171	21-600694	5.0000–6.0000	QBT3	—	—	—	0.133	0.088199	—	—	—
RE21-07-3172	21-600695	0.0000–0.5000	SOIL	—	—	—	0.108	0.040694	—	—	—
RE21-07-3173	21-600695	2.0000–3.0000	SOIL	0.0274	—	—	0.174	0.048142	7.81	0.377	—
RE21-07-3174	21-600695	5.0000–6.0000	QBT3	—	—	—	—	0.084973	13	0.965	—
MD21-09-8760	21-600695	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	2.83	—	—
RE21-07-3265	21-600710	0.0000–0.5000	SOIL	—	—	—	0.128	0.016124	—	—	—
RE21-07-3266	21-600710	2.0000–3.0000	QBT3	—	—	—	0.018	0.022054	—	—	—
RE21-07-3267	21-600711	0.0000–0.5000	SOIL	0.0754	—	—	0.411	0.044265	—	—	—
RE21-07-3268	21-600711	2.0000–3.0000	SOIL	—	—	—	0.0524	0.259919	—	—	—
RE21-07-3269	21-600712	0.0000–0.5000	SOIL	0.0748	—	—	0.871	0.090632	—	—	—
RE21-07-3270	21-600712	2.0000–3.0000	SOIL	—	—	—	0.0721	0.103562	—	—	—
RE21-07-3271	21-600713	0.0000–0.5000	SOIL	0.0847	—	—	0.576	0.030908	—	—	—
RE21-07-3272	21-600713	2.0000–3.0000	QBT3	—	—	—	0.0458	0.251049	—	—	—
RE21-07-3273	21-600714	0.0000–0.5000	SOIL	0.119	—	—	2.41	0.114024	—	—	—
RE21-07-3274	21-600714	2.0000–3.0000	QBT3	—	—	—	0.132	0.162932	—	—	—
RE21-07-3275	21-600715	0.0000–0.5000	SOIL	0.0962	—	—	1.57	0.077119	—	—	—
RE21-07-3276	21-600715	2.0000–3.0000	QBT3	—	—	—	—	0.136962	—	—	—
RE21-07-3277	21-600716	0.0000–0.5000	SOIL	0.0502	—	—	0.148	0.025893	—	—	—
RE21-07-3278	21-600716	2.0000–3.0000	QBT3	—	—	—	0.0757	0.044326	—	—	—

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3279	21-600717	0.0000–0.5000	SOIL	0.111	—	—	0.786	0.031964	—	—	—
RE21-07-3280	21-600717	2.0000–3.0000	QBT3	—	—	—	—	0.055087	—	—	—
RE21-07-3281	21-600718	0.0000–0.5000	SOIL	—	—	—	0.12	0.042937	—	—	—
RE21-07-3282	21-600718	2.0000–3.0000	QBT3	—	—	—	—	0.243689	—	—	—
RE21-07-3283	21-600719	0.0000–0.5000	SOIL	0.0546	NA	—	0.113	0.669124	—	—	—
RE21-07-3284	21-600719	2.0000–3.0000	SOIL	—	—	—	0.0503	0.125745	—	—	—
RE21-07-3285	21-600720	0.0000–0.5000	SOIL	0.035	NA	—	0.144	0.508864	—	—	—
RE21-07-3286	21-600720	2.0000–3.0000	SOIL	—	—	—	—	0.432242	—	—	—
RE21-07-3287	21-600721	0.0000–0.5000	SOIL	0.138	—	—	2.73	0.13528	—	—	—
RE21-07-3288	21-600721	2.0000–3.0000	SOIL	—	—	—	—	0.314227	—	—	—
RE21-07-3289	21-600722	0.0000–0.5000	SOIL	0.0384	—	—	0.136	0.401895	—	—	—
RE21-07-3290	21-600722	2.0000–3.0000	SOIL	—	NA	—	—	1.33756	—	—	—
RE21-07-3291	21-600723	0.0000–0.5000	SOIL	0.0556	—	—	0.166	0.223565	—	—	—
RE21-07-3292	21-600723	2.0000–3.0000	SOIL	—	—	—	0.0897	0.228055	—	—	—
RE21-07-3293	21-600724	0.0000–0.5000	SOIL	0.0867	—	—	0.448	0.183428	—	—	—
RE21-07-3294	21-600724	2.0000–3.0000	QBT3	—	—	—	—	0.104298	—	—	—
RE21-07-3295	21-600725	0.0000–0.5000	SOIL	0.05	NA	—	0.283	0.059312	—	—	—
RE21-07-3296	21-600725	2.0000–3.0000	QBT3	—	—	—	—	0.24973	—	—	—
RE21-07-3297	21-600726	0.0000–0.5000	SOIL	0.0437	NA	—	—	0.079279	—	—	—

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3298	21-600726	2.0000–3.0000	QBT3	—	—	—	—	0.175504	—	—	—
RE21-07-3317	21-600735	0.0000–0.5000	SOIL	0.268	—	—	0.497	0.024912	—	—	—
RE21-07-3318	21-600735	2.0000–3.0000	QBT3	—	—	—	0.131	0.188837	—	—	—
RE21-07-3319	21-600735	5.0000–6.0000	QBT3	—	NA	—	0.113	0.151341	—	—	—
RE21-07-3320	21-600736	0.0000–0.5000	SOIL	0.0542	NA	0.0268	0.122	5.64444	—	—	—
RE21-07-3321	21-600736	2.0000–3.0000	SOIL	—	0.16	—	0.258	0.559615	—	—	—
RE21-07-3322	21-600736	5.0000–6.0000	QBT3	—	—	—	0.0477	3.10059	—	—	—
RE21-07-3323	21-600737	0.0000–0.5000	SOIL	—	—	—	0.246	0.085364	—	—	—
RE21-07-3324	21-600737	2.0000–3.0000	QBT3	—	—	—	0.0372	0.132351	—	—	—
RE21-07-3325	21-600737	5.0000–6.0000	QBT3	—	—	—	—	0.170393	—	—	—
RE21-07-6248	21-601304	2.5000–3.5000	SOIL	—	—	—	—	0.404677	—	—	—
RE21-07-6249	21-601304	4.5000–5.5000	QBT3	—	—	—	—	0.201557	—	—	—
RE21-07-6250	21-601305	3.0000–4.0000	QBT3	—	—	—	—	0.712924	—	—	—
RE21-07-6251	21-601305	5.0000–6.0000	QBT3	—	—	—	—	1.087	—	—	—
RE21-07-6252	21-601306	1.0000–2.0000	QBT3	—	—	—	—	0.144881	—	—	—
RE21-07-6253	21-601306	3.0000–4.0000	QBT3	—	—	—	—	0.061468	—	—	—
RE21-07-6254	21-601307	3.5000–4.5000	QBT3	—	—	—	—	0.158483	—	—	—
RE21-07-6255	21-601307	5.5000–6.5000	QBT3	—	—	—	—	0.179083	—	0.105	—
RE21-07-6256	21-601308	3.0000–4.0000	SOIL	—	—	—	0.0493	18.6782	—	—	—

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-6257	21-601308	5.0000–6.0000	QBT3	—	—	—	—	12.3545	—	—	—
RE21-07-6258	21-601309	3.5000–4.5000	QBT3	—	—	—	0.107	0.351628	—	—	—
RE21-07-6259	21-601309	5.5000–6.5000	QBT3	—	—	—	—	0.348889	—	—	—
RE21-07-6260	21-601310	6.0000–7.0000	QBT3	—	—	—	—	2.29613	—	—	—
RE21-07-6261	21-601310	8.0000–9.0000	QBT3	—	—	—	—	2.98182	—	—	—
RE21-07-6262	21-601311	6.0000–7.0000	QBT3	—	—	—	—	0.516893	—	0.0934	—
RE21-07-6263	21-601311	8.0000–9.0000	QBT3	—	—	—	—	0.486708	—	—	—
RE21-07-6264	21-601312	4.0000–5.0000	QBT3	—	—	—	—	0.683499	—	—	—
RE21-07-6265	21-601312	6.0000–7.0000	QBT3	—	—	—	—	0.685145	—	0.0918	—
RE21-07-6270	21-601315	3.0000–4.0000	QBT3	—	—	—	—	0.874938	—	0.11	—
RE21-07-6271	21-601315	8.0000–9.0000	QBT3	—	—	—	—	0.791876	—	—	—
RE21-07-6272	21-601315	13.0000–14.0000	QBT3	—	—	—	—	0.967107	—	—	—
MD21-09-8758	21-605251	0.0000–0.5000	SOIL	—	NA	—	0.377	NA	NA	NA	NA
MD21-09-8761	21-605252	0.0000–0.5000	SOIL	0.151	NA	NA	NA	NA	5.54	0.219	2.58
MD21-09-8764	21-605253	0.0000–0.5000	SOIL	NA	NA	0.038	3.13	NA	NA	NA	NA

Table 6.20-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
MD21-09-12458	21-608021	0.0000–0.5000	SOIL	NA	NA	0.0298	3.33	NA	NA	NA	NA
MD21-10-4657	21-609833	0.0000–0.5000	SOIL	NA	NA	0.035	4.58	NA	NA	NA	NA

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

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

[a] na = Not available.

[b] FV applies to soil and tuff samples collected from 0–1 ft only.

[c] — = Not detected or not detected above BV/FV.

[d] NA = Not analyzed.

Table 6.21-1
Summary of Inorganic Chemicals above BVs at SWMU 21-024(o)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Barium	Cadmium	Chromium	Copper	Cyanide (Total)	Lead	Manganese	Nitrate	Perchlorate	Selenium	Uranium	Zinc
QBT3 Background Value				**7340**	**46**	**1.63**	**7.14**	**4.66**	**0.5**	**11.2**	**482**	**na**[a]	**na**	**0.3**	**2.4**	**63.5**
SOIL Background Value				**29200**	**295**	**0.4**	**19.3**	**14.7**	**0.5**	**22.3**	**671**	**na**	**na**	**1.52**	**1.82**	**48.8**
Residential SSL				**78100**	**15600**	**77.9**	**219**[b]	**3130**	**1560**	**400**	**10700**	**125000**	**54.8**	**391**	**235**	**23500**
Industrial SSL				**1130000**	**224000**	**1120**	**2920**[b]	**45400**	**22700**	**800**	**145000**	**1820000**	**795**	**5680**	**3410**	**341000**
Construction Worker SSL				**40700**	**4350**	**309**	**449**[b]	**12400**	**6190**	**800**	**463**	**496000**	**217**	**1550**	**929**	**92900**
RE21-07-74952	21-27346	0.0000–0.5000	SOIL	—[c]	—	0.468 (J)	—	—	—	28.8	—	—	0.000811 (J-)	1.67 (U)	3.55 (J-)	85
RE21-07-74953	21-27346	2.0000–2.5000	QBT3	8830 (J+)	—	—	11.1	5.63	—	—	—	—	—	1.78 (U)	—	—
RE21-07-74955	21-27347	0.0000–0.5000	SOIL	—	—	0.426 (J)	—	—	1.33	31.6	—	3.38	0.00113 (J-)	1.7 (U)	—	192
RE21-07-74956	21-27347	2.0000–2.5000	QBT3	9840 (J+)	46.6	—	9.75	5.25	—	—	—	0.768 (J)	—	1.69 (U)	—	—
RE21-07-74958	21-27348	0.0000–0.5000	SOIL	—	—	2.13	—	15.7	—	52.9	—	3.34	0.00141 (J-)	1.68 (U)	5.13 (J-)	136
RE21-07-74959	21-27348	2.0000–2.5000	QBT3	—	—	—	15.5	5.21	—	—	—	1.18	—	1.55 (U)	—	—
RE21-07-74960	21-27349	0.0000–0.5000	SOIL	—	—	0.694	—	—	—	40.6	—	38	0.000973 (J-)	—	—	116
RE21-07-74961	21-27349	2.0000–2.5000	SOIL	—	—	0.432 (J)	—	—	—	—	699	14	—	1.57 (U)	—	49.1
RE21-07-74962	21-27350	0.0000–0.5000	SOIL	—	—	—	—	—	—	24.9	—	20	0.000654 (J-)	1.59 (U)	—	75.5
RE21-07-74963	21-27350	2.0000–2.5000	QBT3	—	—	—	24.7	—	—	—	—	16.1	0.000759 (J-)	1.55 (U)	—	—
RE21-07-74964	21-27351	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	1.63	0.000539 (J-)	1.57 (U)	—	—
RE21-07-74965	21-27351	2.0000–2.5000	SOIL	—	—	0.512 (U)	—	—	—	—	—	2.15	—	1.54 (U)	—	—
RE21-07-74966	21-27352	0.0000–0.5000	SOIL	—	—	0.602	—	—	—	31.9	—	2.11	—	1.62 (U)	—	96.3
RE21-07-74967	21-27352	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	0.766 (J)	—	1.55 (U)	—	—
RE21-07-74968	21-27353	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	1.72	0.00105 (J-)	1.6 (U)	2.67 (J-)	—
RE21-07-74969	21-27353	2.0000–2.5000	SOIL	—	—	0.505 (U)	—	—	—	—	—	—	—	—	—	—
RE21-07-74970	21-27354	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	0.927 (J)	0.000551 (J-)	1.6 (U)	—	—
RE21-07-74971	21-27354	2.0000–2.5000	SOIL	—	—	0.501 (U)	—	—	—	—	—	—	—	—	—	—
RE21-07-74972	21-27355	0.0000–0.5000	SOIL	—	—	0.626	—	—	—	37.7	—	3.46	0.00124 (J-)	1.53 (U)	—	115
RE21-07-74973	21-27355	2.0000–2.5000	SOIL	—	—	0.517 (U)	—	—	—	—	—	1.22	—	1.55 (U)	—	—
RE21-07-74974	21-27356	0.0000–0.5000	SOIL	—	—	0.527 (U)	—	—	—	—	—	1.71	—	1.58 (U)	—	—
RE21-07-74975	21-27356	2.0000–2.5000	SOIL	—	—	0.493 (U)	—	—	—	—	—	—	—	—	—	—
MD21-09-7574	21-605202	0.0000–0.5000	SOIL	NA[d]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	110

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] — = Not detected or not detected above BV.
[d] NA = Not analyzed.

Table 6.21-2
Summary of Organic Chemicals Detected at SWMU 21-024(o)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate
Residential SSL				**3440**	**67500**	**17200**	**2.22**	**6.21**	**0.621**	**6.21**	**1720** [a]	**62.1**	**240000** [b]	**347**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300** [a]	**234**	**2500000** [b]	**1370**
Construction Worker SSL				**18600**	**263000**	**66800**	**75.8**	**213**	**21.3**	**213**	**6680** [a]	**2060**	**952000** [c]	**4760**
RE21-07-74952	21-27346	0.0000–0.5000	SOIL	— [d]	NA [e]	0.0395	NA	0.173	0.166 (J)	0.389 (J)	—	—	—	—
RE21-07-74953	21-27346	2.0000–2.5000	QBT3	0.0495	—	—	NA	—	—	—	—	—	—	—
RE21-07-74955	21-27347	0.0000–0.5000	SOIL	0.0877	NA	0.173	NA	0.406	0.357 (J)	—	—	0.775 (J)	—	0.119 (J)
RE21-07-74956	21-27347	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-74958	21-27348	0.0000–0.5000	SOIL	0.0702	NA	0.13	NA	0.44	0.452 (J)	0.985 (J)	0.237 (J)	—	—	0.0937 (J)
RE21-07-74959	21-27348	2.0000–2.5000	QBT3	0.0156 (J)	0.00268 (J)	—	NA	0.0249 (J)	—	—	—	—	—	—
RE21-07-74960	21-27349	0.0000–0.5000	SOIL	0.0558	NA	0.115	NA	0.239 (J)	0.234 (J)	0.518 (J)	—	—	—	—
RE21-07-74961	21-27349	2.0000–2.5000	SOIL	—	—	0.0447	NA	—	—	—	—	—	—	—
RE21-07-74962	21-27350	0.0000–0.5000	SOIL	—	NA	0.0155 (J)	NA	0.0702	0.0766 (J)	0.141 (J)	—	0.0448 (J)	—	—
RE21-07-74963	21-27350	2.0000–2.5000	QBT3	—	—	—	NA	—	—	—	—	—	—	0.0796 (J)
RE21-07-74965	21-27351	2.0000–2.5000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-74966	21-27352	0.0000–0.5000	SOIL	—	NA	0.0206 (J)	NA	0.0853	—	—	—	—	—	—
RE21-07-74967	21-27352	2.0000–2.5000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-74968	21-27353	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	—	—
RE21-07-74969	21-27353	2.0000–2.5000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-74970	21-27354	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	—	—
RE21-07-74972	21-27355	0.0000–0.5000	SOIL	0.0843	NA	0.158	NA	0.32	0.273 (J)	0.582 (J)	—	—	—	—
RE21-07-4030	21-27355	2.0000–2.5000	QBT3	NA	NA	NA	0.0201	NA	NA	NA	NA	NA	NA	NA
RE21-07-74973	21-27355	2.0000–2.5000	SOIL	—	—	—	NA	—	—	—	—	—	—	—
RE21-07-74974	21-27356	0.0000–0.5000	SOIL	—	NA	—	NA	—	—	—	—	—	0.589 (J)	—

Table 6.21-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chrysene	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorobenzene	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]
Residential SSL				**621**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**3.04**	**na**	**na**	**na**
Industrial SSL				**2340**	**24400**	**24400**	**na**	**na**	**na**	**na**	**12**	**na**	**na**	**na**
Construction Worker SSL				**20600**	**8910**	**8910**	**na**	**na**	**na**	**na**	**103**	**na**	**na**	**na**
RE21-07-74952	21-27346	0.0000–0.5000	SOIL	0.196	0.388	0.0251 (J)	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74953	21-27346	2.0000–2.5000	QBT3	—	0.0391	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74955	21-27347	0.0000–0.5000	SOIL	0.396	0.837	0.122	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74956	21-27347	2.0000–2.5000	QBT3	—	0.013 (J)	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74958	21-27348	0.0000–0.5000	SOIL	0.553	1.02	0.0832	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74959	21-27348	2.0000–2.5000	QBT3	0.0228 (J)	0.0447	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74960	21-27349	0.0000–0.5000	SOIL	0.291 (J)	0.478	0.0734	NA	NA	NA	NA	0.0892 (J)	NA	NA	NA
RE21-07-74961	21-27349	2.0000–2.5000	SOIL	—	0.0797	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74962	21-27350	0.0000–0.5000	SOIL	0.0907	0.146	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74963	21-27350	2.0000–2.5000	QBT3	—	0.0184 (J)	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74965	21-27351	2.0000–2.5000	SOIL	—	—	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74966	21-27352	0.0000–0.5000	SOIL	0.119	0.199	0.0122 (J)	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74967	21-27352	2.0000–2.5000	SOIL	—	0.0327 (J)	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74968	21-27353	0.0000–0.5000	SOIL	—	0.0634	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74969	21-27353	2.0000–2.5000	SOIL	—	—	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74970	21-27354	0.0000–0.5000	SOIL	0.0228 (J)	0.0292 (J)	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74972	21-27355	0.0000–0.5000	SOIL	0.293	0.634	0.127	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-4030	21-27355	2.0000–2.5000	QBT3	NA	NA	NA	4.89E-06	1.24E-05	0.00000117 (J)	2.67E-06	NA	1.07E-06	0.000000196 (J)	0.000000179 (J)
RE21-07-74973	21-27355	2.0000–2.5000	SOIL	0.0367 (J)	0.0589	—	NA	NA	NA	NA	—	NA	NA	NA
RE21-07-74974	21-27356	0.0000–0.5000	SOIL	—	—	—	NA	NA	NA	NA	—	NA	NA	NA

Table 6.21-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzofurans (Total)	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofurans (Totals)	Toluene
Residential SSL				**na**	**310**[b]	**45**	**na**	**na**	**na**	**na**	**1830**	**1720**	**na**	**5570**
Industrial SSL				**na**	**4100**[b]	**252**	**na**	**na**	**na**	**na**	**20500**	**18300**	**na**	**57900**
Construction Worker SSL				**na**	**1240**[c]	**702**	**na**	**na**	**na**	**na**	**7150**	**6680**	**na**	**21100**
RE21-07-74952	21-27346	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.231	0.382	NA	NA
RE21-07-74953	21-27346	2.0000–2.5000	QBT3	NA	—	—	NA	NA	NA	NA	0.0241 (J)	0.0499 (J)	NA	0.00204
RE21-07-74955	21-27347	0.0000–0.5000	SOIL	NA	0.0439	0.0853	NA	NA	NA	NA	0.73	0.914	NA	NA
RE21-07-74956	21-27347	2.0000–2.5000	QBT3	NA	—	—	NA	NA	NA	NA	—	0.015 (J)	NA	0.00321
RE21-07-74958	21-27348	0.0000–0.5000	SOIL	NA	0.0302 (J)	0.0598	NA	NA	NA	NA	0.734	0.983	NA	NA
RE21-07-74959	21-27348	2.0000–2.5000	QBT3	NA	—	—	NA	NA	NA	NA	0.0416	0.0588 (J)	NA	0.000905 (J)
RE21-07-74960	21-27349	0.0000–0.5000	SOIL	NA	0.0263 (J)	0.0462	NA	NA	NA	NA	0.489	0.518 (J)	NA	NA
RE21-07-74961	21-27349	2.0000–2.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.0754	0.0924 (J)	NA	0.01 (J+)
RE21-07-74962	21-27350	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.0814	0.135	NA	NA
RE21-07-74963	21-27350	2.0000–2.5000	QBT3	NA	—	—	NA	NA	NA	NA	—	0.0354 (J)	NA	0.00126
RE21-07-74965	21-27351	2.0000–2.5000	SOIL	NA	—	—	NA	NA	NA	NA	—	—	NA	0.00085 (J+)
RE21-07-74966	21-27352	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.135	0.231	NA	NA
RE21-07-74967	21-27352	2.0000–2.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.0194 (J)	0.0402	NA	0.000713 (J+)
RE21-07-74968	21-27353	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.0383	0.065	NA	NA
RE21-07-74969	21-27353	2.0000–2.5000	SOIL	NA	—	—	NA	NA	NA	NA	—	—	NA	0.00105 (J+)
RE21-07-74970	21-27354	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.0127 (J)	0.034 (J)	NA	NA
RE21-07-74972	21-27355	0.0000–0.5000	SOIL	NA	0.052	0.104	NA	NA	NA	NA	0.682	0.715	NA	NA
RE21-07-4030	21-27355	2.0000–2.5000	QBT3	2.36E-06	NA	NA	4.31E-05	0.00000267 (J)	0.000000333 (J)	3.1E-06	NA	NA	8.49E-07	NA
RE21-07-74973	21-27355	2.0000–2.5000	SOIL	NA	—	—	NA	NA	NA	NA	0.0366	0.0667 (J)	NA	0.000658 (J+)
RE21-07-74974	21-27356	0.0000–0.5000	SOIL	NA	—	—	NA	NA	NA	NA	—	—	NA	NA

Source: SSLs from NMED (2009, 108070).

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

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

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

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

Table 6.21-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-024(o)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**
RE21-07-74952	21-27346	0.0000–0.5000	SOIL	—[c]	—	—	1.16	—
RE21-07-74953	21-27346	2.0000–2.5000	QBT3	—	0.0664	—	0.212	—
RE21-07-74955	21-27347	0.0000–0.5000	SOIL	0.0432	—	—	2.21	—
RE21-07-74958	21-27348	0.0000–0.5000	SOIL	0.0446	—	—	2.01	0.021444
RE21-07-74959	21-27348	2.0000–2.5000	QBT3	—	NA[d]	—	0.471	0.012056
RE21-07-74960	21-27349	0.0000–0.5000	SOIL	0.0348	—	—	0.674	0.017737
RE21-07-74961	21-27349	2.0000–2.5000	SOIL	—	NA	—	0.233	—
RE21-07-74962	21-27350	0.0000–0.5000	SOIL	0.0941	—	—	1.62	—
RE21-07-74963	21-27350	2.0000–2.5000	QBT3	—	—	—	0.176	0.011641
RE21-07-74964	21-27351	0.0000–0.5000	SOIL	0.0201	—	—	0.502	—
RE21-07-74965	21-27351	2.0000–2.5000	SOIL	—	—	—	0.0608	—
RE21-07-74966	21-27352	0.0000–0.5000	SOIL	0.0489	—	0.0846	5.18	—
RE21-07-74967	21-27352	2.0000–2.5000	SOIL	—	NA	—	0.147	—
RE21-07-74968	21-27353	0.0000–0.5000	SOIL	0.0404	—	—	1.17	—
RE21-07-74970	21-27354	0.0000–0.5000	SOIL	0.0366	—	—	0.554	—
RE21-07-74971	21-27354	2.0000–2.5000	SOIL	—	—	—	0.0307	—
RE21-07-74972	21-27355	0.0000–0.5000	SOIL	0.0653	—	—	0.519	—
RE21-07-74973	21-27355	2.0000–2.5000	SOIL	—	—	—	0.0492	—
RE21-07-74974	21-27356	0.0000–0.5000	SOIL	—	—	—	0.12	0.019258
RE21-07-74975	21-27356	2.0000–2.5000	SOIL	—	—	—	—	0.003818
MD21-09-7573	21-605201	0.0000–0.5000	SOIL	0.07	NA	NA	NA	NA
MD21-09-7574	21-605202	0.0000–0.5000	SOIL	NA	NA	—	2.37	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.22-1
Summary of Inorganic Chemicals above BVs at Consolidated Unit 21-026(a)-99

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**400**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	—[c]	—	—	NA[d]	—	—	—	—	—	—
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	—	—	—	NA	—	5690	8 (J)	—	—	—
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	—	—	—	NA	—	—	—	—	—	—
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	—	—	—	NA	—	2530	—	9.29	—	—
RE21-07-75730	21-27551	10.0000–11.0000	QBT3	—	—	—	—	—	8970 (J)	—	—	—	—
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	—	—	—	—	—	5990 (J)	—	—	—	—
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	—	—	—	—	—	8490 (J)	—	—	—	—
RE21-07-75734	21-27552	0.0000–0.5000	SOIL	—	—	—	—	0.516 (U)	—	—	—	—	—
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	—	—	—	—	0.524 (U)	—	—	—	—	—
RE21-07-75736	21-27552	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-75737	21-27553	0.0000–0.5000	SOIL	—	—	—	—	—	13900	—	—	—	—
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	—	—	—	—	—	7170	—	—	—	—
RE21-07-75739	21-27553	5.0000–6.0000	QBT3	—	—	3.11	102 (J+)	—	37000	8.44	5.08	—	—
MD21-09-8729	21-27553	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	2700	NA	NA	NA	NA
RE21-07-75752	21-27554	0.0000–0.5000	SOIL	—	—	—	—	0.48 (U)	—	—	—	—	—
RE21-07-75753	21-27554	2.5000–3.5000	QBT3	—	—	—	—	—	4970 (J+)	13	—	—	—
RE21-07-75754	21-27554	4.5000–5.5000	QBT3	—	—	—	—	—	3120 (J+)	13.2	—	—	—
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	—	—	—	—	0.523 (U)	—	—	—	—	—
RE21-07-75744	21-27555	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	—	—	—	—	0.567 (U)	—	—	—	—	—
RE21-07-75746	21-27556	2.0000–2.5000	QBT3	—	—	—	—	—	—	10.6	—	—	—
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	—	—	—	—	0.632 (U)	—	—	—	—	—
RE21-07-75748	21-27557	2.0000–2.5000	QBT3	13200	—	2.95	48.1	—	—	10.7	4.69	—	—
RE21-07-75749	21-27558	0.0000–0.5000	SOIL	—	—	—	—	0.542 (U)	—	—	—	—	—
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—
RE21-07-75755	21-27559	0.0000–0.5000	SOIL	—	—	—	—	0.483 (U)	—	—	—	—	—
RE21-07-75756	21-27559	2.5000–3.5000	QBT3	—	—	—	—	—	—	11.3	—	—	—

Table 6.22-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**400**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**
RE21-07-75757	21-27559	4.5000–5.5000	QBT3	—	—	—	—	—	3120 (J+)	11.9	—	—	—
RE21-07-75765	21-27560	0.0000–0.5000	SOIL	—	—	—	—	0.552 (U)	—	—	—	—	—
RE21-07-75766	21-27560	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-75767	21-27561	0.0000–0.5000	SOIL	—	—	—	—	0.532 (U)	—	—	—	—	—
RE21-07-75768	21-27561	2.0000–3.0000	SOIL	—	—	—	—	0.566 (U)	—	—	—	—	—
RE21-07-75769	21-27562	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—
RE21-07-75770	21-27562	2.0000–3.0000	QBT3	—	—	—	—	—	—	17.1	—	—	—
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	—	—	—	—	0.546 (U)	—	—	—	—	—
RE21-07-75772	21-27563	2.0000–3.0000	SOIL	—	—	—	—	0.511 (U)	—	—	—	—	—
RE21-07-75773	21-27564	9.5000–10.5000	QBT3	—	—	—	—	—	8450 (J+)	—	—	—	267 (J)
RE21-07-75774	21-27564	11.5000–12.5000	QBT3	—	—	—	—	—	—	—	—	—	82.8 (J)
RE21-07-75775	21-27565	12.0000–13.0000	QBT3	—	—	—	—	—	4150 (J)	—	—	—	—
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	—	—	—	59.1	—	19200 (J)	—	—	—	17.6
RE21-07-75777	21-27566	12.0000–13.0000	QBT3	—	—	—	—	—	4410 (J)	—	—	—	—
RE21-07-75778	21-27566	14.0000–15.0000	QBT3	—	—	—	—	—	3390 (J)	—	—	—	—
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	—	—	—	46.2	—	8320 (J)	—	—	—	—
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	—	—	—	—	—	11100 (J)	—	—	—	—
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	—	—	—	—	0.412 (J)	10500 (J)	—	31.1	—	—
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	—	—	—	—	—	7940 (J)	—	7.72	—	96.6
RE21-07-75806	21-27570	5.5000–6.5000	QBT3	—	—	—	—	—	—	—	—	—	26.4
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	—	—	—	—	—	11000 (J)	—	—	—	—
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	—	—	—	—	—	42800 (J)	9.23	8.14	—	35.8
RE21-07-75809	21-27571	5.5000–6.5000	QBT3	—	—	3.06	—	—	6280 (J)	23.9	—	—	103
RE21-07-75810	21-27572	0.0000–0.5000	QBT3	—	—	—	—	—	—	—	—	0.54 (U)	—
RE21-07-75811	21-27572	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	0.54 (U)	—
RE21-07-75812	21-27572	5.0000–6.0000	QBT3	—	—	—	—	—	—	—	—	0.51 (U)	—
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	—	—	—	—	—	NA	—	—	—	—
RE21-07-75814	21-27573	2.0000–3.0000	QBT3	—	—	—	—	—	NA	8.6	—	—	—
RE21-07-75815	21-27574	0.0000–0.5000	SOIL	—	—	—	—	—	NA	—	—	—	—
RE21-07-75816	21-27574	2.0000–3.0000	QBT3	—	—	—	—	—	NA	10	—	—	—

Table 6.22-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**400**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	—	—	—	—	—	NA	—	—	—	—
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	—	—	—	—	—	NA	—	9.5	—	—
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	—	1.5 (J-)	11.9	708	12.1	NA	252	556	1.9 (J)	249
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	—	—	—	90.5	—	NA	33.2	49.8	—	23.5
RE21-07-75821	21-27577	0.0000–0.5000	SOIL	—	—	—	—	—	NA	—	—	—	—
RE21-07-75822	21-27577	2.0000–3.0000	QBT3	—	—	—	—	—	NA	—	—	0.52 (U)	—
RE21-07-75823	21-27578	0.0000–0.5000	SOIL	—	—	—	—	—	NA	—	—	—	—
RE21-07-75824	21-27578	2.0000–3.0000	QBT3	—	—	—	—	—	NA	—	—	0.55 (U)	—
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	—	0.94 (J-)	—	392	4.4	NA	124	292	2.7 (J)	118
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	—	—	—	—	—	NA	12.8	29.3	0.54 (U)	12.7
RE21-07-75827	21-27580	0.0000–0.5000	SOIL	—	—	—	—	—	NA	—	—	—	—
RE21-07-75828	21-27580	2.0000–3.0000	QBT3	—	—	—	—	—	NA	10.8	—	0.54 (U)	—
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	—	—	—	61.3	—	13900 (J)	—	—	—	—
RE21-07-75830	21-27581	12.0000–13.0000	QBT3	—	—	—	—	—	11700 (J)	—	—	—	—
MD21-09-8731	21-605238	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	5800	NA	NA	NA	NA
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	0.58 (U)	NA

Table 6.22-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**48.8**
Residential SSL				**na**	**23**[e]	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**23500**
Industrial SSL				**na**	**310**[e]	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**341000**
Construction Worker SSL				**na**	**92.9**[f]	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**92900**
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	—	—	—	2.54	—	—	—	—	—
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	—	—	—	—	—	1.51 (U)	—	—	—
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	—	—	—	—	—	1.52 (U)	—	—	—
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	—	0.158	—	—	—	1.51 (U)	—	—	—
RE21-07-75730	21-27551	10.0000–11.0000	QBT3	—	—	—	—	0.000788 (J)	1.53 (U)	—	—	—
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	—	—	—	—	0.000607 (J)	0.675 (J)	—	—	—
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	—	—	—	—	0.000956 (J)	1.52 (U)	—	—	—
RE21-07-75734	21-27552	0.0000–0.5000	SOIL	—	—	—	—	—	1.55 (U)	—	—	—
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	—	—	—	—	—	1.57 (U)	—	—	—
RE21-07-75736	21-27552	5.0000–6.0000	QBT3	—	—	—	—	0.000627 (J)	0.674 (J)	—	—	—
RE21-07-75737	21-27553	0.0000–0.5000	SOIL	—	—	—	1.25	—	1.57 (U)	—	—	—
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	—	—	—	—	0.00134 (J)	1.68 (U)	—	—	—
RE21-07-75739	21-27553	5.0000–6.0000	QBT3	2970	—	6.86	—	0.00094 (J-)	1.64 (U)	—	—	—
MD21-09-8729	21-27553	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75752	21-27554	0.0000–0.5000	SOIL	—	—	—	1.43	—	—	—	—	—
RE21-07-75753	21-27554	2.5000–3.5000	QBT3	—	—	—	—	—	1.51 (U)	—	—	—
RE21-07-75754	21-27554	4.5000–5.5000	QBT3	—	—	—	—	0.00154 (J+)	1.57 (U)	—	—	—
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	—	—	—	1.88	0.000991 (J)	—	—	—	—
RE21-07-75744	21-27555	2.0000–2.5000	QBT3	—	—	—	—	0.000675 (J)	1.57 (U)	—	—	—
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	—	—	—	1.53	—	—	—	—	—
RE21-07-75746	21-27556	2.0000–2.5000	QBT3	—	—	—	—	—	0.66 (J)	—	—	—
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	—	—	—	1.4	—	1.9 (U)	—	—	—
RE21-07-75748	21-27557	2.0000–2.5000	QBT3	1900 (J+)	—	—	—	—	0.868 (J)	—	—	—
RE21-07-75749	21-27558	0.0000–0.5000	SOIL	—	—	—	—	—	1.62 (U)	—	—	—
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	—	—	—	—	—	1.69 (U)	—	—	—
RE21-07-75755	21-27559	0.0000–0.5000	SOIL	—	—	—	1.08	—	—	—	—	—
RE21-07-75756	21-27559	2.5000–3.5000	QBT3	—	—	—	—	—	1.64 (U)	—	—	—
RE21-07-75757	21-27559	4.5000–5.5000	QBT3	—	—	—	—	—	1.6 (U)	—	—	—
RE21-07-75765	21-27560	0.0000–0.5000	SOIL	—	—	—	1.37	—	1.65 (U)	—	—	—
RE21-07-75766	21-27560	2.0000–3.0000	SOIL	—	—	—	—	—	1.71 (U)	—	—	—

Table 6.22-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**48.8**
Residential SSL				**na**	**23**[e]	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**23500**
Industrial SSL				**na**	**310**[e]	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**341000**
Construction Worker SSL				**na**	**92.9**[f]	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**92900**
RE21-07-75767	21-27561	0.0000–0.5000	SOIL	—	—	—	—	—	1.6 (U)	—	—	—
RE21-07-75768	21-27561	2.0000–3.0000	SOIL	—	—	—	1.4	—	1.7 (U)	—	—	—
RE21-07-75769	21-27562	0.0000–0.5000	SOIL	—	—	—	2.62	—	1.56 (U)	—	—	—
RE21-07-75770	21-27562	2.0000–3.0000	QBT3	—	—	—	1.85	0.000929 (J-)	0.845 (J)	—	—	—
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	—	—	—	1.54	—	1.64 (U)	—	—	—
RE21-07-75772	21-27563	2.0000–3.0000	SOIL	—	—	—	—	—	1.53 (U)	—	—	—
RE21-07-75773	21-27564	9.5000–10.5000	QBT3	—	—	—	—	0.00471 (J+)	0.659 (J)	—	—	—
RE21-07-75774	21-27564	11.5000–12.5000	QBT3	—	—	—	—	0.00132 (J-)	1.51 (U)	—	—	—
RE21-07-75775	21-27565	12.0000–13.0000	QBT3	—	—	—	—	—	1.45 (U)	—	—	—
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	—	—	—	—	—	1.6 (U)	—	—	—
RE21-07-75777	21-27566	12.0000–13.0000	QBT3	—	—	—	1.22	0.00414 (J-)	1.46 (U)	—	—	—
RE21-07-75778	21-27566	14.0000–15.0000	QBT3	—	—	—	1.23	0.00268 (J-)	1.53 (U)	—	—	—
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	—	—	—	—	0.000811 (J)	0.646 (J)	—	—	—
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	—	—	—	2.21	0.00352	1.6 (U)	—	—	—
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	—	0.842	—	2.21	—	—	—	—	109 (J-)
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	—	—	—	—	—	1.63 (U)	—	—	—
RE21-07-75806	21-27570	5.5000–6.5000	QBT3	—	—	—	—	0.000823 (J)	1.54 (U)	—	—	—
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	—	0.171	—	2.41	—	1.54 (U)	—	—	—
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	—	—	—	—	—	1.55 (U)	—	—	—
RE21-07-75809	21-27571	5.5000–6.5000	QBT3	—	—	—	—	—	1.58 (U)	—	—	65 (J-)
RE21-07-75810	21-27572	0.0000–0.5000	QBT3	—	—	—	—	—	0.54 (U)	—	—	—
RE21-07-75811	21-27572	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-75812	21-27572	5.0000–6.0000	QBT3	—	—	—	—	—	0.32 (J)	—	—	—
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	—	—	—	2 (J)	—	—	—	—	—
RE21-07-75814	21-27573	2.0000–3.0000	QBT3	—	—	—	—	—	0.38 (J)	—	—	—
RE21-07-75815	21-27574	0.0000–0.5000	SOIL	—	—	—	1.8 (J)	—	—	—	—	—
RE21-07-75816	21-27574	2.0000–3.0000	QBT3	—	—	—	—	—	0.33 (J)	—	—	—
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	—	—	—	0.69 (J)	—	—	—	—	—
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	—	0.22	—	—	—	—	2.6	—	—
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	—	**12.5**	62.6	9.8 (J)	—	1.9	40.3	12.9	1640

Table 6.22-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Magnesium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Silver	Uranium	Zinc
QBT3 Background Value				**1690**	**0.1**	**6.58**	**na**	**na**	**0.3**	**1**	**2.4**	**63.5**
SOIL Background Value				**4610**	**0.1**	**15.4**	**na**	**na**	**1.52**	**1**	**1.82**	**48.8**
Residential SSL				**na**	**23**[e]	**1560**	**125000**	**54.8**	**391**	**391**	**235**	**23500**
Industrial SSL				**na**	**310**[e]	**22700**	**1820000**	**795**	**5680**	**5680**	**3410**	**341000**
Construction Worker SSL				**na**	**92.9**[f]	**6190**	**496000**	**217**	**1550**	**1550**	**929**	**92900**
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	—	0.82	12.1	0.98 (J)	—	—	3.1	—	202
RE21-07-75821	21-27577	0.0000–0.5000	SOIL	—	—	—	2.6 (J)	—	—	—	—	—
RE21-07-75822	21-27577	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-75823	21-27578	0.0000–0.5000	SOIL	—	0.12	—	4.9 (J)	—	—	1.2	—	—
RE21-07-75824	21-27578	2.0000–3.0000	QBT3	—	—	—	—	—	0.34 (J)	—	—	—
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	—	**14.7**	36.6	5.8 (J)	—	1.6	42.2	19.2	568
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	—	0.88	7	—	—	—	2	2.5	73.7
RE21-07-75827	21-27580	0.0000–0.5000	SOIL	—	—	—	2.6 (J)	—	—	—	—	—
RE21-07-75828	21-27580	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	—	—	—	—	—	0.833 (J)	—	—	—
RE21-07-75830	21-27581	12.0000–13.0000	QBT3	—	—	—	—	0.000551 (J)	1.03 (J)	—	—	—
MD21-09-8731	21-605238	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	1.4 (J)	—	NA

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

[e] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table 6.22-2
Summary of Organic Chemicals Detected at Consolidated Unit 21-026(a)-99

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate
Residential SSL				**3440**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]	**347**	**2600**[b]
Industrial SSL				**36700**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]	**1370**	**9100**[b]
Construction Worker SSL				**18600**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**952000**[c]	**4760**	**47600**[c]
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	—[d]	—	NA[e]	NA	—	—	0.0153 (J)	—	—	—	—	—
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	—	—	NA	NA	0.0291 (J)	0.0184 (J)	0.0297 (J)	—	—	—	—	—
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	—	—	NA	NA	0.0142 (J)	—	0.0124 (J)	—	—	—	—	—
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	—	—	NA	NA	0.124	0.0893	0.153	0.0371 (J)	0.0564	—	0.0839 (J)	—
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	0.281	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	0.501 (J)	—	—
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	0.44 (J)	—	—
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	0.481 (J)	—	—
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	—	—	NA	NA	—	—	—	—	—	0.392 (J)	—	—
RE21-07-583	21-27558	2.0000–3.0000	QBT3	NA	NA	0.0044	0.0031 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	0.0123 (J)	—	—	—	—	—
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	—	—	NA	NA	—	—	0.0108 (J)	—	—	—	—	—
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	—	—	NA	NA	—	0.0837	0.162	0.0429	0.0718	—	0.16 (J)	—
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	0.0553	—	—	—	0.0937 (J)	—
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	—	—	NA	NA	0.081 (J)	0.06 (J)	0.062 (J)	—	0.07 (J)	—	—	—
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	—	—	—
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	0.12 (J)	0.069 (J)
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	0.15 (J)	0.55 (J)	NA	NA	5.5	4.3 (J)	5.7 (J)	2.1 (J)	4.6 (J)	—	4.2	0.84
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	—	0.04 (J)	NA	NA	0.47	0.36 (J)	0.44	0.16 (J)	0.36 (J)	—	0.24 (J)	0.071 (J)
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	0.24 (J)	0.65	NA	NA	5.9	4.4 (J)	6 (J)	2.1 (J)	4.2 (J)	—	2.7	1.2
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	—	0.073 (J)	NA	NA	0.28 (J)	0.22 (J)	0.2 (J)	0.089 (J)	0.28 (J)	—	0.14 (J)	0.14 (J)
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	—	—	NA	NA	—	—	—	—	—	—	—	—
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	—	—	NA	NA	—	—	—	—	—	—	0.078 (J)	—

Table 6.22-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Chloroform	Chrysene	Di-n-butylphthalate	Di-n-octylphthalate	Dibenz(a,h)anthracene	Dibenzofuran	Dichlorobenzene[1,4-]	Dimethylphenol[2,4-]	Ethylbenzene	Fluoranthene	Fluorene
Residential SSL				**5.72**	**621**	**6110**	**2400**[f]	**0.621**	**78**[b]	**32.2**	**1220**	**69.7**	**2290**	**2290**
Industrial SSL				**31.9**	**2340**	**68400**	**27000**[f]	**2.34**	**1000**[b]	**180**	**13700**	**385**	**24400**	**24400**
Construction Worker SSL				**671**	**20600**	**23800**	**4760**[g]	**21.3**	**238**[c]	**3780**	**4760**	**6630**	**8910**	**8910**
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	—	0.0248 (J)	—	—	—	—	—	—	—	0.0287 (J)	—
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	—	—	—	—	—	—	—	—	—	0.0109 (J)	—
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	—	0.121	—	—	—	—	—	—	—	0.143	—
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	NA	—	—	—	—	—	—	—	NA	—	—
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-583	21-27558	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	NA	—	—	—	—	—	—	—	NA	0.0137 (J)	—
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	NA	0.104	—	—	—	—	—	—	NA	0.079	—
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	0.000254 (J)	—	—	—	—	—	—	—	—	—	—
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	NA	0.0387	0.0621 (J)	—	—	—	—	—	NA	0.0346	—
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	0.000219 (J)	—	—	—	—	—	—	—	—	—	—
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	NA	0.082 (J)	—	—	—	—	—	—	NA	0.089 (J)	—
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	NA	—	0.04 (J)	—	—	—	—	—	NA	—	—
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	NA	6	0.31 (J)	0.1 (J)	0.83 (J)	—	—	—	NA	6	0.12 (J)
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	—	0.51	—	—	—	—	—	—	—	0.52	—
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	NA	6	0.85	—	0.84 (J)	0.055 (J)	0.064 (J)	0.063 (J)	NA	6.7	0.17 (J)
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	—	0.3 (J)	0.069 (J)	—	—	—	—	—	0.00043 (J)	0.44	—
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	—	—	—	—	—	—	—	—	—	—	—
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	NA	—	—	—	—	—	—	—	NA	—	—

Table 6.22-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene (Total)	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**[h]	**na**	**na**	**6.21**	**na**	**1830**	**1720**	**5570**	**62**[b]	**1090**	**1090**[i]
Industrial SSL				**na**	**na**	**na**	**23.4**	**na**	**20500**	**18300**	**57900**	**260**[b]	**3610**	**3610**[i]
Construction Worker SSL				**na**	**na**	**na**	**213**	**na**	**7150**	**6680**	**21100**	**688**[c]	**3130**	**313**[i]
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	NA	NA	NA	—	NA	—	0.024 (J)	—	—	NA	—
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	NA	NA	NA	—	NA	—	—	—	—	NA	0.000283 (J)
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	NA	NA	NA	—	NA	0.0219 (J)	0.124	—	—	NA	0.000279 (J)
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	NA	NA	NA	—	NA	—	—	0.000311 (J)	—	NA	0.000292 (J)
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	NA	NA	NA	—	NA	—	—	0.00042 (J)	—	NA	0.000357 (J)
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	NA	NA	NA	—	NA	—	—	—	—	NA	—
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	NA	NA	NA	—	NA	—	—	—	0.000413 (J)	NA	—
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	NA	NA	NA	—	NA	—	—	—	—	NA	—
RE21-07-583	21-27558	2.0000–3.0000	QBT3	0.00000158 (J)	3.06E-06	4.78E-07	NA	9.95E-06	NA	NA	NA	NA	NA	NA
RE21-07-75771	21-27563	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	0.0114 (J)	NA	NA	NA	NA
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	NA	NA	NA	—	NA	—	—	—	—	NA	—
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	NA	NA	NA	—	NA	—	—	0.000471 (J)	—	NA	—
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	NA	NA	NA	—	NA	—	—	0.00369	—	NA	—
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	NA	NA	NA	0.0393	NA	—	0.0849	NA	NA	NA	NA
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	NA	NA	NA	—	NA	—	—	—	—	NA	—
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	0.0405	NA	NA	NA	NA
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	NA	NA	NA	—	NA	—	—	—	—	NA	—
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	0.089 (J)	NA	NA	NA	NA
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	NA	NA	NA	—	NA	—	—	—	—	—	NA
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	NA	NA	NA	2.2 (J)	NA	1.8 (J)	5.4	NA	NA	NA	NA
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	NA	NA	NA	0.19 (J)	NA	0.13 (J)	0.49	—	—	—	NA
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	NA	NA	NA	2.1 (J)	NA	2.2	6	NA	NA	NA	NA
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	NA	NA	NA	0.084 (J)	NA	0.24 (J)	0.36	—	0.00049 (J)	0.0015 (J)	NA

Table 6.22-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Phenanthrene	Pyrene	Toluene	Trimethylbenzene[1,2,4-]	Xylene (Total)	Xylene[1,3-]+Xylene[1,4-]
Residential SSL				**na**[h]	**na**	**na**	**6.21**	**na**	**1830**	**1720**	**5570**	**62**[b]	**1090**	**1090**[i]
Industrial SSL				**na**	**na**	**na**	**23.4**	**na**	**20500**	**18300**	**57900**	**260**[b]	**3610**	**3610**[i]
Construction Worker SSL				**na**	**na**	**na**	**213**	**na**	**7150**	**6680**	**21100**	**688**[c]	**3130**	**313**[i]
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	NA	NA	NA	—	NA	—	—	0.00246	—	NA	—
MD21-09-8734	21-605240	0.0000–0.5000	SOIL	NA	NA	NA	—	NA	—	—	NA	NA	NA	NA

Source: SSLs from NMED (2009, 108070).

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

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

[b] EPA regional screening level (carcinogens multiplied by 10 to adjust to 10-5 risk) (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] EPA Region 6 SSL (EPA 2005, 091002).

[g] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

[h] na = Not available.

[i] Xylenes SSLs used as surrogate based on structural similarity.

Table 6.22-3
Summary of Radionuclides Detected or Detected above BVs/FVs at Consolidated Unit 21-026(a)-99

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75726	21-27550	0.0000–0.5000	SOIL	0.194	—[c]	—	0.221	0.028501	—	—	—
RE21-07-75727	21-27550	4.3300–5.3300	QBT3	0.568	—	0.0304	1.38	0.069662	—	—	—
RE21-07-75728	21-27550	6.3300–7.3300	QBT3	0.0777	—	—	0.0546	0.064266	—	—	—
RE21-07-75729	21-27550	9.3300–10.3300	QBT3	0.336	—	—	0.432	0.053788	—	—	—
RE21-07-75730	21-27551	10.0000–11.0000	QBT3	—	—	—	—	0.048368	—	—	—
RE21-07-75731	21-27551	15.0000–16.0000	QBT3	—	—	—	—	0.030543	—	—	—
RE21-07-75732	21-27551	20.0000–21.0000	QBT3	—	—	—	—	0.049667	—	—	—
RE21-07-75735	21-27552	2.0000–3.0000	SOIL	—	0.108	—	—	0.013359	—	—	—
RE21-07-75736	21-27552	5.0000–6.0000	QBT3	—	—	—	—	0.019133	—	—	—
RE21-07-75737	21-27553	0.0000–0.5000	SOIL	0.196	—	—	0.165	—	—	—	—
RE21-07-75738	21-27553	2.0000–3.0000	SOIL	0.104	—	—	0.123	0.042743	—	—	—
RE21-07-75739	21-27553	5.0000–6.0000	QBT3	—	—	—	0.0939	0.052417	—	—	—
RE21-07-75752	21-27554	0.0000–0.5000	SOIL	—	—	—	0.0631	0.003666	—	—	—
RE21-07-75753	21-27554	2.5000–3.5000	QBT3	—	—	—	—	0.014357	—	—	—
RE21-07-75754	21-27554	4.5000–5.5000	QBT3	—	—	—	—	0.018578	—	—	—
RE21-07-75743	21-27555	0.0000–0.5000	SOIL	—	—	—	—	0.038739	—	—	—
RE21-07-75744	21-27555	2.0000–2.5000	QBT3	—	0.33	—	—	0.137131	—	—	—
RE21-07-75745	21-27556	0.0000–0.5000	SOIL	—	—	—	0.468	—	—	—	—
RE21-07-75746	21-27556	2.0000–2.5000	QBT3	—	—	—	—	0.043904	—	—	—
RE21-07-75747	21-27557	0.0000–0.5000	SOIL	—	—	0.073	—	—	—	—	—
RE21-07-75748	21-27557	2.0000–2.5000	QBT3	—	—	—	—	0.033955	—	—	—
RE21-07-75749	21-27558	0.0000–0.5000	SOIL	—	—	—	0.105	0.037091	—	—	—
RE21-07-75750	21-27558	2.0000–2.5000	QBT3	—	—	—	—	0.063699	—	—	—
RE21-07-75755	21-27559	0.0000–0.5000	SOIL	—	—	—	—	0.003199	—	—	—
RE21-07-75756	21-27559	2.5000–3.5000	QBT3	—	—	—	—	0.029128	—	—	—
RE21-07-75757	21-27559	4.5000–5.5000	QBT3	—	—	—	—	0.016753	—	—	—
RE21-07-75766	21-27560	2.0000–3.0000	SOIL	—	—	—	0.0671	0.028452	—	—	—

Table 6.22-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75768	21-27561	2.0000–3.0000	SOIL	—	0.139	—	—	—	—	—	—
RE21-07-75769	21-27562	0.0000–0.5000	SOIL	—	—	—	0.127	0.022418	—	—	—
RE21-07-75770	21-27562	2.0000–3.0000	QBT3	—	—	—	—	0.091826	—	—	—
RE21-07-75772	21-27563	2.0000–3.0000	SOIL	—	0.0691	—	—	0.019399	—	—	—
RE21-07-75773	21-27564	9.5000–10.5000	QBT3	0.0508	0.119	—	0.303	0.022498	—	—	—
RE21-07-75774	21-27564	11.5000–12.5000	QBT3	—	—	—	—	0.003926	—	—	—
RE21-07-75775	21-27565	12.0000–13.0000	QBT3	—	—	—	—	0.062563	—	—	—
RE21-07-75776	21-27565	14.0000–15.0000	QBT3	—	—	—	0.0338	0.032353	—	—	—
RE21-07-75777	21-27566	12.0000–13.0000	QBT3	—	—	—	0.043	0.016385	—	—	—
RE21-07-75778	21-27566	14.0000–15.0000	QBT3	—	—	—	—	0.016279	—	—	—
RE21-07-75781	21-27568	10.0000–11.0000	QBT3	—	—	—	—	0.052654	—	—	—
RE21-07-75782	21-27568	12.0000–13.0000	QBT3	—	NA[d]	—	—	0.059384	—	—	—
RE21-07-75804	21-27570	0.0000–0.5000	SOIL	4.19	—	0.125	3.74	0.28166	—	—	—
RE21-07-75805	21-27570	3.5000–4.5000	QBT3	—	—	—	0.0527	0.092848	—	—	—
RE21-07-75806	21-27570	5.5000–6.5000	QBT3	—	—	—	—	0.035245	—	—	—
RE21-07-75807	21-27571	0.0000–0.5000	SOIL	0.271	—	—	0.468	0.05425	—	—	—
RE21-07-75808	21-27571	3.5000–4.5000	QBT3	0.0718	—	—	0.109	0.08406	—	—	—
RE21-07-75809	21-27571	5.5000–6.5000	QBT3	—	—	—	—	0.093882	—	—	—
RE21-07-75810	21-27572	0.0000–0.5000	QBT3	—	—	—	—	0.0082	—	—	—
RE21-07-75811	21-27572	2.0000–3.0000	QBT3	—	—	—	—	0.0396	—	—	—
RE21-07-75812	21-27572	5.0000–6.0000	QBT3	—	—	—	NA	0.0128	—	—	—
RE21-07-75813	21-27573	0.0000–0.5000	SOIL	—	—	—	0.077	—	—	—	—
RE21-07-75815	21-27574	0.0000–0.5000	SOIL	0.0418	—	—	—	—	—	—	—
RE21-07-75816	21-27574	2.0000–3.0000	QBT3	—	—	—	—	0.02	—	—	—
RE21-07-75817	21-27575	0.0000–0.5000	SOIL	0.0296	—	—	0.169	—	—	—	—
RE21-07-75818	21-27575	2.0000–3.0000	QBT3	0.177	—	0.25	1.08	0.053	—	—	—
RE21-07-75819	21-27576	0.0000–0.5000	SOIL	58.1	—	3.24	83.5	6.12	12.6	0.65	3.44
RE21-07-75820	21-27576	2.0000–3.0000	QBT3	1.09	—	0.082	2.33	0.701	—	—	—
RE21-07-75821	21-27577	0.0000–0.5000	SOIL	0.182	—	—	0.369	—	—	—	—

Table 6.22-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SSL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SSL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SSL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-75822	21-27577	2.0000–3.0000	QBT3	—	—	—	0.0391	0.0165	—	—	—
RE21-07-75823	21-27578	0.0000–0.5000	SOIL	0.087	—	—	0.138	0.0343	—	—	—
RE21-07-75825	21-27579	0.0000–0.5000	SOIL	5.99	—	2.35	20.5	0.538	43.1	1.8	5.2
RE21-07-75826	21-27579	2.0000–3.0000	QBT3	0.131	—	0.079	0.508	0.106	3.39	0.212	—
RE21-07-75827	21-27580	0.0000–0.5000	SOIL	—	—	—	0.126	0.0082	—	—	—
RE21-07-75828	21-27580	2.0000–3.0000	QBT3	—	—	NA	—	0.0162	—	—	—
RE21-07-75829	21-27581	10.0000–11.0000	QBT3	—	NA	—	—	0.063362	—	—	—
RE21-07-75830	21-27581	12.0000–13.0000	QBT3	—	—	—	—	0.038859	—	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.23-1
Summary of Inorganic Chemicals above BVs at SWMU 21-027(a)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead
QBT3 Background Value				**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**
SOIL Background Value				**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**
Residential SSL				**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**400**
Industrial SSL				**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**
Construction Worker SSL				**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	—[c]	—	—	2.86	—	509	148	—	57
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	—	—	—	—	—	27.8	8.25	—	—
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	—	—	—	2.03	—	146	31.5	—	24.5
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	—	—	—	—	—	15.6	—	—	12.8
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	—	—	—	2	—	187	60.5	—	53.4
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	—	—	—	—	—	32.7	6.16	—	12.2
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	NA[d]	—	—	0.457 (J)	—	82.4	17.6	—	22.7 (J)
RE21-07-3901	21-600864	2.0000–3.0000	QBT3	NA	—	—	—	—	10.5	—	—	—
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	NA	—	—	0.696	—	42.2	—	—	37.6 (J)
RE21-07-3903	21-600865	2.0000–3.0000	QBT3	NA	—	—	—	—	12	—	—	—
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	NA	—	—	0.502 (U)	—	—	—	—	—
RE21-07-3905	21-600866	2.0000–3.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	NA	—	—	0.805	—	105	—	—	—
RE21-07-3907	21-600867	2.0000–3.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	NA	—	—	0.468 (J)	—	105	—	—	—
RE21-07-3909	21-600868	2.0000–3.0000	QBT3	NA	—	—	—	—	—	—	—	—
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	NA	—	—	2.07	—	152	40.7	—	24.5 (J)
RE21-07-3917	21-600872	2.0000–3.0000	QBT3	NA	—	—	—	—	13.6	4.7	—	—
RE21-07-3918	21-600872	5.0000–6.0000	QBT3	NA	—	—	—	—	9.95	—	—	—
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	—	—	—	—	—	—	—	—	—
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	—	—	—	0.515 (U)	—	—	—	—	—
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	—	6.45	95.6	—	2820	503	47.2	—	37.7
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	—	4.2	61.8	—	—	81.2	16.1	—	19.4
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	—	9.28	—	0.542 (U)	—	—	—	—	—
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	—	—	—	0.568 (U)	—	—	—	—	—
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	—	—	—	0.585 (U)	—	—	—	—	—
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	—	—	—	0.605 (U)	—	—	—	—	—

Table 6.23-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Copper	Cyanide (Total)	Lead
QBT3 Background Value				**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**4.66**	**0.5**	**11.2**
SOIL Background Value				**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**14.7**	**0.5**	**22.3**
Residential SSL				**31.3**	**3.9**	**15600**	**77.9**	**na**[a]	**219**[b]	**3130**	**1560**	**400**
Industrial SSL				**454**	**17.7**	**224000**	**1120**	**na**	**2920**[b]	**45400**	**22700**	**800**
Construction Worker SSL				**124**	**65.4**	**4350**	**309**	**na**	**449**[b]	**12400**	**6190**	**800**
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	1.8 (J-)	—	—	0.66	—	561 (J)	NA	0.52 (UJ)	41.9 (J-)
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	—	—	—	—	—	116	NA	0.51 (UJ)	13.3 (J-)
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	—	—	—	0.791	—	80.7	77.8	—	35.6
RE21-07-5871	21-601229	6.0000–7.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5872	21-601229	11.0000–12.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	—	—	—	—	—	—	—	—	—
RE21-07-5876	21-601229	21.0000–22.0000	QBT3	—	—	—	—	—	—	—	—	—
MD21-09-8838	21-605279	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	—	—	NA	18
MD21-09-8839	21-605280	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	140 (J+)	NA	NA	NA
MD21-09-12456	21-608020	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	76 (J)	NA	NA	NA

Table 6.23-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lithium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Strontium	Vanadium	Zinc
QBT3 Background Value				**na**	**0.1**	**6.58**	**na**	**na**	**0.3**	**na**	**17**	**63.5**
SOIL Background Value				**na**	**0.1**	**15.4**	**na**	**na**	**1.52**	**na**	**39.6**	**48.8**
Residential SSL				**160**[e]	**23**[e]	**1560**	**125000**	**54.8**	**391**	**46900**	**391**	**23500**
Industrial SSL				**2000**[e]	**310**[e]	**22700**	**1820000**	**795**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**619**[f]	**92.9**[f]	**6190**	**496000**	**217**	**1550**	**186000**	**1550**	**92900**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	11	0.213	—	3.57	—	—	43.2 (J)	—	398
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	4.14	—	—	3	—	1.46 (U)	4.13 (J)	—	—
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	7.31	—	—	6.78	0.00364	—	26.7 (J)	—	128
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	4.65	—	—	—	—	1.5 (U)	4.55 (J)	—	—
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	15.3	0.457	—	13.9	0.000884 (J)	—	38.5 (J)	—	209
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	3.41	—	—	3.95	—	0.923 (J)	8.18 (J)	—	—
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	8.99	—	—	3.19	—	—	16.2	—	—
RE21-07-3901	21-600864	2.0000–3.0000	QBT3	3.5	—	—	2.08	—	1.48 (U)	2.6	—	—
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	9.02	—	—	2.98	—	—	11.7	—	52.9
RE21-07-3903	21-600865	2.0000–3.0000	QBT3	4.25	—	—	—	0.00135 (J)	1.49 (U)	4.77	—	—
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	8.21	—	—	2.6	—	—	3.06	—	—
RE21-07-3905	21-600866	2.0000–3.0000	QBT3	1.86 (J)	—	—	—	—	0.562 (J)	1.17	—	—
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	6.73	0.224	—	3.11	—	—	11.6	—	59.8
RE21-07-3907	21-600867	2.0000–3.0000	QBT3	2.33	—	—	—	—	1.49 (U)	0.703	—	—
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	9.11	—	—	3.1	0.000581 (J)	—	12.5	—	58.9
RE21-07-3909	21-600868	2.0000–3.0000	QBT3	5.1	—	—	—	—	0.594 (J)	6.79	—	—
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	9.37	—	—	3.92	—	—	20.3	—	160
RE21-07-3917	21-600872	2.0000–3.0000	QBT3	4.05	—	—	—	—	1.45 (U)	3.2	—	—
RE21-07-3918	21-600872	5.0000–6.0000	QBT3	4.45	—	—	2.1	—	1.5 (U)	2.34	—	—
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	12	—	—	4.59	0.00178 (J+)	2.34	20.4	—	148
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	15.3	—	—	2.73	0.00231 (J+)	2.13	25.7	—	73.5
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	13.6	0.487	11.9	3.03	—	2.75	24.9	22.2	175
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	8.81	—	—	1.84	—	2.95	14.8	—	—
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	18.1	—	—	1.22	—	4	32.8	—	66.6
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	13	—	—	—	—	2.83	21.4	—	—
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	14.3	—	—	—	—	—	33.9	—	100
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	11.1	—	—	1.81	—	1.81 (U)	18	—	278
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	5.2	0.598 (J+)	—	1.6	—	—	23.3 (J)	—	698 (J)
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	2.1 (J)	0.274 (J+)	—	1.8	—	—	11.5	—	176
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	8.31 (J+)	0.333	—	4.54	—	4.09	16	—	349

Table 6.23-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Lithium	Mercury	Nickel	Nitrate	Perchlorate	Selenium	Strontium	Vanadium	Zinc
QBT3 Background Value				**na**	**0.1**	**6.58**	**na**	**na**	**0.3**	**na**	**17**	**63.5**
SOIL Background Value				**na**	**0.1**	**15.4**	**na**	**na**	**1.52**	**na**	**39.6**	**48.8**
Residential SSL				**160**[e]	**23**[e]	**1560**	**125000**	**54.8**	**391**	**46900**	**391**	**23500**
Industrial SSL				**2000**[e]	**310**[e]	**22700**	**1820000**	**795**	**5680**	**681000**	**5680**	**341000**
Construction Worker SSL				**619**[f]	**92.9**[f]	**6190**	**496000**	**217**	**1550**	**186000**	**1550**	**92900**
RE21-07-5871	21-601229	6.0000–7.0000	QBT3	5.43 (J+)	—	—	—	—	1.8	1.19	—	—
RE21-07-5872	21-601229	11.0000–12.0000	QBT3	4.49 (J+)	—	—	—	—	1.33 (J)	0.573	—	—
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	5.34 (J+)	—	—	—	—	1.87	0.96	—	—
RE21-07-5876	21-601229	21.0000–22.0000	QBT3	5.29 (J+)	—	—	—	—	1.35 (J)	0.502 (J)	—	—
MD21-09-8838	21-605279	0.0000–0.5000	QBT3	NA	—	NA	NA	NA	NA	NA	NA	—
MD21-09-8839	21-605280	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-12456	21-608020	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

[c] — = Not detected or not detected above BV.

[d] NA = Not analyzed.

[e] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table 6.23-2
Summary of Organic Chemicals Detected at SWMU 21-027(a)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**39600**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**369000**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**148000**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	0.0481	NA[b]	0.0776	NA	NA	0.336	0.372	0.586	0.18	—[c]	—	NA
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	—	NA	0.0173 (J)	NA	NA	0.2	0.24	0.375	0.162	—	—	NA
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	0.0557 (J)	NA	0.0906 (J)	NA	NA	0.713	0.819	1.55	0.457	—	0.287 (J)	NA
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	0.0639	0.0273 (J)	—	—	NA
RE21-08-10373	21-600864	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10374	21-600864	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	—	NA	—	NA	NA	0.042	—	0.0848	0.0346 (J)	—	—	NA
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	NA
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	—	NA	0.00724 (J)	NA	NA	—	—	0.137	—	—	—	NA
RE21-08-10375	21-600867	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10376	21-600867	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	—	NA	—	NA	NA	—	—	—	—	—	—	NA
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	0.0227 (J)	NA	0.0323 (J)	NA	NA	0.201	—	0.387	0.137 (J)	—	—	NA
RE21-07-3925	21-600872	0.0000–0.5000	SOIL	NA	NA	NA	0.0518	0.0284 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-08-10371	21-600872	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	—	—	—	NA	NA	0.0223 (J)	—	—	—	—	—	—
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	—	—	—	NA	NA	0.0189 (J)	—	—	—	—	—	—
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	0.0457	—	0.0542	NA	NA	0.339	0.378 (J)	0.616 (J)	0.19 (J)	0.244 (J)	—	—
RE21-08-10372	21-601225	1.0000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	—	—	—	NA	NA	0.0196 (J)	—	0.033 (J)	—	—	—	—
RE21-07-5893	21-601225	3.0000–4.0000	QBT3	NA	NA	NA	0.0095	0.0069	NA	NA	NA	NA	NA	NA	NA
MD21-09-12457	21-601225	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	—	—	0.0113 (J)	NA	NA	0.0537 (J)	—	—	—	—	—	—

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acetone	Anthracene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Butanone[2-]
Residential SSL				**3440**	**67500**	**17200**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**39600**
Industrial SSL				**36700**	**851000**	**183000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**369000**
Construction Worker SSL				**18600**	**263000**	**66800**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**148000**
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	—	0.0269 (J)	—	NA	NA	—	—	—	—	—	—	0.00581 (J)
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	—	—	—	NA	NA	—	—	0.0493 (J)	—	—	—	—
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	—	—	—	NA	NA	—	—	0.04 (J)	—	—	0.044 (J)	—
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	0.0188 (J)	—	0.0343 (J)	NA	NA	0.141	0.155	0.36	0.092	—	—	—
RE21-08-10369	21-601229	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-08-10370	21-601229	6.0000–7.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-8597	21-601229	11.0000–12.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	—	—	—	NA	NA	—	—	—	—	—	—	—

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbon Disulfide	Chrysene	Di-n-butylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]
Residential SSL				**1940**	**621**	**6110**	**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**7540**	**2340**	**68400**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**5890**	**20600**	**23800**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	NA	0.386	—	0.873	0.0344	NA	NA	NA	NA	NA	NA	NA
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	NA	0.272	—	0.422	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	—	—	—	0.0108 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	NA	0.801	—	1.84	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	NA	0.0274 (J)	—	0.0544	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-10373	21-600864	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	1.15E-05	2.56E-05	2.57E-06	0.000000244 (J)	6.38E-06	0.000000323 (J)	0.000000642 (J)
RE21-08-10374	21-600864	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	—	1.6E-07	—	—	—	—	—
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	NA	0.047	—	0.0738	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	NA	—	—	0.012 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	NA	0.0771	—	0.133	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-10375	21-600867	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.000000613 (J)	1.28E-06	0.000000177 (J)	—	3.9E-07	—	—
RE21-08-10376	21-600867	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	0.000000125 (J)	1.25E-07	—	—	—	—	—
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	NA	0.0273 (J)	—	0.0469	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	NA	0.232	—	0.461	0.0156 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-07-3925	21-600872	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	0.0837	0.201	0.0109	0.000799	0.0518	0.000499	0.00304
RE21-08-10371	21-600872	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	0.000000362 (J)	7.35E-07	—	—	—	—	—
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	—	0.0206 (J)	—	0.0214 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	—	—	—	0.0209 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	—	0.442	—	1.3	0.0295 (J)	NA	NA	NA	NA	NA	NA	NA
RE21-08-10372	21-601225	1.0000–2.0000	QBT3	NA	NA	NA	NA	NA	0.00031	0.000668	7.56E-05	6.38E-06	0.00035	3.7E-06	1.45E-05
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	—	0.0208 (J)	—	0.0396	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5893	21-601225	3.0000–4.0000	QBT3	NA	NA	NA	NA	NA	0.00132	0.00279	0.000152 (J)	1.42E-05	0.000726 (J)	6.38E-06	3.79E-05
MD21-09-12457	21-601225	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	0.000162	0.000338	1.52E-05	0.00000159 (J)	5.96E-05	0.00000173 (J)	4.98E-06
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	—	0.0688 (J)	—	0.134	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	—	—	—	0.0122 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Carbon Disulfide	Chrysene	Di-n-butylphthalate	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]
Residential SSL				**1940**	**621**	**6110**	**2290**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**7540**	**2340**	**68400**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**5890**	**20600**	**23800**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	—	0.063 (J)	0.12 (J)	0.048 (J)	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	—	—	0.036 (J)	—	—	NA	NA	NA	NA	NA	NA	NA
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	—	0.17	0.0572 (J)	0.359	—	NA	NA	NA	NA	NA	NA	NA
RE21-08-10369	21-601229	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	0.00482	0.00983	0.000058	6.12E-06	0.000252	3.49E-06	2.26E-05
RE21-08-10370	21-601229	6.0000–7.0000	SOIL	NA	NA	NA	NA	NA	0.000447	0.000912	1.85E-05	0.0000021 (J)	0.000076	0.00000201 (J)	7.71E-06
MD21-09-8597	21-601229	11.0000–12.0000	QBT3	NA	NA	NA	NA	NA	8.52E-05	0.000182	6.09E-06	—	2.34E-05	0.000000936 (J)	0.00000208 (J)
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	0.00585	—	—	—	—	NA	NA	NA	NA	NA	NA	NA

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]
Residential SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**6.21**	**45**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**23.4**	**252**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**213**	**702**	**na**	**na**	**na**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.229	—	NA	NA	NA
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.213	—	NA	NA	NA
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.721	—	NA	NA	NA
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0218 (J)	—	NA	NA	NA
RE21-08-10373	21-600864	0.0000–0.5000	SOIL	0.000000564 (J)	6.05E-06	0.000000278 (J)	0.0000002 (J)	—	0.000000229 (J)	3.01E-06	NA	NA	8.85E-05	5.49E-06	0.000000239 (J)
RE21-08-10374	21-600864	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	NA	NA	0.000000522 (J)	—	—
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-08-10375	21-600867	0.0000–0.5000	SOIL	—	—	—	—	—	—	1.1E-07	NA	NA	0.00000441 (J)	0.000000395 (J)	—
RE21-08-10376	21-600867	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	NA	NA	0.000000475 (J)	—	—
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.115 (J)	—	NA	NA	NA
RE21-07-3925	21-600872	0.0000–0.5000	SOIL	0.00129	0.0212	0.000279	0.000296	7.85E-05	0.000619	0.0135	NA	NA	0.35	0.0351	0.000247
RE21-08-10371	21-600872	2.0000–3.0000	QBT3	—	—	—	—	—	—	—	NA	NA	0.00000179 (J)	—	—
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	0.195 (J)	0.0143 (J)	NA	NA	NA
RE21-08-10372	21-601225	1.0000–2.0000	QBT3	6.85E-06	9.52E-05	4.27E-06	3.13E-06	0.000000806 (J)	4.23E-06	0.00011	NA	NA	0.00217	0.000184	0.0000023 (J)
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5893	21-601225	3.0000–4.0000	QBT3	1.61E-05	0.000259	4.92E-06	3.82E-06	0.00000129 (J)	6.92E-06	0.000205	NA	NA	0.0152	0.000503 (J)	3.22E-06
MD21-09-12457	21-601225	7.0000–8.0000	QBT3	4.01E-06	4.49E-05	0.000000809 (J)	0.000000689 (J)	0.00000023 (J)	0.00000109 (J)	2.42E-05	NA	NA	0.00139	4.54E-05	0.00000157 (J)
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]
Residential SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**6.21**	**45**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**23.4**	**252**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**na**	**na**	**213**	**702**	**na**	**na**	**na**
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	NA	NA	NA	NA	NA	NA	NA	0.0733	—	NA	NA	NA
RE21-08-10369	21-601229	1.0000–2.0000	SOIL	0.000011	0.000334	0.00000219 (J)	0.00000168 (J)	0.000000587 (J)	0.00000234 (J)	6.12E-05	NA	NA	0.0353	0.000141	0.00000165 (J)
RE21-08-10370	21-601229	6.0000–7.0000	SOIL	4.44E-06	0.000069	0.00000105 (J)	0.000000854 (J)	0.000000316 (J)	0.00000126 (J)	2.63E-05	NA	NA	0.00364	0.000046	0.00000145 (J)
MD21-09-8597	21-601229	11.0000–12.0000	QBT3	0.00000162 (J)	1.78E-05	—	—	—	—	5.81E-06	NA	NA	0.000879 (J)	2.15E-05	0.000000601 (J)
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	—	—	NA	NA	NA

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Tetrachloroethene	Toluene
Residential SSL				**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000045**	**na**	**0.000374**	**na**	**6.99**	**5570**
Industrial SSL				**na**	**na**	**na**	**na**	**20500**	**18300**	**0.000204**	**na**	**0.00147**	**na**	**36.4**	**57900**
Construction Worker SSL				**na**	**na**	**na**	**na**	**7150**	**6680**	**0.000284**	**na**	**0.0127**	**na**	**338**	**21100**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.415	0.759	NA	NA	NA	NA	NA	NA
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	NA	NA	—	0.000401 (J)
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0989	0.405	NA	NA	NA	NA	NA	NA
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	NA	NA	—	—
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.611	1.72	NA	NA	NA	NA	NA	NA
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	NA	NA	—	0.000414 (J)
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0153 (J)	0.0458	NA	NA	NA	NA	NA	NA
RE21-08-10373	21-600864	0.0000–0.5000	SOIL	4.79E-07	—	—	1.9E-06	NA	NA	—	—	0.00000015 (J)	6.07E-07	NA	NA
RE21-08-10374	21-600864	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	NA	NA
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0206 (J)	0.0648	NA	NA	NA	NA	NA	NA
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	0.0109 (J)	NA	NA	NA	NA	NA	NA
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0509	0.124	NA	NA	NA	NA	NA	NA
RE21-08-10375	21-600867	0.0000–0.5000	SOIL	—	—	—	—	NA	NA	—	—	—	—	NA	NA
RE21-08-10376	21-600867	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	NA	NA
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0142 (J)	0.045	NA	NA	NA	NA	NA	NA
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.207	0.316	NA	NA	NA	NA	NA	NA
RE21-07-3925	21-600872	0.0000–0.5000	SOIL	0.002	3.03E-05	8.49E-05	0.00225	NA	NA	2.59E-05	0.00021	9.24E-06	0.000427	NA	NA
RE21-08-10371	21-600872	2.0000–3.0000	QBT3	—	—	—	—	NA	NA	—	—	—	—	NA	NA
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	NA	NA	NA	NA	—	0.0274 (J)	NA	NA	NA	NA	—	0.000341 (J+)
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	NA	NA	NA	NA	—	0.0235 (J)	NA	NA	NA	NA	0.000227 (J)	0.00066 (J+)
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	NA	NA	NA	NA	0.597	1.1	NA	NA	NA	NA	—	0.000785 (J+)
RE21-08-10372	21-601225	1.0000–2.0000	QBT3	1.79E-05	0.000000767 (J)	—	4.12E-05	NA	NA	0.000000429 (J)	1.58E-06	0.00000077 (J)	9.55E-06	NA	NA
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	NA	NA	NA	NA	0.0239 (J)	0.0325 (J)	NA	NA	NA	NA	—	0.00117
RE21-07-5893	21-601225	3.0000–4.0000	QBT3	2.79E-05	0.000000503 (J)	0.00000143 (J)	2.76E-05	NA	NA	5.99E-07	4.23E-06	0.000000302 (J)	6.43E-06	NA	NA
MD21-09-12457	21-601225	7.0000–8.0000	QBT3	8.85E-06	0.000000131 (J)	0.000000234 (J)	7.43E-06	NA	NA	0.000000412 (J)	2.66E-06	—	1.6E-06	NA	NA
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	NA	NA	NA	NA	0.0745	0.153 (J)	NA	NA	NA	NA	0.000781 (J)	—
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	NA	NA	NA	NA	—	—	NA	NA	NA	NA	—	0.000448 (J)
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	NA	NA	NA	NA	—	0.0293 (J)	NA	NA	NA	NA	0.00078 (J)	—
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	NA	NA	NA	NA	—	—	NA	NA	NA	NA	0.00559	—

Table 6.23-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)	Tetrachloroethene	Toluene
Residential SSL				**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000045**	**na**	**0.000374**	**na**	**6.99**	**5570**
Industrial SSL				**na**	**na**	**na**	**na**	**20500**	**18300**	**0.000204**	**na**	**0.00147**	**na**	**36.4**	**57900**
Construction Worker SSL				**na**	**na**	**na**	**na**	**7150**	**6680**	**0.000284**	**na**	**0.0127**	**na**	**338**	**21100**
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	0.04 (J)	NA	NA	NA	NA	—	—
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	NA	NA	—	—
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	NA	NA	NA	NA	0.176	0.309	NA	NA	NA	NA	—	—
RE21-08-10369	21-601229	1.0000–2.0000	SOIL	1.51E-05	—	0.00000072 (J)	1.18E-05	NA	NA	0.000000358 (J)	2.74E-06	0.000000178 (J)	3.96E-06	NA	NA
RE21-08-10370	21-601229	6.0000–7.0000	SOIL	8.71E-06	0.000000171 (J)	0.000000425 (J)	6.07E-06	NA	NA	—	5.24E-07	—	1.02E-06	NA	NA
MD21-09-8597	21-601229	11.0000–12.0000	QBT3	2.54E-06	—	—	1.6E-06	NA	NA	0.000000115 (J)	2.84E-07	—	—	NA	NA
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	NA	NA	—	—

Source: SSLs from NMED (2009, 108070).

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

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

[b] NA = Not analyzed.

[c] — = Not detected.

[d] na = Not available.

Table 6.23-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-027(a)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-3894	21-600861	0.0000–0.5000	SOIL	54.5 (J)	—[c]	22.6	144	—	38.7	1.9	2.39
RE21-07-3895	21-600861	2.0000–3.0000	QBT3	0.865	—	1.23	4.7	—	3.27	0.246	—
RE21-07-3896	21-600862	0.0000–0.5000	SOIL	16.7 (J)	—	28.3	96.4	—	11.8	0.656	—
RE21-07-3897	21-600862	2.0000–3.0000	QBT3	0.674	—	1.52	3.32	—	2.7	0.193	—
RE21-07-3898	21-600863	0.0000–0.5000	SOIL	24.7	—	27.9	159	0.108889	51.9	2.74	—
RE21-07-3899	21-600863	2.0000–3.0000	QBT3	1.01	—	1.52	4.56	—	2.65	0.186	—
RE21-07-3900	21-600864	0.0000–0.5000	SOIL	2.54	—	2.23	14.7	—	4.68	0.361	—
RE21-07-3901	21-600864	2.0000–3.0000	QBT3	0.279	—	0.324	1.37	—	—	0.124	—
RE21-07-3902	21-600865	0.0000–0.5000	SOIL	6.64	—	7.09	39.1	—	8.11	0.411	—
RE21-07-3903	21-600865	2.0000–3.0000	QBT3	0.269	—	0.401	1.25	—	—	0.116	—
RE21-07-3904	21-600866	0.0000–0.5000	SOIL	0.235	—	0.282	1.2	—	3.5	—	2.77
RE21-07-3905	21-600866	2.0000–3.0000	QBT3	—	—	—	0.0329	—	—	0.101	—
RE21-07-3906	21-600867	0.0000–0.5000	SOIL	7.11	—	8.52	33.8	0.019911	7.65	0.454	—
RE21-07-3907	21-600867	2.0000–3.0000	QBT3	0.3	—	0.482	1.67	—	—	0.105	—
RE21-07-3908	21-600868	0.0000–0.5000	SOIL	5.57	—	2.23	28.9	—	4.35	0.209	—
RE21-07-3909	21-600868	2.0000–3.0000	QBT3	0.0699	—	0.068	0.353	—	—	—	—
RE21-07-3916	21-600872	0.0000–0.5000	SOIL	15.1	—	22.3	72.9	0.018326	25.9	1.26	—
RE21-07-3917	21-600872	2.0000–3.0000	QBT3	0.574	—	0.815	2.74	—	—	0.0994	—
RE21-07-3918	21-600872	5.0000–6.0000	QBT3	0.463	—	0.831	3.44	—	—	—	—
RE21-07-5860	21-601224	1.0000–2.0000	SOIL	1.43	0.179	0.753	13.4	0.01811	—	—	—
RE21-07-5861	21-601224	3.0000–4.0000	SOIL	1.65	—	0.593	14.4	0.021812	—	—	—
MD21-09-8594	21-601224	8.0000–9.0000	QBT3	0.05	NAd	—	0.123	NA	NA	NA	NA
RE21-07-5862	21-601225	1.0000–2.0000	QBT3	27.7	0.302	4.85	168	0.061462	12.7	0.866	—
RE21-07-5863	21-601225	3.0000–4.0000	QBT3	2.75	NA	0.598	17.7	—	2.87	—	—
RE21-07-5864	21-601226	2.5000–3.5000	SOIL	3.01	—	1.1	46.4	0.277904	—	—	—

Table 6.23-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236	Uranium-238
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**	**1.93**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**	**2.29**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**	**87**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**	**430**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**	**160**
RE21-07-5865	21-601226	4.5000–5.5000	SOIL	0.0775	—	—	0.497	0.71619	—	—	—
MD21-09-8599	21-601226	9.5000–10.5000	QBT3	NA	NA	NA	NA	0.400616	NA	NA	NA
RE21-07-5866	21-601227	1.5000–2.5000	SOIL	0.828	—	0.192	5.38	—	2.66	0.202	—
RE21-07-5867	21-601227	3.5000–4.5000	SOIL	2.39	—	0.746	14.1	—	2.79	—	—
MD21-09-8593	21-601227	8.5000–9.5000	QBT3	—	NA	0.0278	0.169	NA	NA	NA	NA
RE21-07-5868	21-601228	2.0000–3.0000	SOIL	12.1	0.239	11.5	113	—	—	NA	—
RE21-07-5869	21-601228	4.0000–5.0000	QBT3	—	—	—	27.9	—	—	—	—
RE21-07-5870	21-601229	1.0000–2.0000	SOIL	35.9	0.452	89.4 (J)	143	0.014984	4.5	0.258	—
RE21-07-5871	21-601229	6.0000–7.0000	QBT3	—	—	—	0.0272	0.012764	—	—	—
RE21-07-5873	21-601229	16.0000–17.0000	QBT3	—	—	—	0.0974	—	—	—	—
MD21-09-8838	21-605279	0.0000–0.5000	QBT3	—	NA	—	0.211	NA	—	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 6.24-1
Summary of Inorganic Chemicals above BVs at SWMU 21-027(c)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Lead	Manganese	Mercury	Nitrate	Perchlorate	Selenium	Uranium	Zinc
QBT3 Background Value				**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**11.2**	**482**	**0.1**	**na**[a]	**na**	**0.3**	**2.4**	**63.5**
SOIL Background Value				**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**22.3**	**671**	**0.1**	**na**	**na**	**1.52**	**1.82**	**48.8**
Residential SSL				**3.9**	**15600**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**400**	**10700**	**23**[c]	**125000**	**54.8**	**391**	**235**	**23500**
Industrial SSL				**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**800**	**145000**	**310**[c]	**1820000**	**795**	**5680**	**3410**	**341000**
Construction Worker SSL				**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**800**	**463**	**92.9**[d]	**496000**	**217**	**1550**	**929**	**92900**
RE21-07-75115	21-27399	3.0000–4.0000	SOIL	—[e]	—	—	—	—	—	32.9 (J+)	90.4	—	0.37	—	0.000649 (J)	—	—	137 (J+)
RE21-07-75116	21-27399	5.0000–6.0000	SOIL	—	—	0.541 (U)	—	—	—	26 (J+)	35.1	—	0.129	—	—	—	2.04	79.2 (J+)
RE21-07-75117	21-27399	8.0000–9.0000	QBT3	3.4	97 (J+)	—	—	—	4.56	9.16 (J+)	24.8	546 (J+)	—	—	—	1.67 (U)	—	—
RE21-07-75121	21-27401	0.0000–0.5000	SOIL	—	—	0.417 (J)	21500 (J)	—	—	—	—	—	—	—	—	—	—	62.6 (J-)
RE21-07-75122	21-27401	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.2 (J-)
RE21-07-75123	21-27402	0.0000–0.5000	SOIL	—	—	0.719	—	—	—	—	61.5	—	—	0.851 (J-)	—	1.61 (U)	—	102 (J-)
RE21-07-75124	21-27402	2.0000–2.5000	SOIL	—	—	—	—	—	—	—	66.3	—	—	—	—	1.66 (U)	—	56.2 (J-)
RE21-07-75125	21-27403	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	0.968 (J-)	—	—	—	—
RE21-07-75126	21-27403	2.0000–2.5000	SOIL	—	—	0.548	—	—	—	—	31	—	—	—	—	1.58 (U)	—	57 (J-)
RE21-07-75127	21-27404	0.0000–0.5000	SOIL	—	—	0.491 (J)	—	—	—	17.7	31.6	—	0.111	—	—	1.68 (U)	—	108 (J-)
RE21-07-75128	21-27404	2.0000–2.5000	SOIL	—	—	—	—	52.3	—	—	—	—	—	0.843 (J-)	—	1.65 (U)	—	58 (J-)
RE21-07-75129	21-27405	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	1.81 (U)	—	—
RE21-07-75130	21-27405	2.0000–2.5000	SOIL	—	—	0.576 (U)	—	36.5	—	—	—	—	—	—	—	1.73 (U)	—	—
RE21-07-75131	21-27406	0.0000–0.5000	SOIL	—	—	0.522 (J)	—	—	—	—	34.4	—	—	—	—	—	2.77	86.3 (J-)
RE21-07-75132	21-27406	2.0000–2.5000	SOIL	—	—	0.519 (U)	8230 (J)	—	—	—	—	—	—	—	—	1.56 (U)	—	—
RE21-07-75133	21-27407	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	—	—	—	1.02 (J-)	—	—	—	—
RE21-07-75134	21-27407	2.0000–2.5000	SOIL	—	—	0.5 (U)	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75135	21-27408	0.0000–0.5000	SOIL	—	—	0.533 (U)	—	—	—	—	—	—	—	0.859 (J-)	—	1.6 (U)	—	—
RE21-07-75136	21-27408	2.0000–2.5000	SOIL	—	—	0.53 (U)	—	—	—	—	—	—	—	—	—	1.59 (U)	—	—
RE21-07-75137	21-27409	0.0000–0.5000	SOIL	—	—	0.511 (U)	—	—	—	—	—	—	—	0.788 (J-)	—	1.53 (U)	—	—
RE21-07-75138	21-27409	2.0000–2.5000	SOIL	—	—	0.5 (U)	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75139	21-27410	0.0000–0.5000	SOIL	—	—	0.502 (U)	—	—	—	—	—	—	—	1.04 (J-)	—	—	—	—
RE21-07-75140	21-27410	2.0000–2.5000	SOIL	—	—	0.514 (U)	—	—	—	—	—	—	—	—	—	1.54 (U)	—	—
RE21-07-75141	21-27411	0.0000–0.5000	SOIL	—	—	0.514 (U)	—	—	—	—	—	—	—	—	—	1.54 (U)	—	—
RE21-07-75142	21-27411	2.0000–2.5000	SOIL	—	—	0.514 (U)	—	—	—	—	—	—	—	—	—	1.54 (U)	—	—
RE21-07-75143	21-27412	0.0000–0.5000	SOIL	—	—	0.534 (U)	—	—	—	—	78.5	—	—	0.879 (J)	—	1.6 (U)	—	—
RE21-07-75144	21-27412	2.0000–2.5000	SOIL	—	—	0.512 (U)	—	—	—	—	114	—	—	—	—	1.53 (U)	—	—

Table 6.24-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Lead	Manganese	Mercury	Nitrate	Perchlorate	Selenium	Uranium	Zinc
QBT3 Background Value				**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**11.2**	**482**	**0.1**	**na**[a]	**na**	**0.3**	**2.4**	**63.5**
SOIL Background Value				**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**22.3**	**671**	**0.1**	**na**	**na**	**1.52**	**1.82**	**48.8**
Residential SSL				**3.9**	**15600**	**77.9**	**na**	**219**[b]	**23**[c]	**3130**	**400**	**10700**	**23**[c]	**125000**	**54.8**	**391**	**235**	**23500**
Industrial SSL				**17.7**	**224000**	**1120**	**na**	**2920**[b]	**300**[c]	**45400**	**800**	**145000**	**310**[c]	**1820000**	**795**	**5680**	**3410**	**341000**
Construction Worker SSL				**65.4**	**4350**	**309**	**na**	**449**[b]	**34.9**[d]	**12400**	**800**	**463**	**92.9**[d]	**496000**	**217**	**1550**	**929**	**92900**
MD21-09-8715	21-27412	4.0000–5.0000	QBT3	NA[f]	NA	NA	NA	NA	NA	NA	120 (J)	NA	NA	NA	NA	NA	NA	NA
MD21-09-12452	21-27412	7.0000–8.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	100	NA	NA	NA	NA	NA	NA	NA
RE21-07-75145	21-27413	2.5000–3.5000	SOIL	—	—	—	—	—	—	35.3 (J+)	44.9	—	—	—	—	—	3.92	231 (J+)
RE21-07-75146	21-27413	4.5000–5.5000	SOIL	—	—	0.585 (U)	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75147	21-27414	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	26.9	—	—	2.75	0.00155 (J)	—	—	51.5 (J+)
RE21-07-75148	21-27414	3.0000–4.0000	SOIL	—	—	0.538 (U)	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75151	21-27414	5.0000–6.0000	SOIL	—	—	—	—	—	—	—	25.9	—	—	—	—	1.63 (U)	—	—
RE21-07-75149	21-27415	0.0000–0.5000	SOIL	—	—	—	—	—	—	—	24.8	—	—	1.88	0.00104 (J)	—	—	60.1 (J+)
RE21-07-75150	21-27415	3.0000–4.0000	SOIL	—	—	0.545 (U)	—	—	—	—	—	—	—	—	—	—	—	—
RE21-07-75153	21-27415	5.0000–6.0000	SOIL	—	—	0.547 (U)	—	—	—	—	—	—	0.895	—	0.000663 (J)	—	—	—
MD21-09-8714	21-605234	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] na = Not available.
[b] Chromium VI SSL used.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[e] — = Not detected or not detected above BV.
[f] NA = Not analyzed.

Table 6.24-2
Summary of Organic Chemicals Detected at SWMU 21-027(c)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Acetone	Anthracene	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Bis(2-ethylhexyl)phthalate	Chrysene
Residential SSL				**3440**	**1720**[a]	**67500**	**17200**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**240000**[b]	**347**	**621**
Industrial SSL				**36700**	**18300**[a]	**851000**	**183000**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**2500000**[b]	**1370**	**2340**
Construction Worker SSL				**18600**	**6680**[a]	**263000**	**66800**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**952000**[c]	**4760**	**20600**
RE21-07-75115	21-27399	3.0000–4.0000	SOIL	—[d]	—	—	—	NA[e]	—	—	—	—	—	—	—	—
RE21-07-75116	21-27399	5.0000–6.0000	SOIL	—	—	—	—	NA	—	—	0.255 (J)	—	—	—	—	0.179 (J)
RE21-07-75117	21-27399	8.0000–9.0000	QBT3	—	—	0.00417 (J)	—	NA	—	—	—	—	—	—	—	—
RE21-07-75121	21-27401	0.0000–0.5000	SOIL	0.032 (J)	—	NA	0.0493	NA	0.3 (J)	0.295 (J)	0.693 (J)	—	—	—	—	0.449 (J)
RE21-07-75122	21-27401	2.0000–2.5000	SOIL	0.0216 (J)	—	—	0.0683	NA	0.301 (J)	0.353 (J)	0.508 (J)	NA	0.228 (J)	—	—	0.397 (J)
RE21-07-75123	21-27402	0.0000–0.5000	SOIL	0.565	—	NA	0.949	NA	3.08 (J)	2.43 (J)	5.67 (J)	1.12 (J)	—	0.306 (J)	0.296 (J)	3.18 (J)
RE21-07-75124	21-27402	2.0000–2.5000	SOIL	0.0412	—	0.0112 (J)	0.0704	NA	0.373 (J)	0.354 (J)	0.745 (J)	NA	NA	0.256 (J)	0.156 (J)	0.432 (J)
RE21-07-75125	21-27403	0.0000–0.5000	SOIL	0.0557	—	NA	0.0842	NA	0.491 (J)	0.499 (J)	1.12 (J)	0.34 (J)	—	—	48.8	0.594 (J)
RE21-07-75126	21-27403	2.0000–2.5000	SOIL	0.0215 (J)	—	—	0.0368 (J)	NA	0.239	0.26 (J)	0.532 (J)	0.194 (J)	—	—	0.0767 (J)	0.304
RE21-07-75127	21-27404	0.0000–0.5000	SOIL	—	—	NA	0.0108 (J)	NA	—	0.0885 (J)	0.179 (J)	—	—	—	—	0.109
RE21-07-75128	21-27404	2.0000–2.5000	SOIL	—	—	—	0.0106 (J)	NA	—	NA	NA	NA	NA	—	—	—
RE21-07-75129	21-27405	0.0000–0.5000	SOIL	—	—	NA	—	NA	—	—	0.0252 (J)	—	0.0212 (J)	—	—	0.0236 (J)
RE21-07-75130	21-27405	2.0000–2.5000	SOIL	—	—	—	—	NA	—	NA	NA	NA	NA	—	0.34 (J)	—
RE21-07-75131	21-27406	0.0000–0.5000	SOIL	—	—	NA	—	NA	—	0.0537 (J)	0.103 (J)	—	—	—	—	—
RE21-07-75133	21-27407	0.0000–0.5000	SOIL	—	—	NA	—	NA	—	—	0.0127 (J)	—	—	—	0.159 (J)	0.0154 (J)
RE21-07-75134	21-27407	2.0000–2.5000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-75135	21-27408	0.0000–0.5000	SOIL	—	—	NA	—	NA	—	—	0.0135 (J)	—	0.0116 (J)	—	—	—
RE21-07-75136	21-27408	2.0000–2.5000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-75138	21-27409	2.0000–2.5000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-75140	21-27410	2.0000–2.5000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-5087	21-27411	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0016 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75141	21-27411	0.0000–0.5000	SOIL	—	—	NA	—	NA	—	0.0301 (J)	0.0569 (J)	—	—	—	—	0.0352
RE21-07-75142	21-27411	2.0000–2.5000	SOIL	—	—	0.00546	—	NA	—	—	—	—	—	—	—	—
RE21-07-75144	21-27412	2.0000–2.5000	SOIL	—	—	0.0044 (J)	—	NA	—	—	—	—	—	—	—	—
RE21-07-75145	21-27413	2.5000–3.5000	SOIL	—	0.0206 (J)	—	0.0209 (J)	NA	0.0909	—	—	—	—	—	—	0.107
RE21-07-75146	21-27413	4.5000–5.5000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	0.079 (J)	—
RE21-07-75151	21-27414	5.0000–6.0000	SOIL	—	—	—	0.0153 (J)	NA	—	0.0537 (J)	0.102 (J)	—	—	—	—	0.0603
RE21-07-75149	21-27415	0.0000–0.5000	SOIL	—	—	NA	—	NA	—	—	0.319 (J)	—	—	—	—	0.223 (J)
RE21-07-75150	21-27415	3.0000–4.0000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	—	—
RE21-07-75153	21-27415	5.0000–6.0000	SOIL	—	—	—	—	NA	—	—	—	—	—	—	—	—

Table 6.24-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Dibenzofuran	Dichlorobenzene[1,4-]	Fluoranthene	Fluorene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene
Residential SSL				**6110**	**78**[b]	**32.2**	**2290**	**2290**	**na**[f]	**na**	**na**	**na**	**na**	**na**	**na**	**6.21**
Industrial SSL				**68400**	**1000**[b]	**180**	**24400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**23.4**
Construction Worker SSL				**23800**	**238**[c]	**3780**	**8910**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**213**
RE21-07-75115	21-27399	3.0000–4.0000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75116	21-27399	5.0000–6.0000	SOIL	—	—	—	0.358 (J)	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75117	21-27399	8.0000–9.0000	QBT3	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75121	21-27401	0.0000–0.5000	SOIL	—	—	—	0.626	0.0244 (J)	NA	NA	NA	NA	NA	NA	NA	0.186 (J)
RE21-07-75122	21-27401	2.0000–2.5000	SOIL	—	—	—	0.48	0.0232 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75123	21-27402	0.0000–0.5000	SOIL	0.0925 (J)	0.25 (J)	—	5.78	0.48	NA	NA	NA	NA	NA	NA	NA	1.11 (J)
RE21-07-75124	21-27402	2.0000–2.5000	SOIL	—	—	—	0.599	0.0281 (J)	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75125	21-27403	0.0000–0.5000	SOIL	—	—	—	0.924	0.0382	NA	NA	NA	NA	NA	NA	NA	0.302 (J)
RE21-07-75126	21-27403	2.0000–2.5000	SOIL	—	—	—	0.526	0.0159 (J)	NA	NA	NA	NA	NA	NA	NA	0.17 (J)
RE21-07-75127	21-27404	0.0000–0.5000	SOIL	0.506	—	—	0.153	—	NA	NA	NA	NA	NA	NA	NA	0.0428 (J)
RE21-07-75128	21-27404	2.0000–2.5000	SOIL	0.0391 (J)	—	—	0.0153 (J)	—	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75129	21-27405	0.0000–0.5000	SOIL	—	—	—	0.0384 (J)	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75130	21-27405	2.0000–2.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	NA
RE21-07-75131	21-27406	0.0000–0.5000	SOIL	—	—	—	0.0679	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75133	21-27407	0.0000–0.5000	SOIL	0.0381 (J)	—	—	0.0142 (J)	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75134	21-27407	2.0000–2.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75135	21-27408	0.0000–0.5000	SOIL	—	—	—	0.0211 (J)	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75136	21-27408	2.0000–2.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75138	21-27409	2.0000–2.5000	SOIL	—	—	0.000427 (J)	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75140	21-27410	2.0000–2.5000	SOIL	—	—	0.000302 (J)	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-5087	21-27411	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	5.16E-06	1.13E-05	0.0000012 (J)	3.55E-06	0.000000191 (J)	8.81E-07	1.13E-06	NA
RE21-07-75141	21-27411	0.0000–0.5000	SOIL	—	—	—	0.0501	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75142	21-27411	2.0000–2.5000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75144	21-27412	2.0000–2.5000	SOIL	—	—	0.000461 (J)	0.0114 (J)	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75145	21-27413	2.5000–3.5000	SOIL	0.103 (J)	—	—	0.152	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75146	21-27413	4.5000–5.5000	SOIL	—	—	—	0.0281 (J)	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75151	21-27414	5.0000–6.0000	SOIL	—	—	—	0.112	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75149	21-27415	0.0000–0.5000	SOIL	—	—	—	0.426	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75150	21-27415	3.0000–4.0000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—
RE21-07-75153	21-27415	5.0000–6.0000	SOIL	—	—	—	—	—	NA	NA	NA	NA	NA	NA	NA	—

Table 6.24-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloroethene
Residential SSL				**3210**[g]	**199**	**310**[b]	**45**	**na**	**na**	**na**	**1830**	**1720**	**na**	**5570**	**45.7**
Industrial SSL				**14900**[g]	**1090**	**4100**[b]	**252**	**na**	**na**	**na**	**20500**	**18300**	**na**	**57900**	**253**
Construction Worker SSL				**1030**[g]	**10600**	**1240**[c]	**702**	**na**	**na**	**na**	**7150**	**6680**	**na**	**21100**	**4600**
RE21-07-75115	21-27399	3.0000–4.0000	SOIL	—	0.00477 (J)	—	—	NA	NA	NA	—	—	NA	0.00146	—
RE21-07-75116	21-27399	5.0000–6.0000	SOIL	—	0.00293 (J)	—	—	NA	NA	NA	0.224 (J)	0.244 (J)	NA	0.000459 (J)	—
RE21-07-75117	21-27399	8.0000–9.0000	QBT3	—	—	—	—	NA	NA	NA	—	—	NA	—	—
RE21-07-75121	21-27401	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.362	1.03 (J)	NA	NA	NA
RE21-07-75122	21-27401	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	0.387	0.965 (J)	NA	0.000639 (J)	—
RE21-07-75123	21-27402	0.0000–0.5000	SOIL	NA	NA	0.0794	0.223	NA	NA	NA	4.98	9.91 (J)	NA	NA	NA
RE21-07-75124	21-27402	2.0000–2.5000	SOIL	0.00162 (J)	—	—	—	NA	NA	NA	0.426	1.11 (J)	NA	0.00516 (J)	—
RE21-07-75125	21-27403	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.594	1.78 (J)	NA	NA	NA
RE21-07-75126	21-27403	2.0000–2.5000	SOIL	0.0003 (J)	—	—	—	NA	NA	NA	0.268	0.663	NA	0.00123	—
RE21-07-75127	21-27404	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.0798	0.218	NA	NA	NA
RE21-07-75128	21-27404	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	0.0338 (J)	NA	0.00207	—
RE21-07-75129	21-27405	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.0158 (J)	0.0459	NA	NA	NA
RE21-07-75130	21-27405	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	0.0173 (J)	NA	0.000695 (J)	—
RE21-07-75131	21-27406	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.0258 (J)	0.131 (J)	NA	NA	NA
RE21-07-75133	21-27407	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	—	0.0237 (J)	NA	NA	NA
RE21-07-75134	21-27407	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	NA	0.00355	0.00188
RE21-07-75135	21-27408	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	—	0.0266 (J)	NA	NA	NA
RE21-07-75136	21-27408	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	NA	0.000619 (J)	—
RE21-07-75138	21-27409	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	NA	0.000861 (J)	—
RE21-07-75140	21-27410	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	NA	0.000927 (J)	—
RE21-07-5087	21-27411	0.0000–0.5000	SOIL	NA	NA	NA	NA	4.96E-05	0.00000218 (J)	3.1E-07	NA	NA	8.49E-08	NA	NA
RE21-07-75141	21-27411	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.0199 (J)	0.0698	NA	NA	NA
RE21-07-75142	21-27411	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	NA	0.000551 (J)	—
RE21-07-75144	21-27412	2.0000–2.5000	SOIL	—	—	—	—	NA	NA	NA	—	—	NA	0.0013	0.000874 (J)
RE21-07-75145	21-27413	2.5000–3.5000	SOIL	—	—	—	—	NA	NA	NA	0.086	0.152	NA	0.000378 (J)	—
RE21-07-75146	21-27413	4.5000–5.5000	SOIL	—	—	—	—	NA	NA	NA	0.0151 (J)	0.0225 (J)	NA	0.000387 (J)	—
RE21-07-75151	21-27414	5.0000–6.0000	SOIL	—	—	—	—	NA	NA	NA	0.0722	0.0884	NA	0.000358 (J)	—

Table 6.24-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Isopropyltoluene[4-]	Methylene Chloride	Methylnaphthalene[2-]	Naphthalene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzofurans (Totals)	Toluene	Trichloroethene
Residential SSL				**3210**[g]	**199**	**310**[b]	**45**	**na**	**na**	**na**	**1830**	**1720**	**na**	**5570**	**45.7**
Industrial SSL				**14900**[g]	**1090**	**4100**[b]	**252**	**na**	**na**	**na**	**20500**	**18300**	**na**	**57900**	**253**
Construction Worker SSL				**1030**[g]	**10600**	**1240**[c]	**702**	**na**	**na**	**na**	**7150**	**6680**	**na**	**21100**	**4600**
RE21-07-75149	21-27415	0.0000–0.5000	SOIL	NA	NA	—	—	NA	NA	NA	0.205 (J)	0.367	NA	NA	NA
RE21-07-75150	21-27415	3.0000–4.0000	SOIL	—	0.00699 (J+)	—	—	NA	NA	NA	—	—	NA	0.000404 (J+)	—
RE21-07-75153	21-27415	5.0000–6.0000	SOIL	—	0.00634	—	—	NA	NA	NA	—	—	NA	0.00124	—

Source: SSLs from NMED (2009, 108070).

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

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

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

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] — = Not detected.

[e] NA = Not analyzed.

[f] na = Not available.

[g] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table 6.24-3
Summary of Radionuclides Detected or Detected above BVs/FVs at SWMU 21-027(c)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**na**	**1.98**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**5.7**	**750**	**170**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**1900**	**440000**	**1500**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**800**	**320000**	**220**
RE21-07-75115	21-27399	3.0000–4.0000	SOIL	0.988	NA[c]	1.12	0.112	19.7	—[d]	—	—
RE21-07-75116	21-27399	5.0000–6.0000	SOIL	0.736	—	0.138	0.0783	20.4	—	—	—
RE21-07-75117	21-27399	8.0000–9.0000	QBT3	0.155	—	—	—	3.82	—	—	—
RE21-07-75121	21-27401	0.0000–0.5000	SOIL	0.82	—	—	0.169	17.8	—	0.031667	—
RE21-07-75122	21-27401	2.0000–2.5000	SOIL	0.446	—	—	0.0638	7.85	—	0.021565	—
RE21-07-75123	21-27402	0.0000–0.5000	SOIL	1.08	—	—	0.138	5.3	—	—	—
RE21-07-75124	21-27402	2.0000–2.5000	SOIL	1.2	—	0.345	0.144	12.5	—	0.046101	—
RE21-07-75125	21-27403	0.0000–0.5000	SOIL	—	NA	—	—	1.24	—	0.04843	—
RE21-07-75126	21-27403	2.0000–2.5000	SOIL	1.4	NA	0.207	0.242	43.3	—	0.021744	—
RE21-07-75127	21-27404	0.0000–0.5000	SOIL	0.496	—	—	—	5.38	—	—	—
RE21-07-75128	21-27404	2.0000–2.5000	SOIL	—	—	—	—	0.528	—	0.058588	—
RE21-07-75129	21-27405	0.0000–0.5000	SOIL	—	NA	NA	—	0.483	—	—	—
RE21-07-75130	21-27405	2.0000–2.5000	SOIL	—	NA	—	—	0.622	—	0.037605	—
RE21-07-75131	21-27406	0.0000–0.5000	SOIL	0.533	NA	—	0.0648	8.59	—	—	—
RE21-07-75132	21-27406	2.0000–2.5000	SOIL	—	NA	—	—	0.202	—	0.016752	—
RE21-07-75133	21-27407	0.0000–0.5000	SOIL	—	NA	—	—	0.349	—	—	—
RE21-07-75134	21-27407	2.0000–2.5000	SOIL	—	NA	—	—	0.0541	—	0.012992	—
RE21-07-75135	21-27408	0.0000–0.5000	SOIL	0.0904	NA	—	—	0.469	—	0.017146	—
RE21-07-75137	21-27409	0.0000–0.5000	SOIL	3.59	—	—	0.248	11.2	—	—	3.31
RE21-07-75138	21-27409	2.0000–2.5000	SOIL	—	NA	—	—	0.493	0.189	—	—
RE21-07-75139	21-27410	0.0000–0.5000	SOIL	—	NA	—	—	0.319	2.97	0.029693	—
RE21-07-75140	21-27410	2.0000–2.5000	SOIL	—	NA	—	—	0.0596	—	—	—
RE21-07-75141	21-27411	0.0000–0.5000	SOIL	0.0635	NA	—	—	1.06	—	0.015127	—
RE21-07-75142	21-27411	2.0000–2.5000	SOIL	0.0347	NA	—	—	0.221	—	—	—
RE21-07-75143	21-27412	0.0000–0.5000	SOIL	—	NA	—	0.0673	0.0688	—	—	—
RE21-07-75145	21-27413	2.5000–3.5000	SOIL	0.0971	NA	—	—	3.26	—	—	—
RE21-07-75146	21-27413	4.5000–5.5000	SOIL	—	—	—	—	0.773	—	0.039	—

Table 6.24-3 (continued)

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-134	Cesium-137	Plutonium-238	Plutonium-239/240	Strontium-90	Tritium	Uranium-234
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**na**	**na**	**1.98**
SOIL Background Value				**0.013**[b]	**na**	**1.65**[b]	**0.023**[b]	**0.054**[b]	**1.31**[b]	**na**	**2.59**
Residential SAL				**30**	**2.4**	**5.6**	**37**	**33**	**5.7**	**750**	**170**
Industrial SAL				**180**	**9.7**	**23**	**240**	**210**	**1900**	**440000**	**1500**
Construction Worker SAL				**34**	**7.7**	**18**	**40**	**36**	**800**	**320000**	**220**
RE21-07-75147	21-27414	0.0000–0.5000	SOIL	0.643	NA	—	0.0551	11	—	—	—
RE21-07-75148	21-27414	3.0000–4.0000	SOIL	0.173	—	NA	—	3.93	—	—	—
RE21-07-75151	21-27414	5.0000–6.0000	SOIL	0.672	NA	NA	—	15.1	—	—	—
RE21-07-75149	21-27415	0.0000–0.5000	SOIL	1.91	0.141	NA	0.0809	7.72	—	—	—
RE21-07-75150	21-27415	3.0000–4.0000	SOIL	0.166	—	—	0.0286	5.76	—	0.017389	—
RE21-07-75153	21-27415	5.0000–6.0000	SOIL	0.407	—	—	0.0725	11.6	—	—	—
MD21-09-8712	21-605232	0.0000–0.5000	SOIL	0.115	NA	NA	—	2.98	NA	NA	NA
MD21-09-8713	21-605233	4.0000–5.0000	QBT3	0.114	—	—	—	0.443	NA	NA	NA

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] NA = Not analyzed.
[d] — = Not detected or not detected above BV/FV.

Table 6.25-1
Summary of Inorganic Chemicals above BVs at AOC C-21-027

Sample ID	Location ID	Depth (ft)	Media	Aluminum	Antimony	Arsenic	Barium	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (Total)	Lead	Magnesium	Nickel	Nitrate	Perchlorate	Selenium	Silver	Thallium	Zinc
QBT3 Background Value				**7340**	**0.5**	**2.79**	**46**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**	**0.5**	**11.2**	**1690**	**6.58**	**na[a]**	**na**	**0.3**	**1**	**1.1**	**63.5**
SOIL Background Value				**29200**	**0.83**	**8.17**	**295**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**	**0.5**	**22.3**	**4610**	**15.4**	**na**	**na**	**1.52**	**1**	**0.73**	**48.8**
Residential SSL				**78100**	**31.3**	**3.9**	**15600**	**77.9**	**na**	**219[b]**	**23[c]**	**3130**	**1560**	**400**	**na**	**1560**	**125000**	**54.8**	**391**	**391**	**5.16**	**23500**
Industrial SSL				**1130000**	**454**	**17.7**	**224000**	**1120**	**na**	**2920[b]**	**300[c]**	**45400**	**22700**	**800**	**na**	**22700**	**1820000**	**795**	**5680**	**5680**	**74.9**	**341000**
Construction Worker SSL				**40700**	**124**	**65.4**	**4350**	**309**	**na**	**449[b]**	**34.9[d]**	**12400**	**6190**	**800**	**na**	**6190**	**496000**	**217**	**1550**	**1550**	**20.4**	**92900**
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	—[e]	—	—	—	—	9100	20	—	—	—	—	—	—	—	0.00037 (J)	—	—	1 (U)	53
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00014 (J)	—	1.1 (U)	1.1 (U)	87
MD21-09-9092	21-605337	10.0000–11.0000	QBT3	—	2.2 (UJ)	—	—	—	5600	19	—	—	—	—	—	—	—	0.00012 (J)	0.54 (U)	1.1 (U)	—	—
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	—	—	—	—	—	—	67	—	—	—	—	—	—	29 (J-)	0.00035 (J)	—	—	1 (U)	52
MD21-09-9094	21-605338	5.0000–6.0000	SOIL	—	—	—	—	0.56 (U)	—	—	—	—	—	—	—	—	—	0.00018 (J)	—	1.1 (U)	1.1 (U)	—
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	—	—	—	—	—	—	16	—	—	—	—	—	—	—	0.00015 (J)	0.54 (U)	1.1 (U)	—	—
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	—	2.24	—	—	0.648	—	—	—	—	—	30.2	—	—	1.22	0.000625 (J+)	—	—	—	625
MD21-09-9097	21-605339	2.0000–3.0000	QBT3	—	1.35	—	51.6	—	28800 (J+)	10.5	—	—	—	—	—	—	—	0.00063 (J+)	1 (U)	—	—	—
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	—	0.904 (J)	—	—	—	—	—	—	—	0.797	—	—	—	21.9	0.00817 (J+)	—	—	—	—
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	—	0.965 (J)	—	—	—	—	20.1	—	—	0.807	—	—	—	14.1	0.00575 (J+)	—	—	—	—
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	—	1.02 (J)	—	—	—	—	—	—	—	0.63	—	—	—	39.1	0.00369 (J+)	—	—	—	—
MD21-09-9103	21-605341	2.0000–3.0000	SOIL	—	—	—	—	—	—	—	—	—	—	—	—	—	78.6	0.00826 (J+)	—	—	—	—
MD21-09-9105	21-605342	0.0000–0.5000	QBT3	—	2 (U)	—	—	—	—	—	—	—	—	14 (J)	—	—	—	0.00019 (J)	0.5 (U)	—	—	—
MD21-09-9106	21-605342	2.0000–3.0000	QBT3	—	2 (U)	—	—	—	—	—	—	—	—	—	—	—	—	0.0046	0.49 (U)	—	—	—
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	—	0.99 (U)	—	—	—	27000	—	—	—	0.54 (U)	32	—	—	38	0.00068	—	1.1 (U)	1.1 (U)	56
MD21-10-7820	21-610684	5.0000–6.0000	QBT3	8400	0.53 (U)	3.2	120	—	5600	10 (J)	3.5	5.1	0.6 (U)	—	1800	9.2	1.8 (J)	0.00015 (J)	0.6 (U)	1.2 (U)	1.2 (U)	—
MD21-10-7821	21-610684	10.0000–11.0000	QBT3	—	—	—	100	—	9700	9.8 (J)	—	—	0.59 (U)	12	—	7.7	1.9 (J)	0.00014 (J)	0.59 (U)	1.2 (U)	1.2 (U)	—

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

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

[a] na = Not available.

[b] Chromium VI SSL used.

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

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] — = Not detected or not detected above BV.

Table 6.25-2
Summary of Organic Chemicals Detected at AOC C-21-027

Sample ID	Location ID	Depth (ft)	Media	Acetone	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene
Residential SSL				**67500**	**1.12**	**2.22**	**6.21**	**0.621**	**6.21**	**1720**[a]	**62.1**	**347**	**621**
Industrial SSL				**851000**	**8.26**	**8.26**	**23.4**	**2.34**	**23.4**	**18300**[a]	**234**	**1370**	**2340**
Construction Worker SSL				**263000**	**4.36**	**75.8**	**213**	**21.3**	**213**	**6680**[a]	**2060**	**4760**	**20600**
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	—[b]	NA[c]	NA	0.16 (J)	0.16 (J)	0.24 (J)	0.1 (J)	0.097 (J)	—	0.15 (J)
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	0.013 (J)	NA	NA	—	—	—	—	—	—	—
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	—	NA	NA	—	—	0.083 (J)	—	—	0.071 (J)	—
MD21-10-7825	21-605338	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	0.016 (J)	NA	NA	—	—	—	—	—	—	—
MD21-10-7826	21-605339	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	—	NA	NA	—	0.0108 (J)	0.0278 (J)	—	—	—	—
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	—	NA	NA	—	—	—	—	—	—	—
MD21-09-12897	21-605340	2.0000–3.0000	SOIL	NA	0.0024 (J)	0.0025 (J)	NA	NA	NA	NA	NA	NA	NA
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	—	NA	NA	—	—	—	—	—	0.0744 (J)	—
MD21-10-7816	21-605340	5.0000–6.0000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	—	NA	NA	—	—	—	—	—	—	—
MD21-10-7832	21-605342	0.0000–0.5000	QBT3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	NA	NA	NA	—	—	0.094 (J)	—	—	0.1 (J)	—
MD21-10-7833	21-610686	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 6.25-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Di-n-butylphthalate	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzodioxins (Total)	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	Heptachlorodibenzofurans (Total)	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]	Hexachlorodibenzodioxin [1,2,3,7,8,9-]
Residential SSL				**6110**	**2290**	**na**[d]	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Industrial SSL				**68400**	**24400**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
Construction Worker SSL				**23800**	**8910**	**na**	**na**	**na**	**na**	**na**	**na**	**na**	**na**
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	—	0.23 (J)	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	—	0.086 (J)	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-7825	21-605338	0.0000–0.5000	SOIL	NA	NA	0.00046	0.000988	3.49E-05	2.76E-06	0.000105	1.08E-05	1.57E-05	9.79E-06
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	—	—	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-7826	21-605339	0.0000–0.5000	SOIL	NA	NA	0.000323	0.000694	5.93E-05	4.25E-06	0.000194	3.17E-06	1.07E-05	4.91E-06
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	0.0732 (J)	0.0229 (J)	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	—	—	NA	NA	NA	NA	NA	NA	NA	NA
MD21-09-12897	21-605340	2.0000–3.0000	SOIL	NA	NA	0.00148	0.00354	0.000296	2.53E-05	0.00135	5.81E-06	4.39E-05	9.86E-06
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	—	0.0125 (J)	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-7816	21-605340	5.0000–6.0000	QBT3	NA	NA	0.00495	0.0109	0.000982	8.99E-05	0.00469	2.44E-05	0.00019	3.76E-05
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	—	0.0259 (J)	NA	NA	NA	NA	NA	NA	NA	NA
MD21-10-7832	21-605342	0.0000–0.5000	QBT3	NA	NA	0.00016	0.000344	2.11E-05	0.00000149 (J)	5.73E-05	0.00000218 (J)	6.03E-06	4.64E-06
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	—	0.15 (J)	0.000137	0.000293	0.00002	2.79E-06	5.82E-05	0.0000014 (J)	3.61E-06	2.96E-06
MD21-10-7833	21-610686	0.0000–0.5000	SOIL	NA	NA	0.0227	0.0433	0.00164	0.00015	0.00642	0.000131	0.000542	0.000275

Table 6.25-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Hexachlorodibenzodioxins (Total)	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [1,2,3,7,8,9-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Hexachlorodibenzofurans (Total)	Indeno(1,2,3-cd)pyrene	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]
Residential SSL				**na**	**na**	**na**	**na**	**na**	**na**	**6.21**	**na**	**na**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**na**	**na**	**23.4**	**na**	**na**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**na**	**na**	**213**	**na**	**na**	**na**
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	0.091 (J)	NA	NA	NA
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-10-7825	21-605338	0.0000–0.5000	SOIL	0.000162	0.00000156 (J)	0.00000185 (J)	NA	2.94E-06	5.93E-05	NA	0.00482	7.34E-05	3.46E-06
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-10-7826	21-605339	0.0000–0.5000	SOIL	7.99E-05	0.00000163 (J)	0.00000158 (J)	0.000000341 (J)	2.51E-06	6.27E-05	NA	0.00389	0.000149	0.00000152 (J)
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-09-12897	21-605340	2.0000–3.0000	SOIL	0.000211	6.19E-06	3.84E-06	—	8.13E-06	0.000315	NA	0.0199	0.00145	—
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-10-7816	21-605340	5.0000–6.0000	QBT3	0.000857	2.22E-05	1.43E-05	4.43E-06	3.14E-05	0.00119	NA	0.0783	0.00309	0.000011
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	NA	NA	NA	NA	NA	NA	—	NA	NA	NA
MD21-10-7832	21-605342	0.0000–0.5000	QBT3	7.14E-05	0.000000896 (J)	0.00000106 (J)	—	0.0000015 (J)	2.67E-05	NA	0.0016	4.97E-05	0.00000145 (J)
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	3.56E-05	6.98E-06	0.00000246 (J)	0.000000647 (J)	3.09E-06	4.78E-05	—	0.00132	5.14E-05	0.00000099 (J)
MD21-10-7833	21-610686	0.0000–0.5000	SOIL	0.00503	6.57E-05	6.59E-05	1.62E-05	0.000112	0.00235	NA	0.209 (J—)	0.00402	6.04E-05

Table 6.25-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Pentachlorodibenzodioxins (Total)	Pentachlorodibenzofuran [1,2,3,7,8-]	Pentachlorodibenzofuran [2,3,4,7,8-]	Pentachlorodibenzofurans (Totals)	Phenanthrene	Pyrene	Tetrachlorodibenzodioxin [2,3,7,8-]	Tetrachlorodibenzodioxins (Total)	Tetrachlorodibenzofuran [2,3,7,8-]	Tetrachlorodibenzofurans (Totals)
Residential SSL				**na**	**na**	**na**	**na**	**1830**	**1720**	**0.000045**	**na**	**0.000374**	**na**
Industrial SSL				**na**	**na**	**na**	**na**	**20500**	**18300**	**0.000204**	**na**	**0.00147**	**na**
Construction Worker SSL				**na**	**na**	**na**	**na**	**7150**	**6680**	**0.000284**	**na**	**0.0127**	**na**
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	0.34 (J)	NA	NA	NA	NA
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	NA	NA	NA	NA	—	—	NA	NA	NA	NA
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	0.2 (J)	NA	NA	NA	NA
MD21-10-7825	21-605338	0.0000–0.5000	SOIL	2.55E-05	0.000000393 (J)	NA	2.49E-05	NA	NA	5.99E-07	3.15E-06	—	7.32E-06
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	NA	NA	NA	NA	—	—	NA	NA	NA	NA
MD21-10-7826	21-605339	0.0000–0.5000	SOIL	1.02E-05	0.000000258 (J)	0.000000509 (J)	1.56E-05	NA	NA	5.09E-07	1.74E-06	—	4.39E-06
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	NA	NA	NA	NA	0.0117 (J)	0.0258 (J)	NA	NA	NA	NA
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	NA	NA	NA	NA	—	0.0108 (J)	NA	NA	NA	NA
MD21-09-12897	21-605340	2.0000–3.0000	SOIL	6.96E-06	0.000000344 (J)	0.000000931 (J)	3.59E-05	NA	NA	0.000000392 (J)	0.0000015 (J)	—	6.14E-06
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	NA	NA	NA	NA	—	0.0157 (J)	NA	NA	NA	NA
MD21-10-7816	21-605340	5.0000–6.0000	QBT3	5.04E-05	0.00000119 (J)	0.00000154 (J)	0.000144	NA	NA	1.27E-06	4.58E-06	—	1.72E-05
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	NA	NA	NA	NA	0.0178 (J)	0.0275 (J)	NA	NA	NA	NA
MD21-10-7832	21-605342	0.0000–0.5000	QBT3	1.03E-05	0.00000024 (J)	0.000000398 (J)	8.5E-06	NA	NA	0.000000252 (J)	1.24E-06	—	3.03E-06
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	6.97E-06	0.00000168 (J)	8.29E-06	6.64E-05	—	0.13 (J)	—	7.94E-07	3.84E-06	3.21E-05
MD21-10-7833	21-610686	0.0000–0.5000	SOIL	0.000535	7.65E-06	1.94E-05	0.000527	NA	NA	5.82E-06	6.04E-05	2.52E-06	0.000134

Source: BVs from LANL (1998, 059730). SSLs from NMED (2009, 108070).
Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A.
[a] Pyrene SSL used as surrogate based on structural similarity.
[b] — = Not detected.
[c] NA = Not analyzed.
[d] na = Not available.

Table 6.25-3
Summary of Radionuclides Detected or Detected above BV/FVs at AOC C-21-027

Sample ID	Location ID	Depth (ft)	Media	Americium-241	Cesium-137	Plutonium-238	Plutonium-239/240	Tritium	Uranium-234	Uranium-235/236
QBT3 Background Value				**na**[a]	**na**	**na**	**na**	**na**	**1.98**	**0.09**
SOIL Background Value				**0.013**[b]	**1.65**[b]	**0.023**[b]	**0.054**[b]	**na**	**2.59**	**0.2**
Residential SAL				**30**	**5.6**	**37**	**33**	**750**	**170**	**17**
Industrial SAL				**180**	**23**	**240**	**210**	**440000**	**1500**	**87**
Construction Worker SAL				**34**	**18**	**40**	**36**	**320000**	**220**	**43**
MD21-09-9090	21-605337	0.0000–0.5000	SOIL	0.189	—[c]	0.063	1.66	—	—	—
MD21-09-9091	21-605337	5.0000–6.0000	SOIL	—	—	—	0.172	—	—	—
MD21-09-9092	21-605337	10.0000–11.0000	QBT3	0.039	—	—	0.213	—	—	—
MD21-09-9093	21-605338	0.0000–0.5000	SOIL	0.341	—	0.152	3.72	—	—	—
MD21-09-9094	21-605338	5.0000–6.0000	SOIL	—	—	—	0.108	—	—	—
MD21-09-9095	21-605338	10.0000–11.0000	QBT3	—	—	—	0.262	—	—	—
MD21-09-9096	21-605339	0.0000–1.0000	SOIL	0.853	0.534	0.0831	13.8	0.011872	—	—
MD21-09-9097	21-605339	2.0000–3.0000	QBT3	—	—	—	0.248	—	—	—
MD21-09-9099	21-605340	0.0000–0.5000	SOIL	0.263	—	0.0376	3.5 (J)	—	—	—
MD21-09-9100	21-605340	2.0000–3.0000	SOIL	0.94	0.336	0.118	9.72	—	—	—
MD21-10-7816	21-605340	5.0000–6.0000	QBT3	2.74	NA[d]	0.245	20.3	NA	NA	NA
MD21-09-9102	21-605341	0.0000–0.5000	SOIL	0.368	—	0.0428	4.31	—	—	0.223
MD21-09-9103	21-605341	2.0000–3.0000	SOIL	0.13	—	—	1.19 (J)	—	—	—
MD21-09-9105	21-605342	0.0000–0.5000	QBT3	0.05	0.301	—	0.518	—	—	—
MD21-09-9106	21-605342	2.0000–3.0000	QBT3	—	—	—	0.0194	—	—	—
MD21-10-7817	21-610682	0.0000–0.5000	SOIL	NA	NA	3.54	295	NA	NA	NA
MD21-10-7818	21-610683	0.0000–1.0000	SOIL	NA	NA	0.039	6.75	NA	NA	NA
MD21-10-7819	21-610684	0.0000–0.5000	SOIL	0.416	—	0.097	8.76	0.488141 (J-)	5.19	0.273
MD21-10-7820	21-610684	5.0000–6.0000	QBT3	—	—	—	0.137	—	—	—
MD21-10-7821	21-610684	10.0000–11.0000	QBT3	—	—	—	0.363	—	—	—

Note: Results are in pCi/g. Data qualifiers are defined in Appendix A.
Source: BVs/FVs are from LANL (1998, 059730). SALs from LANL (2009, 107655).
[a] na = Not available.
[b] FV applies to soil and tuff samples collected from 0–1 ft only.
[c] — = Not detected or not detected above BV/FV.
[d] NA = Not analyzed.

Table 8.0-1
Summary of Field Characterization Activities and Risk-Screening Results

Site	Nature and Extent Defined?	Extent Sampling Required?	Risk-Screening Assessments Performed?	Meets Acceptable Potential Hazard, Risk, or Dose Level?	Corrective Actions Complete?	Remediation Necessary?
AOC 21-002(b)	Yes	No	Yes	Yes	Yes	No
Consolidated Unit 21-003-99	No	Yes	No	High potential	No	No
Consolidated Unit 21-006(c)-99	No	Yes	Yes	Yes	No	No
SWMU 21-009	Yes	No	Yes	Yes	Yes	No
SWMU 21-012(b)	Yes	No	Yes	Yes	Yes	No
SWMU 21-013(c)	Yes	No	Yes	Yes	Yes	No
SWMU 21-022(f)	Yes	No	Yes	Yes	Yes	No
Consolidated Unit 21-022(h)-99	No	Yes	Yes	No	No	Yes, limited soil removal
Consolidated Unit 21-023(a)-99	No	Yes (>10 ft bgs)	Yes	Yes	No	No
SWMU 21-024(a)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(b)	Yes	No	Yes	No	No	Yes, limited soil removal
SWMU 21-024(c)	No	Yes	No	High potential	No	No
SWMU 21-024(d)	No	Yes (>10 ft bgs)	Yes	Yes	No	No
SWMU 21-024(e)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(g)	No	Yes (>10 ft bgs)	Yes	Yes	No	No
SWMU 21-024(h)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(i)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(j)	Yes	No	Yes	Yes	Yes	No
SWMU 21-024(k)	No	Yes	No	High potential	No	No
Consolidated Unit 21-024(l)-99	Yes	No	Yes	No	No	Yes, limited soil removal
SWMU 21-024(n)	No	Yes	No	High potential	No	No
SWMU 21-024(o)	Yes	No	Yes	Yes	Yes	No
Consolidated Unit 21-026(a)-99	No	Yes (>10 ft bgs)	Yes	No	No	Yes, limited soil removal
SWMU 21-027(a)	Yes	No	Yes	No	No	Yes, limited soil removal
SWMU 21-027(c)	Yes	No	Yes	Yes	Yes	No
AOC C-21-027	No	Yes	No	Unknown	No	Unknown
Total Sites	**15**	**11**	**21**	**16**	**12**	**5**

Appendix A

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

A-1.0 ACRONYMS AND ABBREVATIONS

%R	percent recovery
%RSD	percent relative standard deviation
AK	acceptable knowledge
ALARA	as low as reasonably acceptable
AOC	area of concern
ASTDR	Agency for Toxic Substances and Disease Registry
AUF	area use factor
BCG	Biota Concentration Guide (DOE)
bgs	below ground surface
BH	borehole
BV	background value
CCB	continuing calibration blank
CCV	continuing calibration verification
CMP	corrugated metal pipe
cmp	counts per minute
COC	chain of custody
COPC	chemical of potential concern
COPEC	chemical of potential ecological concern
CSM	conceptual site model
D&D	decontamination and decommissioning
DAF	dilution attenuation factor
DDT	dichlorophenyltrichloroethylene
DER	duplicate error ratio
DL	detection limit
DOE	Department of Energy (U.S.)
DP	Delta Prime
dpm	disintegrations per minute
DRO	diesel range organic
EDL	estimated detection limit
Eh	oxidation-reduction potential
EP	Environmental Programs Directorate
EPC	exposure point concentration

EPA	Environmental Protection Agency (U.S.)
EQL	estimated quantitation limit
ESL	ecological screening level
eV	electronvolt
FD	field duplicate
FTB	field trip blank
FV	fallout value
GPS	global-positioning system
HI	hazard index
HQ	hazard quotient
HR	home range
HSA	hollow-stem auger
ICB	initial calibration blank
ICPES	inductively coupled plasma emission spectroscopy
ICS	interference check sample
ICV	initial calibration verification
I.D.	inside diameter
IDL	instrument detection limit
IDW	investigation-derived waste
IS	internal standard
K_d	distribution coefficient
K_{oc}	organic carbon partition coefficient
K_{ow}	octanol/water partition coefficient
LAL	lower acceptance level
LANL	Los Alamos National Laboratory
LASL	Los Alamos Scientific Laboratory
LCS	laboratory control sample
LOAEL	lowest observed adverse effect level
LLW	low-level waste
MDA	material disposal area
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
NMED	New Mexico Environment Department

NMSA	New Mexico Statutes Annotated
NOAEL	no observed adverse effect level
NPDES	National Pollution Discharge Elimination System
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
PAUF	population area use factor
PPE	personal protective equipment
PQL	practical quantitation limit
PRG	preliminary remediation goal
QA	quality assurance
QC	quality control
QP	quality procedure
RCRA	Resource Conservation and Recovery Act
RCT	radiological control technician
RDA	recommended daily allowance
RESRAD	residual radioactivity (model)
RfD	reference dose
RFI	RCRA facility investigation
RL	reporting limit
RPD	relative percent difference
RPF	Records Processing Facility
RRF	relative response factor
SAL	screening action level
SCL	sample collection log
SF	slope factor
SMO	Sample Management Office
SOP	standard operating procedure
SOW	statement of work
SSL	soil screening level
SSO	site safety officer
SVOC	semivolatile organic compound
SWMU	solid waste management unit
T&E	threatened and endangered

TA	technical area
TAL	target analyte list (EPA)
TCDD	tetrachlorodibenzo-p-dioxin[2,3,7,8]
TEF	toxicity equivalency factor
TPH	total petroleum hydrocarbons
TPU	total propagated uncertainty
TRV	toxicity reference values
TSCA	Toxic Substances Control Act
UAL	upper acceptance level
UCL	upper confidence limit
VCA	voluntary corrective action
VCP	vitrified clay pipe
VOC	volatile organic compound
WCSF	waste characterization strategy form

A-2.0 METRIC CONVERSION TABLE

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

A-3.0 DATA QUALIFIER DEFINITIONS

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

Appendix B

Field Methods

B-1.0 INTRODUCTION

This appendix summarizes field methods used during the 2009– investigation at Delta Prime (DP) Site Aggregate Area at Los Alamos National Laboratory (the Laboratory). Table B-1.0-1 summarizes the methods and the following sections provide more detail of the field methods for DP Site Aggregate Area. All activities were conducted in accordance with the applicable Environmental Programs Directorate standard operating procedures (SOPs) and quality procedures (QPs), available at the following URL: http://www.lanl.gov/environment/all/qa/adep.shtml.

B-2.0 EXPLORATORY DRILLING CHARACTERIZATION

No exploratory drilling characterization was conducted during the 2009 investigation activities. All drilling was conducted for the purpose of collecting investigation samples.

B-3.0 FIELD-SCREENING METHODS

This section summarizes the field-screening methods used during the 2009 sampling activities. The field-screening results are presented in Tables 3.1-2 and 3.1-3 of the investigation report.

B-3.1 Field Screening for VOCs

Organic vapor screening was conducted using a photoionization detector (PID) in accordance with SOP-6.33, Headspace Vapor Screening with a Photoionization Detector. Samples at AOC C-21-027 were field screened for volatile organic compounds (VOCs) using a MiniRae 2000 PID with an 11.7 electronvolt (eV) lamp. A total of four PIDs, bench calibrated yearly by the vendor, were field calibrated by field personnel using 100 ppm isobutylene as a span calibration gas. Field-screening results were recorded in sample collection logs (Appendix G on DVD).

B-3.2 Field Screening for Radioactivity

Immediately upon separating the split-spoon core barrel, each core was screened for radioactivity, targeting alpha and beta/gamma emitters. Screening was conducted by a radiation control technician (RCT) using an Eberline E-600 radiation meter with an SHP-380AB alpha and beta/gamma scintillation detector held within 1-in. of the core barrel. The Eberline E 600 with attachment SHP-380AB consists of a dual phosphor plate covered by two mylar windows housed in a light-excluding metal body. The phosphor plate is a plastic scintillator for the detection of beta and gamma emissions and is thinly coated with zinc sulfide for the detection of alpha emissions. The operational range varies from trace emissions to 1 million disintegrations per minute (dpm). Field-screening results were recorded in sample collection logs (Appendix G on DVD).

B-4.0 BOREHOLE ABANDONMENT

All boreholes greater than 20 ft in depth were abandoned by filling them with a bentonite/concrete mixture. The boreholes were pressure-grouted from the bottom of the borehole to the surface in accordance with EP-ERSS-SOP-5034, Monitoring Well and Borehole Abandonment. Shallow holes (<20 ft) were abandoned by placing bentonite chips in the borehole up to 2–3 ft from the ground surface. The chips were hydrated and then 2–3 ft of concrete or clean soil was placed on top.

All cuttings from the boreholes were placed in appropriate waste containers. Logs for the boreholes drilled at the diesel spill site, tank 21-57, are provided in Appendix E.

B-5.0 FIELD INSTRUMENT CALIBRATION

All instruments were calibrated before use. Several environmental factors affected the instruments' integrity, including air temperature, atmospheric pressure, wind speed, and humidity. Calibration of the PID was conducted by the site-safety officer (SSO). Calibration of the Eberline E-600 was conducted by the RCT. All calibrations were performed according to the manufacturers' specifications and requirements.

B-5.1 PID Calibration

The PID was calibrated both to ambient air and a standard reference gas (100 ppm isobutylene). The ambient-air calibration determined the zero point of the instrument sensor calibration curve in ambient air. Calibration with the standard reference gas determined a second point of the sensor calibration curve. Each calibration was within 3% of 100 ppm isobutylene, qualifying the instrument for use.

The following calibration information was recorded daily on operational calibration logs:

- instrument ID number
- final span settings
- date and time
- concentration and type of calibration gas used (isobutylene at 100 ppm)
- name of the SSO performing the calibration

All calibration procedures for the MiniRAE 2000 PID met the manufacturer's specifications for standard reference gas calibration.

B-5.2 Eberline E-600 Instrument Calibration

The Eberline E-600 was calibrated daily by the RCT before local background levels for radioactivity were measured. The instrument was calibrated using plutonium-239 and chloride-36 sources for alpha and beta emissions, respectively. The following five checks were performed as part of the calibration procedures: calibration date, physical damage, battery, response to a source of radioactivity, and background. All calibrations performed for the Eberline E-600 met the manufacturer's specifications, the requirements of QP-5.2, Control of Measuring and Test Equipment, and the applicable radiation detection instrument manual.

B-6.0 SURFACE AND SUBSURFACE SAMPLING

This section summarizes the methods used for collecting samples for laboratory analysis, including surface soil and subsurface tuff. The samples were collected according to the approved investigation work plans (LANL 2004, 087461; NMED 2005, 089314; LANL 2006, 092079; LANL 2008, 102760; NMED 2009, 104978).

B-6.1 Surface Soil Sampling Methods

Surface samples were collected from 0 to 0.5 ft below ground surface (bgs) in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. A hand auger was used to collect material in varying increments. Samples were placed in a stainless-steel bowl prior to transfer to sterile sample collection jars or bags for transport to the Sample Management Office (SMO). In accordance with SOP-5061, Field Decontamination of Drilling and Sampling Equipment, the sample collection tools were decontaminated immediately before and after each sample was collected.

B-6.2 Subsurface Rock Sampling Methods

The subsurface rock samples were collected using a hollow-stem auger (HSA) drill rig in accordance with SOP-06.26, Core Barrel Sampling for Subsurface Earth Materials, or using a hand auger in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. A total of three HSA drilling rigs were used: two track mounted LAR-75 (limited access rigs) manufactured by D&R Services and one truck mounted Central Mine Equipment-50. Borehole samples were collected in a stainless-steel split-spoon core-barrel sampler that retrieved core in 2.5-ft or 5-ft intervals. The samples collected, listed by location and depth, are presented in Tables 4.2-1 through 4.2-25 of this investigation report.

Samples for VOC analysis were immediately placed into sample jars to minimize the loss of subsurface VOCs during the sample collection process and transferred directly to sterile sample collection jars or bags for transport to the SMO. In accordance with SOP-5061, Field Decontamination of Drilling and Sampling Equipment, the sample collection tools were decontaminated immediately before each sample was collected.

B-6.3 Quality Assurance/Quality Control Samples

Quality assurance/quality control (QA/QC) samples for soil and tuff were collected in accordance with SOP-5059, Field Quality Control Samples. Field duplicate samples were collected at a frequency of at least 1 duplicate sample for every 10 samples. Field rinsate samples were collected from sampling equipment at a frequency of at least 1 rinsate sample for every 10 samples. Field trip blanks were collected at a frequency of 1 for every 10 samples for VOC samples only.

B-6.4 Sample Documentation and Handling

Field personnel completed a sample collection log and chain-of-custody (COC) form for each sample set. Sample containers were sealed with signed COC seals and placed in coolers at approximately 4°C. Samples were packaged with preservatives, as necessary, depending upon the analytical method to be used, packed, handled, and shipped in accordance with SOP-5057, Handling, Packaging, and Transporting Field Samples, and SOP-5056, Sample Containers and Preservation.

Swipe samples were collected from the exterior of sample containers and analyzed by the RCT before the sample containers were removed from the site. Samples were transported to the SMO in sealed coolers before they were shipped to the analytical laboratory. The SMO reviewed and approved the sample collection logs and COC forms and accepted custody of the samples.

B-6.5 Decontamination of Sampling Equipment

Decontamination activities were performed in accordance with SOP-5061, Field Decontamination of Drilling and Sampling Equipment, and SOP-5059, Field Quality Control Samples. The hand auger and hollow-stem auger equipment that made (or could have made) contact with sample material were

decontaminated after each core was retrieved and logged. Decontamination included wiping the equipment with a household-strength cleaning spray and sterile paper towels. Decontamination of the drilling equipment was conducted before mobilization of the drill rig to another borehole to avoid cross-contamination between samples and borehole locations.

B-7.0 GEODETIC SURVEYING

All sampling locations were surveyed according to SOP-5028, Coordinating and Evaluating Geodetic Surveys. Global-positioning system (GPS) surveys were performed with the Laboratory-owned real-time kinematic GPS. This unit consists of a Trimble 5700 base-station receiver, Trimble Zephyr base-station antenna, Trimble HPB450 base-station radio, Trimble TSC2 survey controller, Pacific Crest HPB450 repeater radio, and a Trimble R8 integrated rover radio/antenna/receiver. A Trimble VX total station/laser scanner, paired with a TSC2 survey controller was used to fulfill those surveying requirements not possible with GPS. Horizontal accuracy of the monumented control points is within 0.1 ft. The differential GPS instrument referenced from Laboratory control points is accurate within 0.2 ft.

B-8.0 DEVIATIONS FROM WORK PLAN

The following deviations from the approved work plans (LANL 2004, 087461; NMED 2005, 089314; LANL 2006, 092079; LANL 2008, 102760; NMED 2009, 104978) occurred during sample collection:

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

B-9.0 WASTE

Six waste streams were generated during field activities and included

- contact waste,
- drill cuttings,
- PCB remediation waste <50 ppm,
- PCB remediation waste >500 ppm,
- PCB-remediation debris containing asbestos, and
- municipal solid waste.

Appendix D contains the details of the wastes generated.

B-10.0 REFERENCES

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

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

LANL (Los Alamos National Laboratory), August 2004. "Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-04-5009, Los Alamos, New Mexico. (LANL 2004, 087461)

LANL (Los Alamos National Laboratory), April 2006. "Supplemental Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-06-1508, Los Alamos, New Mexico. (LANL 2006, 092079)

LANL (Los Alamos National Laboratory), March 2008. "Delta Prime Site Aggregate Area Investigation Report, Revision 1," Los Alamos National Laboratory document LA-UR-08-1834, Los Alamos, New Mexico. (LANL 2008, 102760)

NMED (New Mexico Environment Department), April 13, 2005. "Approval with Modifications for the Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," New Mexico Environment Department letter to D. Gregory (DOE LASO) and G.P. Nanos (LANL Director) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2005, 089314)

NMED (New Mexico Environment Department), January 12, 2009. "Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

Table B-1.0-1
Summary of Field Investigation Methods

Method	Summary
Spade and Scoop Collection of Soil Samples	This method is typically used to collect shallow (i.e., approximately 0-12 in.) soil or sediment samples. The spade-and-scoop method involved digging a hole to the desired depth, as prescribed in the sampling and analysis plan, and collecting a discrete grab sample. The sample was placed in a clean stainless-steel bowl before it was transferred to various sample containers.
Hand-Auger Sampling	This method is typically used for sampling soil or sediment at depths of less than 10–15 ft but may in some cases be used to collect samples of weathered or nonwelded tuff. The method involved hand-turning a stainless-steel bucket auger (typically 3–4 in. inside diameter), creating a vertical hole that was advanced to the desired sample depth. When the desired depth was reached, the auger was decontaminated before advancing the hole through the sample depth. The sample material was transferred from the auger bucket to a stainless-steel sampling bowl before the various required sample containers were filled.
Headspace Vapor Screening	Individual soil, tuff, or sediment samples were field screened for VOCs by placing a portion of the sample in a plastic sample bag or in a glass container with a foil-sealed cover. The container was sealed and gently shaken and allowed to equilibrate for 5 min. The sample was then screened by inserting a PID probe into the container and measuring and recording any detected vapors. PIDs must use lamps with voltage of 11.7 eV.
Handling, Packaging, and Shipping of Samples	Field team members sealed and labeled samples before packing and ensured that the sample containers and the containers used for transport were free of external contamination. Field team members packaged all samples to minimize the possibility of breakage during transportation. After all environmental samples were collected, packaged, and preserved, a field team member transported them either to the SMO or to an SMO-approved radiation screening laboratory under COC. The SMO arranged for shipping samples to analytical laboratories. The field team member must inform the SMO and/or the radiation screening laboratory coordinator when levels of radioactivity were in the action-level or limited-quantity ranges.
Sample Control and Field Documentation	The collection, screening, and transport of samples were documented on standard forms generated by the SMO. These forms included sample collection logs, COC forms, and sample container labels. Collection logs were completed at the time of sample collection and were signed by the sampler and a reviewer who verified the logs for completeness and accuracy. Corresponding labels were initialed and applied to each sample container, and custody seals were placed around container lids or openings. The COC forms were completed and assigned to verify the samples had not been left unattended.
Field Quality Control Samples	Field quality control samples were collected as follows: Field Duplicates: at a frequency 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 was collected in a sample container and submitted for laboratory analysis Trip Blanks: required for all field events that include collecting samples for VOC analysis. Trip blanks containers of certified clean sand that were opened and kept with the other sample containers during the sampling process

Table B-1.0-1 (continued)

Method	Summary
Field Decontamination of Drilling and Sampling Equipment	Dry decontamination is the preferred method to minimize the generation of liquid waste. Dry decontamination methods included the use of a wire brush or other tool to remove soil or other material adhering to the sampling equipment, followed by the use of a commercial cleaning agent (nonacid, waxless cleaners) and paper wipes. Dry decontamination was followed by wet decontamination if necessary.
Containers and Preservation of Samples	Specific requirements/processes for sample containers, preservation techniques, and holding times are based on U.S. Environmental Protection Agency guidance for environmental sampling, preservation, and QA. Specific requirements for each sample were printed on the sample collection logs provided by the SMO (size and type of container [e.g., glass, amber glass, and polyethylene]). All samples were preserved by being placed in insulated containers with ice to maintain a temperature of 4˚C. Nitric acid and other preservatives were also applied to the media or analytical requests.
Coordinating and Evaluating Geodetic Surveys	Geodetic surveys focused on obtaining survey data of acceptable quality to use during project investigations. Geodetic surveys were conducted with a Trimble 5700 differential GPS. The survey data conformed to Laboratory Information Architecture project standards IA-CB02, Geographic Information System Horizontal Spatial Reference System, and IA-D802, Geospatial Positioning Accuracy Standard for A/E/C/ and Facility Management. All coordinates were expressed as State Plain Coordinate System 83, NM Central, U.S. feet coordinates. All elevation data were reported relative to the National Geodetic Vertical Datum of 1983.
Management of Environmental Restoration Project Waste, Waste Characterization	Investigation-derived waste (IDW) was managed, characterized, and stored in accordance with an approved waste characterization strategy form that documented site history, field activities, and the characterization approach for each waste stream managed. Waste characterization was adequate to comply with on-site or off-site waste acceptance criteria. All stored IDW was marked with appropriate signage and labels. Drummed IDW was stored on pallets to prevent deterioration of containers. Generators were required to reduce the volume of waste generated by as much as was technically and economically feasible. The means to store, control, and transport each potential waste type and its classification were determined before the start of field operations that generated waste. A waste storage area was established before waste was generated. Waste storage areas located in controlled areas of the laboratory were controlled as needed to prevent inadvertent addition or management of wastes by unauthorized personnel. Each container of waste generated was individually labeled with waste classification, item identification number, and radioactivity (if applicable), immediately following containerization. All waste was segregated by classification and compatibility to prevent cross-contamination.

Appendix C

Photographs of
Phase II Investigation Activities at DP Site Aggregate Area

PCB site outfall sampling

PCB site outfall sampling

PCB site outfall sampling

PCB site outfall sampling

PCB site asphalt debris

PCB site regraded after remediation

PCB site regraded after remediation

PCB site regraded after remediation

PCB site excavation area sampling

PCB site excavation

PCB site excavation

PCB site excavation

PCB site outfall excavation

PCB site outfall excavation

PCB site outfall excavation

PCB site outfall excavation

PCB site outfall excavation

PCB site excavation and preparation

PCB site excavation and preparation

PCB site excavated material storage

PCB site excavation

PCB site excavation areas

PCB site excavation areas

PCB site excavation areas

PCB site excavation areas

PCB site power pole removal

PCB site waste removal

PCB site waste removal

PCB site outfall confirmation sampling

Appendix D

Management of Investigation-Derived Waste

D-1.0 INTRODUCTION

This appendix contains the waste management records for the investigation-derived waste (IDW) generated while implementing the approved DP Site Phase II work plan (LANL 2008, 104989; NMED 2009, 104978) and the supplemental work plan (LANL 2006, 092079) at Technical Area 21 (TA-21) of Los Alamos National Laboratory (the Laboratory).

All IDW was managed in accordance with Standard Operating Procedure (SOP) 5238, Characterization and Management of Environmental Program Waste. This SOP incorporates the waste management requirements of applicable U.S Environmental Protection Agency and New Mexico Environment Department (NMED) regulations, U.S Department of Energy orders, and Laboratory requirements.

Consistent with SOP-5238, a waste characterization strategy form (WCSF) was prepared to address characterization approaches, on-site management, and final disposition options for wastes. Analytical data and information on wastes generated during previous investigations and/or acceptable knowledge (AK) were used to complete the WCSF. The WCSF is included in this appendix as Attachment D-1 (on CD).

The selection of waste containers was based on appropriate U.S. Department of Transportation requirements, waste types, and estimated volumes of IDW generated. Immediately following containerization, each waste container was individually labeled with a unique identification number and with information regarding waste classification, contents, and date generated. Wastes were staged in clearly marked, appropriately constructed waste accumulation areas. Waste accumulation area posting, regulated storage duration, and inspection requirements were based on the type of IDW and its classification. Container and storage requirements were detailed in the WCSF and approved before waste was generated.

Investigation activities were conducted in a manner that minimizes the generation of waste. Waste minimization was accomplished by implementing the most recent version of the Laboratory's hazardous waste minimization report.

D-2.0 WASTE STREAMS

The IDW streams generated and managed during the DP Site Phase II sampling and polychlorinated biphenyl (PCB) site remediation are described below and summarized in Table D-2.0-1.

- Contact waste: This waste stream includes spent personal protective equipment (PPE), material used in dry decontamination of sampling equipment (e.g., paper towels), and plastic bags. These wastes were containerized in rolloff bins with the PCB-remediation waste and stored at an area of contamination approved by NMED on February 12, 2009. Characterization of this waste was conducted using AK based on site characterization sampling. The waste was characterized as PCB-contamination waste and was disposed at Energy Solutions in Clive, Utah.
- Drill cuttings (IDW): This waste stream consists of soil and rock cuttings generated from the drilling of boreholes. These wastes were containerized in drums and supersacks and stored at the point of generation. This waste was characterized using direct sampling. All drill cuttings met the criteria for land application in the NMED-approved Notice of Intent Decision Tree for Land application of Investigation Derived Waste Solids from Construction of Wells/Boreholes. Approximately 8 yd^3 of this stream was land-applied on-site at Technical Area 21.

- PCB-remediation waste <50 ppm: This waste stream consists of excavated soil and associated contact waste from the PCB site [Consolidated Unit 21-003-99 and SWMU 21-024(c)]. These wastes were stored on-site within the area of contamination approved by NMED on February 12, 2009. They were stockpiled with appropriate stormwater best management practices (BMPs) until they were shipped off-site for disposal. The waste was characterized using the analytical results from site characterization and direct sampling of the waste. Approximately 1335 yd^3 of PCB-remediation waste (<50 ppm) was disposed of at Energy Solutions in Clive, Utah.
- PCB-remediation waste >500 ppm: This waste stream consists of excavated soil and associated contact waste from the PCB site [Consolidated Unit 21-003-99 and SWMU 21-024(c)]. These wastes were containerized in rolloff bins and stored within an area of contamination approved by NMED on February 12, 2009. This waste was characterized using the analytical results from site characterization and direct sampling for waste characterization. Approximately 45 yd^3 of PCB-remediation waste (>500 ppm) was disposed of at Energy Solutions in Clive, Utah.
- PCB-remediation debris containing asbestos: This waste stream consists of debris (piping, concrete, asphalt, metal, etc.) generated during the remediation of the PCB site. These wastes were containerized in rolloff bins and stored at an area of contamination approved by NMED on February 12, 2009. This waste was characterized using the analytical results from site characterization and direct sampling of the waste. Approximately 15yd^3 of PCB-contaminated waste was disposed of at Energy Solutions in Clive, Utah.
- Municipal Solid Waste (MSW): This waste stream consists of noncontact trash and debris and empty sample preservation containers. It was stored in plastic bags and disposed of at the Los Alamos County landfill.

D.3.0 REFERENCES

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

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LANL (Los Alamos National Laboratory), April 2006. "Supplemental Investigation Work Plan for Delta Prime Site Aggregate Area at Technical Area 21," Los Alamos National Laboratory document LA-UR-06-1508, Los Alamos, New Mexico. (LANL 2006, 092079)

LANL (Los Alamos National Laboratory), December 2008. "Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," Los Alamos National Laboratory document LA-UR-08-7794, Los Alamos, New Mexico. (LANL 2008, 104989)

NMED (New Mexico Environment Department), January 12, 2009. "Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

Table D-2.0-1
Summary of IDW Generation and Management

Waste Stream	Waste Type	Volume	Characterization Method	On-Site Management	Disposition
Contact Waste	Low-level waste (LLW), PCB-containing	Negligible	AK based on sampling of drill cuttings and investigation samples	Plastic bags	Energy Solutions in Clive, Utah
Drill Cuttings	Not applicable	8 yd^3	Direct sampling	Drums or supersacks	Energy Solutions in Clive, Utah
PCB Remediation Waste <50 ppm	LLW, PCB-containing	1335 yd^3	Direct sampling	Stockpiled with BMPs	Energy Solutions in Clive, Utah
PCB Remediation Waste >500 ppm	LLW, PCB-containing	50 yd^3	Direct sampling	Rolloff containers	Energy Solutions in Clive, Utah
Debris	LLW, PCB, asbestos containing	15 yd^3	AK of site characterization samples and direct sampling	Rolloff containers	Energy Solutions in Clive, Utah
Municipal Solid	MSW	Negligible	AK	Plastic bags	Los Alamos Municipal Landfill

Attachment D-1

Waste Characterization Strategy Form
(on CD included with this document)

Appendix E

Diesel Tank 21-57 Spill Site Investigation

E-1.0 INTRODUCTION

In 2002 and 2003, site assessments were conducted regarding a potential fuel-oil leak into the subsurface surrounding the underground pipelines connected to aboveground diesel tank 21-57 at Technical Area 21 (TA-21) (Figure E-1.0-1). The 2009 investigation described in this appendix further characterizes the site and assesses current conditions and extent of contamination at the site.

E-2.0 FIELD ACTIVITIES

Two boreholes were installed and sampled at the diesel spill site, tank 21-57, in August and September 2009. These boreholes are shown in Figure E-1.0-1. They were drilled next to previously installed boreholes. The total depth of the borehole sampling was determined by field-screening results. Table E-2.0-1 shows the field-screening results.

The PetroFLAG test kit results, borehole logs, field book, and waste characterization form are attached to this appendix as Attachment E-1 (on CD).

E-3.0 RESULTS

Tables E-3.0-1 and E-3.0-2 show the samples collected at the site and the analytical results, respectively.

The extent of diesel contamination is defined at the site. Concentrations of semivolatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) diesel range organics (DRO), and volatile organic compounds (VOCs) decreased with depth (Figure E-1.0-1 and Table E-3.0-2). TPH-DRO sampling results from additional characterization activities in 2009 appear to be consistent with sampling results from site assessment work completed in 2002 and 2003.

E-4.0 REFERENCE

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

Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.

NMED (New Mexico Environment Department), December 2009. "Technical Background Document for Development of Soil Screening Levels, Revision 5.0," with revised Table A-1, New Mexico Environment Department, Hazardous Waste Bureau and Ground Water Quality Bureau Voluntary Remediation Program, Santa Fe, New Mexico. (NMED 2009, 108070)

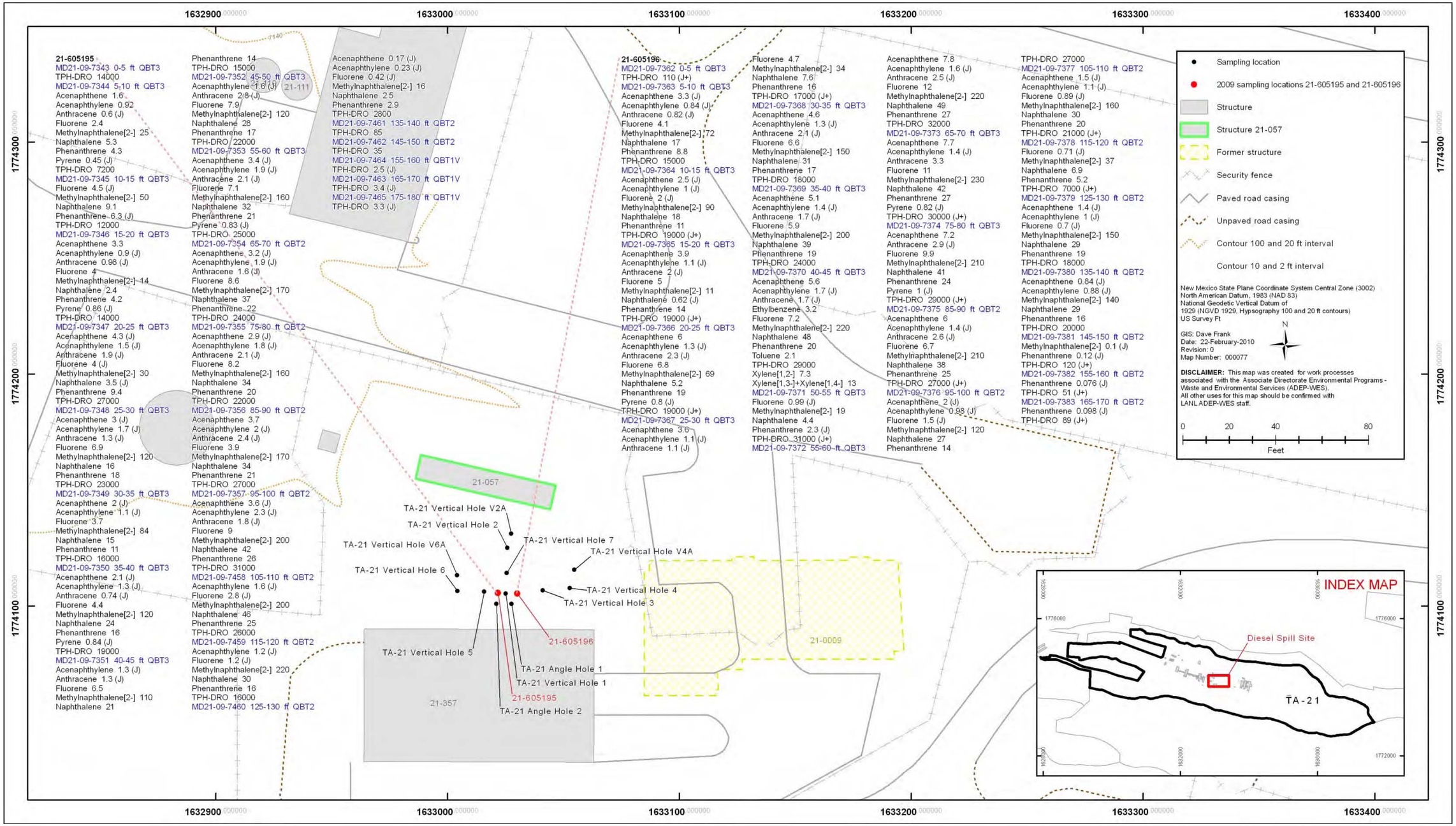

Figure E-1.0-1 Diesel spill site within TA-21 and 2009 sampling results

Table E-2.0-1
Diesel Tank 21-57 Spill 2009 Field-Screening Results

Location Number	Sample Top Depth Interval (ft)	Sample Bottom Depth Interval (ft)	Work Plan Location ID	Photoionization Detector Background (ppm)	Photoionization Detector (ppm)	Alpha Background (dpm*)	Alpha (dpm)	Beta Background (dpm)	Beta/Gamma (dpm)
21-605195	0	5	V-1A	0	1.1	59	48	1937	2370
21-605195	5	10	V-1A	0	198	59	75	1937	2520
21-605195	10	15	V-1A	0	183	59	62	1937	2460
21-605195	15	20	V-1A	0	324	59	69	1937	2470
21-605195	20	25	V-1A	0	144	59	61	1937	2030
21-605195	25	30	V-1A	0	135	59	69	1937	2360
21-605195	30	35	V-1A	0	253	59	48	1937	2230
21-605195	35	40	V-1A	0	278	59	48	1937	2610
21-605195	40	45	V-1A	0	278	59	34	1937	2420
21-605195	45	50	V-1A	0	151	59	75	1937	2410
21-605195	45	50	V-1A	0	151	59	75	1937	2410
21-605195	55	60	V-1A	0	101	59	41	1937	2470
21-605195	65	70	V-1A	0	324	69	20	2490	2500
21-605195	75	80	V-1A	0	321	69	69	2490	2620
21-605195	85	90	V-1A	0	253	69	89	2490	2530
21-605195	95	100	V-1A	0	182	69	48	2490	2540
21-605195	105	110	V-1A	0	560	69	48	2490	2430
21-605195	115	120	V-1A	0	600	69	69	2480	2520
21-605195	125	130	V-1A	0	175	69	48	2490	2700
21-605195	135	140	V-1A	0.8	171	35	6	1521	662
21-605195	145	150	V-1A	0.8	52.5	35	10	1521	1208
21-605195	145	150	V-1A	0.8	52.5	35	10	1521	1208
21-605195	155	160	V-1A	1	2.3	35	48	1521	258
21-605195	165	170	V-1A	1	4.6	35	20	1521	2470
21-605195	175	180	V-1A	0.9	8.4	35	48	1521	2410
21-605195	185	190	V-1A	0.7	9	69	48	2800	2720
21-605195	195	200	V-1A	0.7	8.3	69	75	2800	2940
21-605196	0	5	V-1B	0.7	48.8	31	49.55	1071	2000
21-605196	0	5	V-1B	0.7	48.8	31	49.55	1071	2000

Table E-2.0-1 (continued)

Location Number	Sample Top Depth Interval (ft)	Sample Bottom Depth Interval (ft)	Work Plan Location ID	Photoionization Detector Background (ppm)	Photoionization Detector (ppm)	Alpha Background (dpm*)	Alpha (dpm)	Beta Background (dpm)	Beta/Gamma (dpm)
21-605196	5	10	V-1B	0.7	551	31	31	1071	1071.5
21-605196	10	15	V-1B	0.7	538	31	42.2	1071	2840
21-605196	15	20	V-1B	1	576	31	0	1071	2330
21-605196	20	25	V-1B	1.5	349	31	9.93	1071	1957
21-605196	25	30	V-1B	1.2	439	31	52.5	1071	2535
21-605196	30	35	V-1B	0.8	796	31	10.9	1071	1608
21-605196	35	40	V-1B	1.3	520	31	10.9	1071	1603
21-605196	40	45	V-1B	1.5	578	31	16.98	1071	1675
21-605196	40	45	V-1B	1.5	478	31	16.98	1071	1675
21-605196	50	55	V-1B	1.5	730	31	0	1531	1675
21-605196	55	60	V-1B	1.5	760	31	16.98	1531	1542
21-605196	65	70	V-1B	1.5	637	31	0	1531	2150
21-605196	75	80	V-1B	1	690	31	30	531	2180
21-605196	75	80	V-1B	1	690	31	30	1531	2180
21-605196	85	90	V-1B	0.6	582	55	34	2920	2630
21-605196	95	100	V-1B	0.9	532	55	55	2920	2980
21-605196	105	110	V-1B	0.8	411	55	55	2920	2990
21-605196	115	120	V-1B	0.7	246	55	96	2920	2940
21-605196	125	130	V-1B	0.9	302	55	55	2920	2820
21-605196	135	140	V-1B	1.1	408	55	82	2920	2630
21-605196	145	150	V-1B	1	82.6	55	96	2920	3110
21-605196	145	150	V-1B	1	82.6	55	96	2920	3110
21-605196	155	160	V-1B	0.7	46.2	40	33	1590	2300
21-605196	165	170	V-1B	0.8	54.8	40	117	1590	3000
21-605196	175	180	V-1B	0.9	2.3	40	117	1590	3290
21-605196	185	190	V-1B	0.9	2.4	40	62	1590	3160
21-605196	195	200	V-1B	0.8	4.3	40	62	1590	2950
21-605196	195	200	V-1B	0.8	4.3	40	62	1590	2950

* dpm = Disintegrations per minute.

Table E-3.0-1
Samples Collected and Analyses Requested at the Diesel Spill Site, Tank 21-57

Sample ID	Location ID	Depth (ft)	Media	Field Quality Control Type	SVOCs	TPH-DRO	VOCs
MD21-09-7471	21-605195	0.0000–0.0000	na[a]	FTB[b]	—[c]	—	09-2935[d]
MD21-09-7472	21-605195	0.0000–0.0000	na	FTB	—	—	09-2971
MD21-09-7473	21-605195	0.0000–0.0000	na	FTB	—	—	09-2978
MD21-09-7474	21-605195	0.0000–0.0000	na	FTB	—	—	09-2995
MD21-09-7343	21-605195	0.0000–5.0000	QBT3	na	09-2935	09-2935	09-2935
MD21-09-7344	21-605195	5.0000–10.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7345	21-605195	10.0000–15.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7346	21-605195	15.0000–20.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7347	21-605195	20.0000–25.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7348	21-605195	25.0000–30.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7349	21-605195	30.0000–35.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7350	21-605195	35.0000–40.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7351	21-605195	40.0000–45.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7330	21-605195	45.0000–50.0000	QBT3	FD[e]	09-2935	09-2935	—
MD21-09-7352	21-605195	45.0000–50.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7353	21-605195	55.0000–60.0000	QBT3	na	09-2935	09-2935	—
MD21-09-7354	21-605195	65.0000–70.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7355	21-605195	75.0000–80.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7356	21-605195	85.0000–90.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7357	21-605195	95.0000–100.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7458	21-605195	105.0000–110.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7459	21-605195	115.0000–120.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7460	21-605195	125.0000–130.0000	QBT2	na	09-2971	09-2971	—
MD21-09-7461	21-605195	135.0000–140.0000	QBT2	na	09-2978	09-2978	—
MD21-09-7332	21-605195	145.0000–150.0000	QBT2	FD	09-2978	09-2978	09-2978
MD21-09-7462	21-605195	145.0000–150.0000	QBT2	na	09-2978	09-2978	09-2978
MD21-09-7464	21-605195	155.0000–160.0000	QBT1V	na	09-2978	09-2978	—
MD21-09-7463	21-605195	165.0000–170.0000	QBT1V	na	09-2978	09-2978	—
MD21-09-7465	21-605195	175.0000–180.0000	QBT1V	na	09-2978	09-2978	—
MD21-09-7466	21-605195	185.0000–190.0000	QBT1V	na	09-2995	09-2995	—
MD21-09-7467	21-605195	195.0000–200.0000	QBT1V	na	09-2995	09-2995	09-2995
MD21-09-7475	21-605196	0.0000–0.0000	na	FTB	—	—	09-3000
MD21-09-7476	21-605196	0.0000–0.0000	na	FTB	—	—	09-3000
MD21-09-7477	21-605196	0.0000–0.0000	na	FTB	—	—	09-3006
MD21-09-7333	21-605196	0.0000–5.0000	QBT3	FD	09-3000	09-3000	09-3000
MD21-09-7362	21-605196	0.0000–5.0000	QBT3	na	09-3000	09-3000	09-3000

Table E-3.0-1 (continued)

Sample ID	Location ID	Depth (ft)	Media	Field Quality Control Type	SVOCs	TPH-DRO	VOCs
MD21-09-7363	21-605196	5.0000–10.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7364	21-605196	10.0000–15.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7365	21-605196	15.0000–20.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7366	21-605196	20.0000–25.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7367	21-605196	25.0000–30.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7368	21-605196	30.0000–35.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7369	21-605196	35.0000–40.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7334	21-605196	40.0000–45.0000	QBT3	FD	09-3000	09-3000	09-3000
MD21-09-7370	21-605196	40.0000–45.0000	QBT3	na	09-3000	09-3000	09-3000
MD21-09-7371	21-605196	50.0000–55.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7372	21-605196	55.0000–60.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7373	21-605196	65.0000–70.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7331	21-605196	75.0000–80.0000	QBT3	FD	09-3000	09-3000	—
MD21-09-7374	21-605196	75.0000–80.0000	QBT3	na	09-3000	09-3000	—
MD21-09-7375	21-605196	85.0000–90.0000	QBT2	na	09-3000	09-3000	—
MD21-09-7376	21-605196	95.0000–100.0000	QBT2	na	09-3000	09-3000	—
MD21-09-7377	21-605196	105.0000–110.0000	QBT2	na	09-3000	09-3000	—
MD21-09-7378	21-605196	115.0000–120.0000	QBT2	na	09-3000	09-3000	—
MD21-09-7379	21-605196	125.0000–130.0000	QBT2	na	09-3000	09-3000	—
MD21-09-7380	21-605196	135.0000–140.0000	QBT2	na	09-3000	09-3000	—
MD21-09-7335	21-605196	145.0000–150.0000	QBT2	FD	09-3000	09-3000	09-3000
MD21-09-7381	21-605196	145.0000–150.0000	QBT2	na	09-3000	09-3000	09-3000
MD21-09-7382	21-605196	155.0000–160.0000	QBT2	na	09-3006	09-3006	—
MD21-09-7383	21-605196	165.0000–170.0000	QBT2	na	09-3006	09-3006	—
MD21-09-7384	21-605196	175.0000–180.0000	QBT1V	na	09-3006	09-3006	—
MD21-09-7385	21-605196	185.0000–190.0000	QBT1V	na	09-3006	09-3006	—
MD21-09-7336	21-605196	195.0000–200.0000	QBT1V	FD	09-3006	09-3006	09-3006
MD21-09-7386	21-605196	195.0000–200.0000	QBT1V	na	09-3006	09-3006	09-3006

[a] na = Not available.

[b] FTB = Field trip blank.

[c] — = Not analyzed.

[d] Laboratory request number.

[e] FD = Field duplicate.

Table E-3.0-2
Organics Detected at Diesel Spill Site, Tank 21-57

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Anthracene	Ethylbenzene	Fluorene	Methylnaphthalene[2-]	Naphthalene	Phenanthrene	Pyrene	Toluene	TPH-DRO	Xylene[1,2-]	Xylene[1,3] +Xylene[1,4-]
Residential Soil Screening Levels				**3440**	**1720**	**17200**	**69.7**	**2290**	**310**[a]	**45**	**1830**	**1720**	**5570**	**520**[b]	**9550**	**1090**
MD21-09-7343	21-605195	0.0000–5.0000	QBT3	—[c]	—	—	—	—	—	—	—	—	—	14000	—	—
MD21-09-7344	21-605195	5.0000–10.0000	QBT3	1.6	0.92	0.6 (J)	NA[d]	2.4	25	5.3	4.3	0.45 (J)	NA	7200	NA	NA
MD21-09-7345	21-605195	10.0000–15.0000	QBT3	—	—	—	NA	4.5 (J)	50	9.1	6.3 (J)	—	NA	12000	NA	NA
MD21-09-7346	21-605195	15.0000–20.0000	QBT3	3.3	0.9 (J)	0.98 (J)	NA	4	14	2.4	4.2	0.86 (J)	NA	14000	NA	NA
MD21-09-7347	21-605195	20.0000–25.0000	QBT3	4.3 (J)	1.5 (J)	1.9 (J)	NA	4 (J)	30	3.5 (J)	9.4	—	NA	27000	NA	NA
MD21-09-7348	21-605195	25.0000–30.0000	QBT3	3 (J)	1.7 (J)	1.3 (J)	NA	6.9	120	16	18	—	NA	23000	NA	NA
MD21-09-7349	21-605195	30.0000–35.0000	QBT3	2 (J)	1.1 (J)	—	NA	3.7	84	15	11	—	NA	16000	NA	NA
MD21-09-7350	21-605195	35.0000–40.0000	QBT3	2.1 (J)	1.3 (J)	0.74 (J)	NA	4.4	120	24	16	0.84 (J)	NA	19000	NA	NA
MD21-09-7351	21-605195	40.0000–45.0000	QBT3	—	1.3 (J)	1.3 (J)	NA	6.5	110	21	14	—	NA	15000	NA	NA
MD21-09-7352	21-605195	45.0000–50.0000	QBT3	—	1.6 (J)	2.8 (J)	NA	7.9	120	28	17	—	NA	22000	NA	NA
MD21-09-7353	21-605195	55.0000–60.0000	QBT3	3.4 (J)	1.9 (J)	2.1 (J)	NA	7.1	160	32	21	0.83 (J)	NA	25000	NA	NA
MD21-09-7354	21-605195	65.0000–70.0000	QBT2	3.2 (J)	1.9 (J)	1.6 (J)	NA	8.6	170	37	22	—	NA	24000	NA	NA
MD21-09-7355	21-605195	75.0000–80.0000	QBT2	2.9 (J)	1.8 (J)	2.1 (J)	NA	8.2	160	34	20	—	NA	22000	NA	NA
MD21-09-7356	21-605195	85.0000–90.0000	QBT2	3.7	2 (J)	2.4 (J)	NA	3.9	170	34	21	—	NA	27000	NA	NA
MD21-09-7357	21-605195	95.0000–100.0000	QBT2	3.6 (J)	2.3 (J)	1.8 (J)	NA	9	200	42	26	—	NA	31000	NA	NA
MD21-09-7458	21-605195	105.0000–110.0000	QBT2	—	1.6 (J)	—	NA	2.8 (J)	200	46	25	—	NA	26000	NA	NA
MD21-09-7459	21-605195	115.0000–120.0000	QBT2	—	1.2 (J)	—	NA	1.2 (J)	220	30	16	—	NA	16000	NA	NA
MD21-09-7460	21-605195	125.0000–130.0000	QBT2	0.17 (J)	0.23 (J)	—	NA	0.42 (J)	16	2.5	2.9	—	NA	2800	NA	NA
MD21-09-7461	21-605195	135.0000–140.0000	QBT2	—	—	—	NA	—	—	—	—	—	NA	85	NA	NA
MD21-09-7462	21-605195	145.0000–150.0000	QBT2	—	—	—	—	—	—	—	—	—	—	35	—	—
MD21-09-7464	21-605195	155.0000–160.0000	QBT1V	—	—	—	NA	—	—	—	—	—	NA	2.5 (J)	NA	NA
MD21-09-7463	21-605195	165.0000–170.0000	QBT1V	—	—	—	NA	—	—	—	—	—	NA	3.4 (J)	NA	NA
MD21-09-7465	21-605195	175.0000–180.0000	QBT1V	—	—	—	NA	—	—	—	—	—	NA	3.3 (J)	NA	NA
MD21-09-7362	21-605196	0.0000–5.0000	QBT3	—	—	—	—	—	—	—	—	—	—	110 (J+)	—	—
MD21-09-7363	21-605196	5.0000–10.0000	QBT3	3.3 (J)	0.84 (J)	0.82 (J)	NA	4.1	72	17	8.8	—	NA	15000	NA	NA
MD21-09-7364	21-605196	10.0000–15.0000	QBT3	2.5 (J)	1 (J)	—	NA	2 (J)	90	18	11	—	NA	19000 (J+)	NA	NA
MD21-09-7365	21-605196	15.0000–20.0000	QBT3	3.9	1.1 (J)	2 (J)	NA	5	11	0.62 (J)	14	—	NA	19000 (J+)	NA	NA
MD21-09-7366	21-605196	20.0000–25.0000	QBT3	6	1.3 (J)	2.3 (J)	NA	6.8	69	5.2	19	0.8 (J)	NA	19000 (J+)	NA	NA
MD21-09-7367	21-605196	25.0000–30.0000	QBT3	3.6	1.1 (J)	1.1 (J)	NA	4.7	34	7.6	16	—	NA	17000 (J+)	NA	NA
MD21-09-7368	21-605196	30.0000–35.0000	QBT3	4.6	1.3 (J)	2.1 (J)	NA	6.6	150	31	17	—	NA	18000	NA	NA
MD21-09-7369	21-605196	35.0000–40.0000	QBT3	5.1	1.4 (J)	1.7 (J)	NA	5.9	200	39	19	—	NA	24000	NA	NA

Table E-3.0-2 (continued)

Sample ID	Location ID	Depth (ft)	Media	Acenaphthene	Acenaphthylene	Anthracene	Ethylbenzene	Fluorene	Methylnaphthalene[2-]	Naphthalene	Phenanthrene	Pyrene	Toluene	TPH-DRO	Xylene[1,2-]	Xylene[1,3] +Xylene[1,4-]
Residential Soil Screening Levels				**3440**	**1720**	**17200**	**69.7**	**2290**	**310**[a]	**45**	**1830**	**1720**	**5570**	**520**[b]	**9550**	**1090**
MD21-09-7370	21-605196	40.0000–45.0000	QBT3	5.6	1.7 (J)	1.7 (J)	3.2	7.2	220	48	20	—	2.1	29000	7.3	13
MD21-09-7371	21-605196	50.0000–55.0000	QBT3	—	—	—	NA	0.99 (J)	19	4.4	2.3 (J)	—	NA	31000 (J+)	NA	NA
MD21-09-7372	21-605196	55.0000–60.0000	QBT3	7.8	1.6 (J)	2.5 (J)	NA	12	220	49	27	—	NA	32000	NA	NA
MD21-09-7373	21-605196	65.0000–70.0000	QBT3	7.7	1.4 (J)	3.3	NA	11	230	42	27	0.82 (J)	NA	30000 (J+)	NA	NA
MD21-09-7374	21-605196	75.0000–80.0000	QBT3	7.2	—	2.9 (J)	NA	9.9	210	41	24	1 (J)	NA	29000 (J+)	NA	NA
MD21-09-7375	21-605196	85.0000–90.0000	QBT2	6	1.4 (J)	2.6 (J)	NA	6.7	210	38	25	—	NA	27000 (J+)	NA	NA
MD21-09-7376	21-605196	95.0000–100.0000	QBT2	2 (J)	0.98 (J)	—	NA	1.5 (J)	120	27	14	—	NA	27000	NA	NA
MD21-09-7377	21-605196	105.0000–110.0000	QBT2	1.5 (J)	1.1 (J)	—	NA	0.89 (J)	160	30	20	—	NA	21000 (J+)	NA	NA
MD21-09-7378	21-605196	115.0000–120.0000	QBT2	—	—	—	NA	0.71 (J)	37	6.9	5.2	—	NA	7000 (J+)	NA	NA
MD21-09-7379	21-605196	125.0000–130.0000	QBT2	1.4 (J)	1 (J)	—	NA	0.7 (J)	150	29	19	—	NA	18000	NA	NA
MD21-09-7380	21-605196	135.0000–140.0000	QBT2	0.84 (J)	0.88 (J)	—	NA	—	140	29	16	—	NA	20000	NA	NA
MD21-09-7381	21-605196	145.0000–150.0000	QBT2	—	—	—	—	—	0.1 (J)	—	0.12 (J)	—	—	120 (J+)	—	—
MD21-09-7382	21-605196	155.0000–160.0000	QBT2	—	—	—	NA	—	NA	—	0.076 (J)	—	NA	51 (J+)	NA	NA
MD21-09-7383	21-605196	165.0000–170.0000	QBT2	—	—	—	NA	—	NA	—	0.098 (J)	—	NA	89 (J+)	NA	NA

Notes: Results are in mg/kg. Data qualifiers are presented in Appendix A. All soil screening levels are from NMED (2009, 108070) unless otherwise noted.

[a] U.S. Environmental Protection Agency regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[b] From NMED TPH screening guidance (http://www.nmenv.state.nm.us/HWB/Guidance_docs/NMED%20TPH%20Guidance%2010-2006.pdf).

[c] — = Not detected.

[d] NA = Not analyzed.

Attachment E-1

PetroFLAG Test Kit Results, Borehole Logs,
Field Book, and Waste Characterization Form
(on CD included with this document)

Appendix F

Analytical Program

F-1.0 INTRODUCTION

This appendix summarizes the inorganic chemical, radionuclide, and organic chemical analytical methods, the quality assurance (QA)/quality control (QC), and data validation procedures used. The QA/QC procedures were implemented in accordance with the requirements of the Los Alamos National Laboratory (LANL or the Laboratory) "Quality Assurance Project Plan Requirements for Sampling and Analysis" (LANL 1996, 054609) and the Laboratory's analytical services statement of work (SOW) for contract laboratories (LANL 1995, 049738; LANL 2000, 071233).

The results of the QA/QC activities were used to estimate accuracy, bias, and precision of the analytical measurements. QC samples included method blanks, blank spikes, matrix spikes (MSs), and laboratory control samples (LCSs) to assess accuracy. The analytical services SOW describes the type and frequency of QC analyses (LANL 2000, 071233). Other QC factors, such as sample preservation and holding times, were also assessed. Evaluating these QC indicators allows estimates to be made of the accuracy, bias, and precision of the analytical results.

The following standard operating procedures (SOPs) were used for data validation:

- SOP-5161, Routine Validation of Volatile Organic Compound (VOC) Analytical Data
- SOP-5162, Routine Validation of Semivolatile Organic Compound (SVOC) Analytical Data
- SOP-5163, Routine Validation of Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) Analytical Data
- SOP-5165, Routine Validation of Metals Analytical Data
- SOP-5166, Routine Validation of Gamma Spectroscopy, Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Analytical Data
- SOP-5168, Routine Validation of LC/MS/MS High Explosive Analytical Data
- SOP-5169, Routine Validation of Dioxin Furan Analytical Data (EPA Method 1618 and SW-846 EPA Method 8290)
- SOP-5171, Routine Validation of Total Petroleum Hydrocarbons Gasoline Range Organics/Diesel Range Organics Analytical Data (Method 80151B)
- SOP-5191, Routine Validation of LC/MS/MS Perchlorate Analytical Data (SW-846 EPA Method 6850)

A focused data validation was performed for all the data packages (also referred to as request numbers). The focused data validation followed the same procedure discussed above and included a more detailed review of the raw data generated by the analytical laboratory. Appendix A lists the data qualifier definitions.

Some analytical results were rejected for various reasons and are not usable for the purposes of this report. The remaining Phase II data, including qualified data, lend themselves to evaluation and interpretation. The following sections provide summaries of the analytical methods for inorganic chemicals, radionuclides, and organic chemicals. Only the Phase II sampling is addressed in the following sections; the Phase I report (LANL 2008, 102760, Appendix E) previously discussed the Phase I data.

Historical data were revalidated to current data-quality standards for this report. Therefore, analytical results and qualifiers for historical data presented in this document may not be identical to the analytical

results and qualifiers for the historical data presented in the Phase I report (LANL 2008, 102760; NMED 2008, 102290) and used to develop the approved Phase II investigation work plan (LANL 2008, 104989; NMED 2009, 104978). As a result, some data previously presented may now be excluded from the current data set because they are no longer valid and are not presented in this report. Table F-1.0-1 presents the changes that were made to data as a result of revalidation. Table F-1.0-2 presents the data that were excluded from Consolidated Unit 21-003-99 and Solid Waste Management Unit (SWMU) 21-013(c) data sets presented in the Phase I report (LANL 2008, 102760; NMED 2008, 102290). Locations sampled in the 1990s (Table F-1.0-2) were resampled within 5 ft laterally during the Phase I investigation; therefore, only the valid Phase I data are included in the data sets presented in this Phase II report.

F-2.0 INORGANIC CHEMICAL ANALYSIS METHODS

The primary methods used for the analysis of inorganic chemicals are U.S. Environmental Protection Agency (EPA) SW-846 Method 6010B and EPA SW-846 Method 6020. Arsenic, cyanide (total), mercury and perchlorate are analyzed by different methods. Table F-2.0-1 lists the analytical methods used for inorganic chemicals.

F-2.1 Inorganic Chemical QA/QC Samples

LCSs, method blanks, MS samples, laboratory duplicate samples, interference check samples (ICSs), and serial dilution samples were analyzed to assess accuracy and precision of inorganic chemical analyses. Each of these QA/QC sample types is described in the analytical services SOW (LANL 2000, 071233) and is briefly described in the following sections.

The LCS serves as a monitor of the overall performance of each step during the analysis, including sample digestion. The analytical results for the samples were qualified according to National Functional Guidelines (EPA 1994, 048639) if the individual LCS recoveries were not within method-specific acceptable criteria. LCS recoveries should fall into the control limits of 75%–125% (LANL 2000, 071233).

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing. It is extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks serve as a measurement of bias and potential cross-contamination. All target analyte results should be below the contract-required detection limit (LANL 2000, 071233).

MS samples are used to assess the accuracy of inorganic chemical analyses. An MS sample provides information about the effect of each sample matrix on the sample preparation procedures and analytical technique. The spike sample recoveries should be within the acceptance range of 75%–125% (LANL 2000, 071233).

Laboratory duplicate samples assess the precision of inorganic chemical analyses. All relative percent differences (RPDs) between the sample and laboratory duplicate should be ±35% (LANL 2000, 071233).

ICSs verify interelement and background correction factors at the beginning and end of each analysis run.

Serial dilution samples are used to determine the concentration of an analyte when serial dilution is employed. The purpose of such dilution is to bring the concentration of an analyte in the sample within the range of the analysis or to increase the precision of the detected result.

The validation of inorganic chemical data using QA/QC samples and other methods results in the assignment of various qualifiers to individual sampling results or the rejection of the data. The inorganic chemical data were qualified using the appropriate SOPs, and the qualifiers do not affect the usability of the sampling results (except for R-qualified results). The qualified data (except R-qualified data) were used as reported. Table F-2.1-1 summarizes the qualified inorganic chemical data by site.

F-2.2 Rejected Data

There were no rejected inorganic chemical data for the Phase II samples.

F-3.0 SUMMARY OF RADIONUCLIDE ANALYSIS

The primary method used for the analysis of radionuclides is gamma spectroscopy, EPA SW-846 Method 901.1, but a variety of methods were used for individual radionuclides (e.g., isotopic uranium was analyzed by alpha spectroscopy). Samples were analyzed for one or more of the following: gamma-emitting radionuclides: americium-241, strontium-90, tritium, isotopic plutonium, and isotopic uranium. Table F-3.0-1 lists the analytical methods used for radionuclides.

F-3.1 Radionuclide QA/QC Samples

Radionuclides with reported values less than the minimum detectable activity were qualified as not detected (U). Each radionuclide result was also compared with the corresponding total propagated uncertainty. If the result was not greater than 3 times the total propagated uncertainty, the radionuclide was qualified as not detected (U).

The precision and bias of radiochemical analyses performed at external laboratories were assessed using MS samples, LCSs, method blanks, laboratory duplicates, and tracers. The analytical services SOW (LANL 2000, 071233) specify that spike sample recoveries should be within ±25% of the certified value. LCSs were analyzed to assess the accuracy of radionuclide analyses. The LCSs serve as a monitor of the overall performance of each step during the analysis, including the radiochemical separation preparation. The analytical services SOW (LANL 2000, 071233) specify that the LCS recoveries should be within ±25% of the certified value. Method blanks are also used to assess bias. The analytical services SOW (LANL 2000, 071233) specify that the method blank concentration should not exceed the required minimum detectable activity.

The validation of radionuclide data using QA/QC samples and other criteria can result in the assignment of various qualifiers to individual sampling results or in the rejection of the data. The radionuclide data were qualified using the appropriate SOPs, and the qualifiers do not affect the usability of the sampling results (except for R-qualified results). The qualified data (except rejected [R-qualified] data) were used as reported. Table F-3.1-1 summarizes the qualified radionuclide data.

F-3.2 Rejected Data

Table F-3.2-1 summarizes the rejected radionuclide data that were not used to characterize extent or evaluate potential dose.

Americium-241 and tritium data were rejected in one sample at SWMU 21-024(d). Because these data were rejected, extent has not been defined at this SWMU.

Cesium-134 data in two samples was rejected at Area of Concern C-21-027. The usable data were reported as nondetects at this site. Cesium-134 is not a chemical of potential concern at the site and does not affect the determination of nature and extent.

F-4.0 ORGANIC CHEMICAL ANALYSIS METHODS

Samples were analyzed for one or more of the following organic chemical analytical suites: volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), explosive compounds, polychlorinated biphenyls (PCBs), and dioxins/furans. Table F-4.0-1 lists the analytical methods used for organic chemicals.

F-4.1 Organic Chemical QA/QC Samples

Calibration verifications, instrument-performance checks, LCSs, method blanks, MS samples, surrogates, and internal standards (ISs) were analyzed to assess the accuracy and precision of the organic chemical analyses. The analytical services SOW define each of these QA/QC sample types (LANL 2000, 071233). The following section briefly describes these sample types.

Calibration verification, consisting of initial and continuing verification, is the establishment of a quantitative relationship between the response of the analytical procedure and the concentration of the target analyte. The initial calibration verifies the accuracy of the calibration curve and the individual calibration standards used to perform the calibration. The continuing calibration ensures the initial calibration is still holding and is correct as the instrument is used to process samples. The continuing calibration also serves to determine whether analyte identification criteria, such as retention times and spectral matching, have been met.

Instrument performance checks consist of both background and check source counts for the proportional and liquid scintillation counters and check source counts and full width at half-maximum determinations for the gamma spectrometers.

The LCS is a sample of a known matrix that has been spiked with compounds that are representative of the target analytes, and it serves as a monitor of the overall performance of a “controlled” sample. On a daily basis, the LCS is the primary demonstration of the ability to analyze samples with good qualitative and quantitative accuracy. The analytical results for the samples were qualified according to National Functional Guidelines (EPA 1999, 066649) if the individual LCS recoveries were not within method-specific acceptable criteria. LCS recoveries should fall into the control limits of 75%–125% (LANL 2000, 071233).

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing and which is extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks are used to assess the potential for sample contamination during extraction and analysis. All target analytes should be below the contract-required detection limit in the method blank (LANL 2000, 071233).

MS samples are used to measure the ability to recover prescribed analytes from a native sample matrix. MS samples are aliquots of the submitted samples spiked with a known concentration of the target analyte(s). Spiking typically occurs before sample preparation and analysis. The spike sample recoveries should be within the acceptance range of 75%–125% (LANL 2000, 071233).

A surrogate compound (surrogate) is an organic chemical compound used in the analyses of organic target analytes that is similar in composition and behavior to the target analytes but not normally found in environmental samples. Surrogates are added to every blank, sample, and spike to evaluate the efficiency with which analytes are recovered during the extraction and analysis. The recovery percentage of the surrogates must be within specified ranges, or the results may be rejected or assigned a qualifier (LANL 2000, 071233).

ISs are chemical compounds added to every blank, sample, and standard extract at a known concentration. The ISs compensate for analyte concentration changes that might occur during storage of the extract and quantitation variations that can occur during analysis. ISs are used as the basis for quantitation of target analytes. The percent recovery (%R) for ISs should be within the range of 50%–200% (LANL 2000, 071233).

The validation of organic chemical data using QA/QC samples and other methods can result in the assignment of various qualifiers to individual sample results or the rejection of the data. The organic chemical data were qualified using the appropriate SOPs, and the qualifiers do not affect the usability of the sampling results (except for R-qualified results). The qualified data (except R-qualified data) were used as reported. Table F-4.1-1 summarizes the qualified organic chemical data.

F-4.2 Rejected Data

Table F-4.2-1 summarizes the rejected organic chemical data. The rejected data were not used to characterize nature and extent or potential risk and do not affect the determination of extent or the evaluation of risk at the sites.

Various organic chemical results were qualified as rejected (R). Most of these results were reported as not detected and/or other usable data were available.

F-5.0 REFERENCES

The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.

Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.

EPA (U.S. Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA-540/R-94/013, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1994, 048639)

EPA (U.S. Environmental Protection Agency), October 1999. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," EPA540/R-99/008, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1999, 066649)

LANL (Los Alamos National Laboratory), July 1995. “Statement of Work (Formerly Called "Requirements Document") - Analytical Support, (RFP number 9-XS1-Q4257), (Revision 2 - July, 1995),” Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 1995, 049738)

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LANL (Los Alamos National Laboratory), March 2008. “Delta Prime Site Aggregate Area Investigation Report, Revision 1,” Los Alamos National Laboratory document LA-UR-08-1834, Los Alamos, New Mexico. (LANL 2008, 102760)

LANL (Los Alamos National Laboratory), December 2008. “Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1,” Los Alamos National Laboratory document LA-UR-08-7794, Los Alamos, New Mexico. (LANL 2008, 104989)

NMED (New Mexico Environment Department), June 27, 2008. “Notice of Approval, Delta Prime Site Aggregate Area Investigation Report, Revision 1 at Technical Area 21,” 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, 102290)

NMED (New Mexico Environment Department), January 12, 2009. “Approval, Delta Prime Site Aggregate Area Phase II Work Plan, Revision 1,” New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2009, 104978)

Table F-1.0-1
Phase I Data Changes as a Result of Revalidation

AOC/SWMU	Sample ID	Analyte	Reporting Qualifier Changes
21-022(f)	RE21-08-8720	Acetone	J to U
	RE21-08-8726	Acetone	J to U
	RE21-08-8727	Acetone	J to U
	RE21-08-8728	Acetone	J to U
21-024(e)	RE21-07-74617	Acetone	J to U
21-024(j)	RE 21-07-6190	Acetone	J to U

Table F-1.0-2
Vintage Pre-Phase I and II Data Removed from Data Sets

SWMU/ Consolidated Unit Data Set	Sample ID	Location ID
21-003-99	AAB8961	21-01884
	AAB8966	21-01885
	AAB8971	21-01886
	AAB8976	21-01887
	AAB8981	21-01888
	AAB8983	21-01888
	AAB8986	21-01889
	AAB8991	21-01890
	AAB8996	21-01891
	AAB8998	21-01891
	AAB9001	21-01892
	AAB9003	21-01892
	AAB9005	21-01892
21-013(c)	AAB7101	21-01908
	AAB7102	21-01908
	AAB7105	21-01909
	AAB7106	21-01909
	AAB7109	21-01910
	AAB7110	21-01910
	AAB7113	21-01911
	AAB7114	21-01911
	AAB7117	21-01912
	AAB7118	21-01912
	AAB7121	21-01913
	AAB7122	21-01913
	AAB7125	21-01914
	AAB7126	21-01914
	AAB7129	21-01915
	AAB7130	21-01915
	AAB7133	21-01916
	AAB7134	21-01916
	AAB7137	21-01917
	AAB7138	21-01917

Table F-2.0-1
Inorganic Chemical Analytical Methods

Analytical Method	Analytical Description	Analytical Suite
EPA Method 300	Ion chromatography	Nitrate
SW-846:6850	High-performance liquid chromatography/mass spectrometry	Perchlorate
SW-846: 6010/6010A/6010B	Inductively coupled plasma emission spectrometry (ICPES)—atomic emission spectroscopy	Aluminum, antimony, arsenic, barium, beryllium, boron, calcium, cadmium, cobalt, chromium, copper, iron, lead, lithium, magnesium, manganese, mercury, nickel, potassium, selenium, silicon, sodium, silver, thallium, titanium, uranium, vanadium, and zinc (target analyte list [TAL] metals)
SW-846:6020	ICPES	Aluminum, antimony, arsenic, barium, beryllium, boron, calcium, cadmium, cobalt, chromium, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, sodium, silicon, silver, thallium, titanium, vanadium, and zinc (TAL metals)
SW-846:7060	Graphite furnace atomic absorption	Arsenic
SW-846:9012a	Colorimetric method	Cyanide (total)
SW-846:7471A	Cold vapor atomic absorption	Mercury

Table F-2.1-1
Qualified Inorganic Chemical Data

SWMU/AOC/ Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-002(b)	METALS	3	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-003-99 and 21-024(c)	ANION	1	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-003-99 and 21-024(c)	METALS	6	J	The sample result was reported as detected between the instrument detection limit (IDL) and the estimated detection limit (EDL).
21-003-99 and 21-024(c)	METALS	2	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-003-99 and 21-024(c)	METALS	2	J-	The associated matrix spike recovery was < the lower acceptance limit (LAL) but >10%.
21-003-99 and 21-024(c)	METALS	5	J+	The associated matrix spike recovery was > the upper acceptance limit (UAL).
21-003-99 and 21-024(c)	METALS	1	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-006(c)-99	ANION	1	U	The sample result is ≤5 times the concentration of the related analyte in the initial calibration blank (ICB)/continuing calibration blank (CCB), which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-009	ANION	5	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-012(b)	ANION	1	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-012(b)	METALS	1	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-012(b)	METALS	1	J-	The associated matrix spike recovery was < LAL but >10%.
21-013(c)	METALS	1	U	The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank.

Table F-2.1-1 (continued)

SWMU/AOC/ Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-022(h)-99	METALS	1	J	The sample result was reported as detected between the IDL and the EDL.
21-024(a)	METALS	1	J	The sample result was reported as detected between the IDL and the EDL.
21-024(a)	METALS	1	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-024(b)	ANION	1	U	The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-024(d)	ANION	1	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-024(d)	METALS	2	J	The sample result was reported as detected between the IDL and the EDL.
21-024(d)	METALS	1	J	The sample and the duplicate sample results were ≥5 times the reporting limit (RL) and the duplicate RPD was > >35%.
21-024(d)	METALS	1	J	Serial dilution sample RPD was >10% and the sample results was >50 times the method detection limit (MDL) (>100 times the MDL for ICPMS).
21-024(d)	METALS	1	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-024(h)	METALS	3	J	The sample result was reported as detected between the IDL and the EDL.
21-024(h)	METALS	3	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-024(h)	METALS	1	UJ	The associated matrix spike recovery was < the LAL but >10%.
21-024(k)	METALS	1	J	The sample result was reported as detected between the IDL and the EDL.
21-024(k)	METALS	2	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-024(k)	METALS	1	J-	The associated matrix spike recovery was < the LAL but >10%.
21-024(l)-99	METALS	3	J	The sample result was reported as detected between the IDL and the EDL.
21-024(l)-99	METALS	1	U	The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank.
21-024(n)	METALS	4	J-	The associated matrix spike recovery was < the LAL but >10%.

Table F-2.1-1 (continued)

SWMU/AOC/ Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-026(a)-99	METALS	1	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
C-21-027	ANION	2	J	Qualification of the data via data validation did not occur because of QC requirements.
C-21-027	ANION	1	J-	The associated MS recovery was < the LAL but >10%.
C-21-027	ANION	5	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
C-21-027	ANION	1	UJ	The associated matrix spike recovery was < the LAL but >10%.
C-21-027	HEX_CR	6	UJ	The associated matrix spike recovery was < the LAL but >10%.
C-21-027	METALS	15	J	The sample result was reported as detected between the IDL and the EDL.
C-21-027	METALS	2	J	The sample and the duplicate sample results were ≥5 times the RL and the duplicate RPD was >35%.
C-21-027	METALS	23	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
C-21-027	METALS	21	J	Qualification of the data via data validation did not occur because of QC requirements.
C-21-027	METALS	5	J-	The associated matrix spike recovery was < the LAL but >10%.
C-21-027	METALS	26	J+	The associated matrix spike recovery was > the UAL.
C-21-027	METALS	7	U	The sample result is ≤5 times the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
C-21-027	METALS	3	U	The sample result is ≤5 times the concentration of the related analyte in the ICB/CCB, which indicates the reported detection is considered indistinguishable from contamination in the blank.
C-21-027	METALS	15	U	The sample result is ≤5 times the concentration of the related analyte in the trip blank, equipment blank, or rinsate, which indicates the reported detection is considered indistinguishable from contamination in the blank.
C-21-027	METALS	1	UJ	The associated matrix spike recovery was < the LAL but >10%.
C-21-027	PERCHLORATE	9	J	Qualification of the data via data validation did not occur because of QC requirements.
C-21-027	PERCHLORATE	6	J+	The MS/MS duplicate (MSD) %R was >125%. Qualify all associated detects as J+.
C-21-027	WET_CHEM	1	J	Qualification of the data via data validation did not occur because of QC requirements.

Table F-2.1-1 (continued)

SWMU/AOC/ Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-027(a)	METALS	1	J	The sample and the duplicate sample results were ≥5 times the RL and the duplicate RPD was >35%.
21-027(a)	METALS	2	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
21-027(a)	METALS	2	J+	The associated matrix spike recovery was > the UAL.
21-027(c)	METALS	1	J	The sample and the duplicate sample results were ≥5 times the RL and the duplicate RPD was >35%.

Table F-3.0-1
Radionuclide Analytical Methods

Analytical Method	Analytical Description	Target Compound List
HASL-300: Am-241	Alpha spectroscopy	Americium-241
EPA Method: 901.1 Generic: Gamma Spec	Gamma Spectroscopy	Americium-241, cesium-137, cesium-134, cobalt-60, europium-152, ruthenium-106, sodium-22, uranium-235
EPA Method: 906.0 LA-10300-M, Vol. 1:R230	Liquid scintillation	Tritium
HASL-300: ISOPU	Alpha spectroscopy	Isotopic plutonium
HASL-300: ISOU	Alpha spectroscopy	Isotopic uranium
EPA Method: 905.0 ASTM:D5811-95M	Gas proportional counting	Strontium-90

Table F-3.1-1
Qualified Radionuclide Data

SWMU/AOC/ Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-006(c)-99	H3	4	J	Associated duplicate sample has duplicate error ratio or relative error ratio greater than the analytical laboratory's acceptance limits.
21-024(l)-99	Americium-241	1	J+	The tracer %R value is greater than the upper acceptance limit.
C-21-027	H3	1	J-	The associated matrix spike recovery was <10%.
C-21-027	H3	2	UJ	The associated matrix spike recovery was <10%.
C-21-027	Isotopic plutonium	2	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.

Table F-3.2-1
Rejected Radionuclide Data

SWMU/AOC	Analyte	Reporting Qualifier	Count	Reason
21-024(d)	Americium-241	R	1	The associated MS recovery was <10%.
21-024(d)	Tritium	R	1	The associated MS recovery was <10%.
C-21-027	Cesium-134	R	2	The analyte is rejected because spectral interferences prevent positive identification of the analytes.

Table F-4.0-1
Organic Chemical Analytical Methods

Analytical Method	Analytical Description	Target Compound List
EPA SW-846: 8321A and 8330	High performance liquid chromatography	Explosive compounds
EPA SW-846:8270B EPA SW-846:8270C	SVOCs	Analytical services SOW (LANL 2000, 071233)
EPA SW-846:8260B–Analysis	VOCs	Analytical services SOW (LANL 2000, 071233)
SW-846:8290–Analysis	Dioxins, furans	Analytical services SOW (LANL 2000, 071233)
EPA Method 3540–Extraction EPA SW-846:8082–Analysis	PCBs	Analytical services SOW (LANL 2000, 071233)

Table F-4.1-1
Qualified Organic Chemical Data

SWMU/AOC/Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-002(b)	SVOC	2	J	Qualification of the data via data validation did not occur because of QC requirements.
21-002(b)	SVOC	4	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the percent relative standard deviation (%RSD) criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-003-99 and 21-024(c)	PCB	60	J	Qualification of the data via data validation did not occur because of QC requirements.
21-003-99 and 21-024(c)	PCB	6	J	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-003-99 and 21-024(c)	PCB	66	J	The initial calibration verification (ICV) and/or continuing calibration verification (CCV) were recovered outside the method-specific limits.
21-003-99 and 21-024(c)	PCB	19	J	The multicomponent standard was not analyzed within 72 h of the initial analysis.
21-003-99 and 21-024(c)	PCB	5	J-	The surrogate is < the LAL but ≥10 %R.
21-003-99 and 21-024(c)	PCB	16	UJ	The surrogate is < the LAL but ≥10%R.
21-003-99 and 21-024(c)	PCB	44	UJ	The ICV and/or CCV were recovered outside the method-specific limits.
21-003-99 and 21-024(c)	SVOC	2	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-003-99 and 21-024(c)	SVOC	2	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-013(c)	SVOC	10	J	Qualification of the data via data validation did not occur because of QC requirements.
21-013(c)	SVOC	8	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-023(a)-99	SVOC	2	J	Qualification of the data via data validation did not occur because of QC requirements.
21-023(a)-99	SVOC	1	J	The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration.
21-023(a)-99	SVOC	5	UJ	The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration.

Table F-4.1-1 (continued)

SWMU/AOC/Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-023(a)-99	SVOC	3	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(d)	SVOC	2	J	Qualification of the data via data validation did not occur because of QC requirements.
21-024(d)	SVOC	3	J	The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration.
21-024(d)	SVOC	3	J	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(d)	SVOC	3	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(g)	SVOC	6	UJ	The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration.
21-024(g)	SVOC	6	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(h)	SVOC	2	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(k)	SVOC	1	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(k)	SVOC	9	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(l)-99	SVOC	28	J	Qualification of the data via data validation did not occur because of QC requirements.
21-024(l)-99	SVOC	5	J	The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration.
21-024(l)-99	SVOC	1	UJ	The IS area count for the quantitating IS is <50% but >10% for organics window relation to the previous continuing calibration.

Table F-4.1-1 (continued)

SWMU/AOC/Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
21-024(l)-99	SVOC	9	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(n)	SVOC	10	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-024(n)	VOC	1	UJ	The ICV and/or CCV were recovered outside the method-specific limits.
21-026(a)-99	SVOC	1	J	Qualification of the data via data validation did not occur because of QC requirements.
21-026(a)-99	SVOC	7	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-027(a)	DIOXIN_FURAN	1	J	The ICV and/or CCV were recovered outside the method specific limits.
21-027(a)	DIOXIN_FURAN	15	J	Qualification of the data via data validation did not occur because of QC requirements.
21-027(a)	SVOC	4	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
21-027(c)	SVOC	1	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
C-21-027	DIOXIN_FURAN	1	J	The affected analytes are considered estimated and biased high because this analyte was identified in the method blank but was >5 times.
C-21-027	DIOXIN_FURAN	28	J	Qualification of the data via data validation did not occur because of QC requirements.
C-21-027	DIOXIN_FURAN	1	J-	The laboratory must spike all samples with the sample fortification solution and all sample extracts with recovery standard solution. The recovery acceptance criterion for each compound is 40%–135%. The fortification sample %R was <40% but >10%.
C-21-027	HEXP	3	UJ	If the MS/ MS duplicate RPD was >30%, and the acceptance criteria are not reported, recovery limits of 70%–130% and an RPD of ≤30% should be used as the criteria. For solid and waste samples, it may be appropriate to accept an RPD of up to 40% based on professional judgment.
C-21-027	PCB	2	J	Qualification of the data via data validation did not occur because of QC requirements.
C-21-027	SVOC	29	J	Qualification of the data via data validation did not occur because of QC requirements.

Table F-4.1-1 (continued)

SWMU/AOC/Consolidated Unit	Analytical Suite	Count	Reporting Qualifier	Description
C-21-027	SVOC	1	J	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
C-21-027	SVOC	6	UJ	The LCS %R was < the LAL but >10%.
C-21-027	SVOC	65	UJ	The affected analytes were analyzed with an initial calibration curve that exceeded the %RSD criteria and/or the associated multipoint calibration correlation coefficient is <0.995.
C-21-027	VOC	2	J	Qualification of the data via data validation did not occur because of QC requirements.
C-21-027	VOC	7	U	The sample result is ≤5 times (10 times for common organic laboratory contaminants) the concentration of the related analyte in the method blank, which indicates the reported detection is considered indistinguishable from contamination in the blank.
C-21-027	VOC	30	UJ	The ICV and/or CCV were recovered outside the method-specific limits.

Table F-4.2-1
Rejected Organic Chemical Data

SWMU/AOC/Consolidated Unit	Analyte	Reporting Qualifier	Count	Reason Description
21-002(b)	Benzoic Acid	R	1	The LCS %R was <10%.
21-003-99 and 21-024(c)	Aroclor-1254	R	1	The affected results were not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit.
21-006(c)-99	Acetone	R	1	The affected analytes were analyzed with a relative response factor (RRF) of <0.05 in the initial calibration and/or CCV.
21-013(c)	Benzoic Acid	R	2	The LCS %R was <10%.
21-024(d)	Benzoic Acid	R	1	The LCS %R was <10%.
21-024(k)	Benzoic Acid	R	2	The LCS %R was <10%.
21-024(n)	Acetone	R	1	The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.
21-026(a)-99	Benzoic Acid	R	1	The LCS %R was <10%.
C-21-027	Acetone	R	3	The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.
C-21-027	Benzoic Acid	R	3	The LCS %R was <10%.
C-21-027	Butanone[2-]	R	12	The affected analytes were analyzed with an RRF of <0.05 in the initial calibration and/or CCV.
C-21-027	Hexachlorodibenzofuran [1,2,3,7,8,9-]	R	1	The IS retention time and qualitative criteria for target compound identification were not met.
C-21-027	Pentachlorodibenzofuran [2,3,4,7,8-]	R	1	The IS retention time and qualitative criteria for target compound identification were not met.

Appendix G

Analytical Suites and Results and Analytical Reports
(on DVDs included with this document)

Appendix H

Risk Assessments

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Attachments

Attachment H-1 ProUCL Files (on CD included with this document)

Attachment H-2 Ecological Scoping Checklists

H-1.0 INTRODUCTION

This appendix presents the results of the human health and ecological risk-screening evaluations conducted in support of environmental characterization of the Delta Prime (DP) Site Aggregate Area located on DP Mesa within Technical Area 21 (TA-21) at Los Alamos National Laboratory (LANL or the Laboratory) (Figure 1.1-1 of the investigation report). The following sites are evaluated.

H-2.0 BACKGROUND

H-2.1 Site Descriptions and Operational History

TA-21 was used primarily for plutonium research, metal production, and related activities from 1945 to 1978. Since 1978, various administrative and research activities have been conducted at TA-21. The current land use is industrial, and it will remain industrial for the reasonably foreseeable future.

The following information on site descriptions and operational history is for sites where nature and extent have been defined. Consolidated Unit 21-006(c)-99 and SWMU 21-024(d) do not have vertical extent determined; however, additional samples will be collected will be at depths greater than are relevant for the risk scenarios and do not result in complete exposure pathways to receptors. Therefore, these additional samples to be collected will not affect the risk-screening results. At Consolidated Unit 21-006(a)-99, one additional sample is needed to define the extent of tritium at the 3 to 4 ft depth interval. The data from this sample will not affect the risk screening-assessment results. Additionally, of the three SWMUs that make up Consolidated Unit 21-022(h)-99, only SWMU 21-022(h) is evaluated for risk because sampling at SWMU 21-022(i) will occur after building 21-002 is removed, and all samples collected at SWMU 21-022(j) are at depths deeper than are relevant for exposure.

H-2.2 AOC 21-002(b), Drum Storage Area

AOC 21-002(b) is a former drum storage structure (structure 21-38) that consisted of three tin-siding walls, a roof, and a concrete floor. The north side of the structure was open. Fifty-five–gallon drums were stored upright within the structure and on the ground immediately outside the building. The contents of the drums stored in this structure are not known, and there are no documented spills or leaks from the drums.

Operational History

- 1945—Structure 21-038 was built southeast of a shop (building 21-031) to be used for drum storage (LANL 1991, 007529, p. 14-58). However, an engineering drawing shows structure 21-038 as a paint storage shed (LASL 1949, 096013).
- 1966—Structure 21-038 underwent decontamination and decommissioning (D&D) activities (LANL 1991, 007529, p. 14-58).

H-2.3 Consolidated Unit 21-006(c)-99, Seepage Pits, Drainline, and Outfall

Consolidated Unit 21-006(c)-99 consists of SWMUs 21-006(a), 21-006(b), 21-006(c), and 21-006(d). These SWMUs are inactive underground seepage pits associated with buildings 21-002 and 21-003. In addition to a seepage pit, SWMU 21-006(b) also includes a drainline and outfall from the seepage pit.

Operational History

SWMU 21-006(a) consists of an unmarked underground seepage pit of approximately 0.1 acre, located between building 21-002 and former building 21-003. Buildings 21-002 and 21-003 were used for plutonium processing and research.

- ~1945—The seepage pit was installed. According to the TA-21 Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) work plan (LANL 1991, 007529, p. 18-14), the pit received Hanford container wash water, bomb electrolytic decontamination solution (ethylene glycol, phosphoric acid, and plutonium), and chemical makeup room wastewater. Approximately 12 gal. of decontamination solution may have been emptied into the drain in room 322 at building 21-003 each day.
- Documentation is not available indicating when use of the seepage pit ended.
- The pit was apparently backfilled and is not visible. Documentation is not available indicating whether the pit was located on the north or south side of the corridor that connected the buildings. If it was on the south side, it may be the same pit as SWMUs 21-006(c) and 21-006(d).

SWMU 21-006(b) consists of a brick manhole placed within a trench (structure 21-118), including a drainline and outfall (LANL 1991, 007529; p. 15-103). The drainline and brick manhole/trench north of the outfall were installed to receive ether waste from the ethyl ether extraction process as part of the original TA-21 plutonium purification process (Christensen and Maraman 1969, 004779, p. 8).

- 1945—The manhole and associated lines were installed during the construction of building 21-003 (LANL 1991, 007529; p. 15-103). A 3-in. cast-iron drainline exited the southeast side of building 21-002 and extended approximately 160 ft southward to structure 21-118 (brick manhole/trench). A 2-in. cast-iron outlet line ran approximately 100 ft southward from the pit to an outfall approximately 8 ft above the surface of a bench below the mesa top.
- September 1945—The ether extraction process was discontinued (Christensen and Maraman 1969, 004779, p. 48).
- Documentation is not available indicating when use of the brick manhole/trench ended.

SWMUs 21-006(c) and 21-006(d) are thought to be the same site because descriptions place them in proximity (LANL 1991, 007529, p. 18-10). SWMU 21-006(c) consists of a seepage pit located 15 ft outside the door to the bomb-cleaning room (room 322) at building 21-003. The pit reportedly received a bomb electrolytic decontamination solution from a drain in room 322. The pit is thought to be partially or entirely beneath current building 21-313 and/or the remaining central corridor portion of building 21-003. As with SWMUs 21-006(a) and 21-006(b), the period of operation has not been found in any available documentation. SWMU 21-006(d) may have been associated with a concrete pad and French drain system called the 21-272 dock. Waste from a second-story chemical makeup room was reportedly dumped or pumped into a stone-filled seepage pit, most likely the pit identified as SWMU 21-006(c).

H-2.4 SWMU 21-009, Waste Treatment Laboratory

SWMU 21-009 is a former waste treatment laboratory (building 21-33) that was a 16-ft × 48-ft wood-frame structure with a 12-ft ceiling and a wooden floor built on concrete pillars.

Operational History

- 1948—Building 21-033 (a waste treatment laboratory) was constructed (LANL 1991, 007529, p. 17-29). Research into methods of recovering additional plutonium from waste streams was conducted at building 21-033 (LANL 1991, 007529, p. 3-1).
- 1965—Building 21-033 underwent D&D activities (LANL 1991, 007529, p. 17-29).

H-2.5 SWMU 21-012(b), Dry Well and Pipelines

SWMU 21-012(b) consists of two concrete steam blowdown pits, a separate drainline that drained each pit toward the southern edge of DP Mesa, a seepage pit filled with river stones, a drywell, an outfall pipe associated with floor drains in building 21-009, and piping conveying effluent between structures.

Operational History

- 1945—Building 21-009 was built to serve as a steam plant.
- 1945–1971—Boiler blowdown was discharged through 3-in. steel drainlines into two concrete pits (structures 21-266 and 21-267, 10 ft^2 × unknown depth), each of which was drained by a 6-in. steel drainline that discharged effluent to the southern edge of DP Mesa. Effluent from building 21-009 floor drains was directed into a 6-in. vitrified clay pipe (VCP) that discharged on the mesa.
- 1971—Boiler blowdown was routed to an aboveground tank, and overflow went through a 3-in. steel drainline into a 6-ft^2, 2-ft-deep seepage pit filled with river stones.
- 1980—A 4-ft^2 × 54-ft-deep drywell was constructed to replace the seepage pit.
- 1985—Building 21-009 was removed and replaced with a new steam plant, building 21-357. The area was regraded (LANL 1991, 007529, pp. 17-37–17-40).

H-2.6 SWMU 21-013(c), Surface Disposal Area

SWMU 21-013(c) is a former surface disposal area located at the eastern end of DP Mesa. The site consisted of mounds of earth; an excavated trench; and an earthen berm that contained scattered concrete, asphalt, and metal debris. Four large concrete pylons and several piles of soil, asphalt, and concrete also were located at the site. Other surface debris included glass, scrap metal, wood, cans, paper, and plastic. The SWMU had been disturbed in the past and appeared to contain only building materials. It is not known when the materials were disposed of at this site.

Operational History

- The dates of operation are not known (LANL 1990, 007512).
- 1988—As a result of a site visit, this inactive surface disposal area was identified as a SWMU northeast of the high-temperature chemistry building (21-209). It was noted that the area was disturbed and appeared to contain building debris (LANL 1991, 007529, p. 14-65).

H-2.7 SWMU 21-022(f), Sump and Pipeline

SWMU 21-022(f) is an inactive sump (structure 21-173) and a pipeline. The sump received industrial waste from laboratory sinks in building 21-152 (a research laboratory) and from building 21-370 (a mechanical equipment building).

Operational History

- 1945—Building 21-152 was originally built to serve as a laboratory for polonium initiator research and production. A sump (structure 21-173) conveyed liquid effluent that originated from the building's laboratory sinks through a 6-in.-diameter steel pipe to Material Disposal Area (MDA) U (LASL 1946, 024460; Francis 2001, 076211). The brick-lined sump was approximately 5 ft 4 in. in diameter and located approximately 13 ft from the northeast corner of building 21-152 (LASL 1945, 001093; LASL 1946, 024460). The depth of the sump is a minimum of 6 ft 10 in. bgs.
- 1965—The sump (structure 21-173) was connected to manhole 21-221, which connects to the Waste Disposal Plant (building 21-257) (Francis 2001, 076211).

H-2.8 Consolidated Unit 21-022(h)-99, Sumps, Drainline, and Outfall

Consolidated Unit 21-022(h)-99 consists of SWMU 21-022(h), a sump, drainline, and outfall that received industrial wastewater and drainage from floor and roof drains of the plutonium fuel service building 21-150; SWMU 21-022(i), a sump located in the equipment room of building 21-002; and SWMU 21-022(j), a sump that received drainage from the equipment room of building 21-003. SWMU 21-022(h) is evaluated for risk; however, SWMUs 21-022(i) and 21-022(j) are not evaluated. SWMU 21-022(i) sampling will occur after building 21-002 is removed, and all samples collected at SWMU 21-022(j) are deeper than the risk scenarios address.

Operational History

SWMU 21-022(h) consists of a sump (structure 21-202), drainline, and outfall.

- 1961–1962—Structure 21-202 was constructed of 36-in.-diameter corrugated metal pipe (CMP) to receive industrial wastewater and drainage from the building 21-150 basement floor and roof drains and route effluent through a 24-in.-diameter pipe that discharged to Los Alamos Canyon (LANL 1991, 007529, p. 18-55).
- 1991—The outfall discharged only treated cooling water from this time forward, and no documentation of removal of structures is available (LANL 1991, 007529, p. 15-53).

H-2.9 Consolidated Unit 21-023(a)-99, Septic Systems

Consolidated Unit 21-023(a)-99 consists of SWMU 21-023(a), a septic tank and drainlines that reportedly serviced a janitor's mop sink in building 21-003; SWMU 21-023(b), a septic tank and drainlines that received wastewater from the shower room in building 21-003; and SWMU 21-023(d), a septic tank and drainlines that received industrial waste and sewage from building 21-003.

Operational History

SWMU 21-023(a) consists of a steel-reinforced concrete septic tank (structure 21-225), 4-in.-diameter cast-iron inlet and outlet lines connected to building 21-003 waste lines to the north and a manhole (structure 21-274) to the south (Andrews and Eshleman 1999, 071295).

- 1945—Building 21-003 was constructed for plutonium research and production. Documentation of the septic system construction date is not available. The septic system was connected to restroom areas of building 21-003.
- 1966—Septic tank (structure 21-225, 5 ft × 9 ft × 6 ft deep) and lines were removed when additions were made to building 21-003 and the new sewage treatment plant opened.

SWMU 21-023(b) consists of a septic tank (structure 21-142), 4-in.-diameter cast-iron inlet and outlet lines connected to building 21-003 waste lines to the north, and a manhole (structure 21-274) to the south (Andrews and Eshleman 1999, 071295).

- 1945—Building 21-003 and the septic system were constructed.
- 1966—Septic tank (circular, 500-gal., approximately 6.5-ft-diameter) and lines may have been removed when the new sewage treatment plant opened.

SWMU 21-023(d) consists of a septic tank (structure 21-187) and 4-in.-diameter cast-iron inlet and outlet lines that were probably connected to the north to the 4-in.-diameter line leading to the treatment facilities (building 21-035) and to the south to manhole 21-273 (Andrews and Eshleman 1999, 071295).

- 1960—The 5-ft × 3-ft × 5.5-ft-deep steel-reinforced concrete septic tank (structure 21-187) was installed under room 364 of building 21-003 and received industrial waste and sewage.
- ~1966—The septic tank was bypassed and the pipeline was connected to the new sewage treatment plant.
- 1966—The septic tank and lines were removed when additions were made to building 21-003 and the new sewage treatment plant opened.

H-2.10 SWMU 21-024(a), Septic System

SWMU 21-024(a) is an inactive septic system that previously routed sewage from the old steam plant (building 21-009) through a septic tank (structure 21-53) to the surface on the south rim of DP Mesa above Los Alamos Canyon (LASL 1946, 071281; LASL 1958, 001519).

Operational History

- 1945—A steam plant (building 21-009) was built, and the septic system was constructed at the same time (LASL 1958, 001519). The reinforced concrete septic tank measured 9 ft × 5.75 ft × 7.25 ft deep (structure 21-053). The inlet line is a 6-in.-diameter VCP, and the outlet line is a 4- or 6-in.-diameter VCP.
- 1966—The septic system was no longer used and was left in place.
- 1985—Building 21-009 was removed and replaced with a new steam plant, building 21-357. The area was regraded, but documentation is not available indicating if the piping or tank was removed.

H-2.11 SWMU 21-024(b), Septic System

SWMU 21-024(b) is a septic tank, pipelines, and associated outfall that formerly routed sewage from building 21-017 (a passageway connecting buildings 21-004 and 21-005).

Operational History

- 1945—Building 21-017 (a passageway) was constructed and the sanitary sewer system routed sewage through a reinforced concrete septic tank 9 ft × 5.75 ft × 7.25 ft deep (structure 21-055) to the surface soil south of building 21-005 (LASL 1946, 071281; LANL 1991, 007529, p. 15-34). The inlet and outlet pipelines are 6-in.- and 4-in.-diameter VCP, respectively (LASL 1946, 071281).
- 1969—Building 21-017 underwent D&D activities (LANL 1991, 007529, p. 15-34).

H-2.12 SWMU 21-024(d), Septic System

SWMU 21-024(d) is an inactive septic tank, pipelines, and associated outfall that routed sewage from an office building (building 21-001) to the south rim of the mesa above Los Alamos Canyon.

Operational History

- 1945—Building 21-001 was constructed as an office building and the sanitary sewer system routed sewage via 6-in.-diameter VCP lines (LASL 1946, 071281) through a reinforced concrete 17.5-ft × 9.5-ft × 8.83-ft-deep septic tank (structure 21-106), until the pipe surfaced on the south rim of DP Mesa above Los Alamos Canyon (LANL 1991, 007529, p. 15-34).
- Early 1960s—Building 21-001 was removed (McGehee and Garcia 1999, 087442, p. 76).
- 1995—The septic tank was filled with pea gravel and left in place. The inlet and outlet pipelines were grouted with concrete and left in place (LANL 1996, 053789, p. 2).

H-2.13 SWMU 21-024(e), Septic System

SWMU 21-024(e) is an inactive septic system that routed sewage from the former TA-21 laundry (building 21-020) and a former diesel power plant and shop (building 21-014) through a septic tank (structure 21-123) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The septic tank and outfall area were located east of MDA V.

Operational History

- 1945—Building 21-020 was constructed as a laundry facility. The sanitary sewer system routed sewage via 6-in. VCP drainlines (LASL 1946, 071281) or via 4-in. cast-iron pipe for the first 5 ft from building 21-020 and then via 4-in. VCP (Francis 1995, 087271) through a 1000-gal. steel septic tank (structure 21-123, 11.33 ft × 6.33 ft × 8 ft deep), and to the outfall (LASL 1946, 071281). The outfall was located approximately 20 ft from the southern edge of DP Mesa above Los Alamos Canyon (LASL 1946, 024460).
- 1946–1947—Building 21-014 was constructed as a diesel power plant and shop (McGehee and Garcia 1999, 087442, p. 156). A 4-in. tile pipe exited the southeast corner of the building and connected to a septic tank (structure 21-123) as well as connected to the laundry building (building 21-020) (LASL 1946, 087574). There was also an exterior grease trap connected to the pipeline exiting the building.
- 1947–1948—Building 21-046, a diesel power plant and warehouse, was constructed as an addition to the existing power plant (building 21-014) (McGehee and Garcia 1999, 087442, p. 174). No researched engineering drawings depict a pipeline connection from this building to

the septic tank (structure 21-123). However, a geophysical survey conducted in 2004 indicates there may have been a pipeline connection at one time (LANL 2004, 087461).

- 1965—The laundry facility (building 21-020) underwent D&D (LANL 1991, 007529, p. 15-38).
- 1996—The septic tank was emptied and filled with pea gravel, inlet and outlet lines were grouted with concrete, and the surrounding area was restored and reseeded (LANL 1996, 053788).
- 2006—Building 21-046 underwent D&D.

H-2.14 SWMU 21-024(g), Septic System

SWMU 21-024(g) is an inactive septic system that formerly routed sewage from building 21-031 (cold work shop/electronics) through pipelines and septic tank (structure 21-125) into two drainage ditches (LASL 1947, 087576; LASL 1948, 087577). Engineering drawings from the 1950s (LASL 1953, 024437; LASL 1958, 000406) indicate sewage from building 21-007 (warehouse) being tied into the system. Subsequently, the drainage ditches were no longer used and the septic tank was moved farther north outside of the fenced area to discharge on the surface of the north rim of DP Mesa. Additionally, a cut pipe visibly exits building 21-031, directing flow into the 2-ft × 2-ft × 1-ft concrete storm drain now present in the paved parking area.

Operational History

- 1948—Building 21-031 was constructed. The septic system consisted of a concrete 4-ft × 8.25-ft × 7.2-ft-deep septic tank (structure 21-125; septic tank 1). It routed sewage via a 4-in. VCP line and another 2-in. pipeline, which converged from an electronics shop/cold workshop (building 21-031) to a 4-in. VCP line into two drainage ditches, each approximately 90 ft long × 9 ft wide × 5 ft deep (LASL 1947, 087576; LASL 1948, 087577). The bottom 4 ft of the drainage ditches consisted of 2-in. to 8-in. rock with a 4-in. perforated fiber pipe running through the center. Also present at the northeast end of building 21-031 was a 2-in. drainpipe ending with a splash block (LASL 1948, 087577). This was connected to a funnel-type drain in the building for spot welder water.
- 1953—A new septic system, consisting of an 18-ft × 9.5-ft × 5-ft-deep-reinforced concrete septic tank (structure 21-125; septic tank 2) (LANL 1991, 007529, p. 15-18), replaced the former septic system described above. It routed sewage via 4-in. VCP lines from a warehouse (building 21-007) and the electronics shop/cold workshop (building 21-031) to the surface on the north rim of DP Mesa above DP Canyon (LASL 1958, 000406; LANL 1991, 007529, p. 15-18).
- 1966—Septic tank 2 was no longer used and was left in place (LANL 1991, 007529, p. 15-18).

H-2.15 SWMU 21-024(h), Septic System

SWMU 21-024(h) is a septic tank, pipelines, and associated outfall that originally received sewage from building 21-151, an administrative building and shop. Later, building 21-152, a polonium-processing and high-temperature laboratory, was tied into the septic tank.

Operational History

- 1945—Building 21-151 was constructed as a plutonium-processing facility and the sanitary sewer system routed sewage through a 6-in.-diameter VCP (LASL 1946, 071281) and a reinforced concrete 11.33-ft × 6.33-ft × 8.67-ft-deep septic tank (structure 21-163) to the surface on the north rim of DP Mesa above DP Canyon (LASL 1945, 024459; LANL 1991, 007529, p. 15-94).
- 1945—Building 21-152 was constructed as a laboratory that worked on Project Rover serving as a polonium-processing and a high-temperature laboratory (LASL 1946, 024460).
- Early 1960s—Building 21-151 was removed.
- 1965—Building 21-152 septic system was tied into the existing septic tank (structure 21-163).
- 1966—The septic tank was no longer used and was left in place (LANL 1991, 007529, p. 15-94).

H-2.16 SWMU 21-024(i), Septic System

SWMU 21-024(i) is a septic tank, pipelines, and associated outfall. The only portion of the septic system remaining at the site is the inlet line from a high-temperature chemistry building (21-209) to the fenceline. Building 21-209 currently overlays part of the pipeline that previously connected to a sump (structure 21-175). The portion of the inlet line from the fence to the septic tank, the septic tank, the outlet line, and the outfall were removed in 2001 as part of an interim action (LANL 2003, 076053).

Operational History

- 1945—Building 21-152 was constructed to serve as a polonium-processing and a high-temperature laboratory, and the septic system that served building 21-152 was constructed at the same time. The septic system routed sewage from the laboratory via 6-in.-diameter VCP inlet line to the reinforced concrete 6-ft × 10-ft × 8-ft-deep septic tank (structure 21-181) through a sump (structure 21-175) (LASL 1946, 024460). Blowdown pipelines from the cooling towers (structures 21-166 and 21-167) were also connected to this sump. Effluent was routed via 6-in.-diameter VCP outlet line to the surface in a broad open area with a gentle slope extending approximately 30 ft to the south edge of DP Mesa above Los Alamos Canyon. The sump and portions of the pipe currently lie under building 21-209 (LASL 1946, 071281).
- 1964–1965—Building 21-209 was built to serve as a high-temperature chemistry building and was located on top of the existing inlet lines from building 21-152, structure 21-166, and structure 21-167 (LASL 1946, 071281). New blowdown pipelines from structures 21-166 and 21-167 were connected into the SWMU 21-024(k) septic system.
- 1965—Septic system was no longer used and left in place.

H-2.17 SWMU 21-024(j), Septic System

SWMU 21-024(j) is an inactive septic tank, pipelines, and associated outfall that received sewage from building 21-155, a warehouse and laboratory.

Operational History

- 1949—Building 21-155 (combined with buildings 21-206 and 21-207 from 1963 to 1965 to become building 21-155) was constructed for initiator research and production.
- 1961—A septic system was constructed to route sewage from a warehouse/laboratory (building 21-155) to a reinforced concrete 5-ft × 3-ft × 6-ft-deep septic tank (structure 21-194) and associated 4-in.-diameter VCP lines (LANL 1991, 007529, p. 15-83). The tank is located off the southwest corner of building 21-155 near the south edge of the perimeter road (LANL 1991, 007529, p. 15-83).
- 1966—The septic tank was no longer used and was left in place (LANL 1991, 007529, p. 15-83).

H-2.18 Consolidated Unit 21-024(l)-99, Sump and Associated Lines, Outfall, Aboveground Storage Tank and Associated Lines

Consolidated Unit 21-024(l)-99 consists of SWMU 21-022(a), a sump and associated lines; SWMU 21-024(l), an outfall; and AOC 21-004(a), an aboveground storage tank and associated lines.

Operational History

SWMU 21-022(a) consists of a 5-ft-diameter brick sump of unknown depth located north of building 21-021 with a 4-in. inlet line from the building, but documentation is not available indicating if an outlet line exists or describing the type of line.

- 1946—Building 21-021 and sump were constructed. Building 21-021 was used as a secure vault to store special fissile material, including uranium and plutonium metal. The inside of the sump contains a metal catch basin approximately 5 ft deep.

SWMU 21-024(l) consists of an outfall that received liquid waste from the floor drain of building 21-021 machine room via a 3-in. cast-iron pipeline (LASL 1960, 001611).

AOC 21-004(a) consists of a 6000-gal. aboveground steel tank (structure 21-335), 8 ft in diameter and 16 ft long, and a 6-in. cast-iron pipeline from building 21-021.

- 1974—The tank was installed to receive effluent from floor drains in building 21-021.

H-2.19 SWMU 21-024(o), Pipeline and Outfall

SWMU 21-024(o) is thought to have been a 4-in. VCP drainline that served the old diesel plant (building 21-046) and an associated outfall.

Operational History

- 1947–1948—Building 21-046, a diesel power plant and warehouse, was constructed as an addition to the existing power plant (building 21-014), and SWMU 21-024(o) was thought to have been a 4-in. VCP line serving it (LANL 1991, 007529, p. 15-56; McGehee and Garcia 1999, 087442, p. 174). The pipe discharged south into Los Alamos Canyon (LASL 1946, 071281).
- 1957—Building 21-046 was converted to a warehouse/maintenance shop (LANL 1991, 007529, p. 15-56).

- 1985—An engineering drawing depicts building 21-046 as a machine shop (LANL 1985, 087578).
- 2006—Building 21-046 was removed and the foundation was left in place.

H-2.20 Consolidated Unit 21-026(a)-99, Sewage Treatment Plant

Consolidated Unit 21-026(a)-99 is a sewage treatment plant that consists of SWMUs 21-013(a), a surface disposal area; 21-026(a), a sewage treatment plant; and 21-026(b), four sludge drying/sand filter beds; and AOCs 21-026(c), a dosing siphon chamber; and 21-026(d), an outfall that served the TA-21 facilities.

Operational History

SWMU 21-026(a) consists of an inactive sewage treatment plant housed in building 21-227. The plant is located at the eastern end of DP Mesa. The treatment plant replaced the original septic tank/filter fields and septic tank/surface discharge systems throughout TA-21. The treatment plant was an extended aeration sanitary waste treatment plant with a grit chamber, comminuter, digester, aeration tank, and clarifier. The plant treated sanitary wastes and cooling water from TA-21 facilities and received water from decontamination activities, janitor's scrub water, and waste from other TA-21 operations. Originally, treated effluent leaving building 21-227 was released at a concrete spill pad located on the southern edge of DP Canyon [AOC 21-026(d)]. Later, effluent was discharged via a dosing siphon chamber to sand filter/sludge drying beds.

- 1966—Sewage treatment plant was built.
- 1992—Traditional treatment operations ended.
- 1992–present—All waste received is stored until pumped out by truck for transport to the TA-46 facility for treatment/disposal.

SWMU 21-026(b) consists of four sludge drying/sand filter beds; each is 14.5-ft by 23-ft with 4-ft deep concrete walls.

- 1966–1990—Sludge drying beds were operational.
- 1990—The tile drainlines were removed and connections were plugged with concrete.
- 1990–~1992—The two westernmost sand filters received effluent from the dosing siphon chamber. Effluent was piped to a gauging station then to the outfall at the edge of mesa.
- 1992—The beds were filled with clean sand when treatment operations ceased.

AOC 21-026(c) consists of a dosing siphon chamber that was a 5-ft wide × 7-ft long × 8-ft-deep concrete tank (structure 21-348). The dosing siphon chamber received effluent until the chamber was full and then was pumped to the two westernmost sand filter beds.

- 1996—A chlorine contact chamber was built with an outfall [AOC 21-026(d)] to the mesa edge.
- 1990—The contact chamber was converted to a dosing siphon chamber; the manhole and outfall lines were plugged with concrete.
- 1990–1992—Effluent from the dosing siphon chamber was pumped to the sand filter beds.
- 1992—The chamber was left in place when treatment operations ceased.

AOC 21-026(d) consists of an outfall. Discharge from the sewage treatment plant flowed through an 8-in.-diameter VCP into a concrete channel on the north edge of DP Mesa and ran down a natural drainage to a tributary of DP Canyon.

- 1966–1992—The outfall received treated liquid wastes from building 21-227.
- March 10, 1998—The outfall (National Pollution Discharge Elimination System [NPDES] Outfall 05S) was deleted from the Laboratory's NPDES permit.

SWMU 21-013(a) consists of a surface disposal area, approximately 45 ft^2.

- 1966–1992—Surface disposal area was used for the periodic disposal of the top layers of sand from the filter beds at SWMU 21-026(b).
- 1994—Sand pile was no longer visible.

H-2.21 SWMU 21-027(a), Drainlines, Surface Drainage, and Outfall

SWMU 21-027(a) consists of drainlines that received effluent from floor drains in building 21-003, a surface-drainage system, and an outfall that discharges to the mesa edge and into Los Alamos Canyon.

Operational History

- 1945—Building 21-003 was built as part of original DP West plutonium facilities. A 4-in.-diameter VCP ran beneath a paved area south of the building for approximately 30 ft and emptied into a storm drain. A 12-in.-diameter culvert ran from the storm drain underground for approximately 50 ft and emptied onto the ground at a ponding area on the southwest corner of the footprint of former cooling tower (structure 21-143, designated as AOC C-21-027). From the cooling tower footprint, runoff flowed in an unlined ditch to a 24-in.-diameter CMP culvert that carries runoff beneath the south perimeter road to the mesa edge. The CMP extended approximately 3 ft over the mesa edge (LANL 1991, 007529, p. 15-69).
- 1994—Outfall was permitted as outfall EPA03A031 under NPDES Permit No. NM0028355 (EPA 1994, 065280).
- 1994–1995—Building 21-003, its drains and the pipes beneath, and the cooling tower were removed during D&D activities. The 4-in.-diameter pipe beneath the paved area was left in place, as was the storm drain, which collected runoff from nearby parking lots.
- 1995—Outfall removed from Laboratory's NPDES permit, effective July 11, 1995.

H-2.22 SWMU 21-027(c), Pipeline and Outfall

SWMU 21-027(c) is a 4-in. VCP line that exited former building 21-006 (a cafeteria and machine shop removed in 1966) and discharged to the south on DP Mesa.

Operational History

- 1945—Building 21-006 was constructed as a cafeteria and machine shop (LASL 1945, 024459). A 4-in.-diameter VCP line exited the southeast corner of the building and discharged to the south on DP Mesa (LANL 1991, 007529, p. 15-18).
- 1966—Building 21-006 was removed and the pipe was left in place (LANL 1991, 007529, p. 15-18).

H-2.23 Investigation Sampling

The final data set used to identify chemicals of potential concern (COPCs) and evaluate potential risks to human health and the environment for the DP Site Aggregate Area consists of all qualified analytical results compiled from the 2006–2009 investigations. Only those data determined to be decision-level following the data-quality assessment (Appendix F) are included in this appendix.

H-2.24 Determination of Chemicals of Potential Concern

The determination of COPCs is provided in the DP Site Aggregate Area Investigation Report, Revision 1 (LANL 2008, 104989; NMED 2009, 104978). Only COPCs detected above background (inorganic chemicals and radionuclides), had detection limits greater than background values (BVs) (inorganic chemicals), were detected (organic chemicals, inorganic chemicals with no BVs), and radionuclides detected at depths where fallout values do not apply, were retained. The ecological evaluation utilizes data for samples collected from 0–5 ft below ground surface (bgs). The industrial scenario utilizes data for samples collected from 0–1 ft bgs. The construction worker and the residential scenarios utilize data for samples collected from 0–10 ft bgs. However, sampling depths often overlapped because of multiple investigations; therefore, all samples with a starting depth less than the lower bound of the interval for each scenario were included in the risk assessments. Tables H-2.2-1 to H-2.2-60 summarize the COPCs evaluated for risk or dose for each of the sites in the DP Site Aggregate Area. Some of the COPCs may not be evaluated for potential risk or dose under one or more scenarios because they were only reported below the depth interval associated with a given scenario.

H-3.0 CONCEPTUAL SITE MODEL

The potential contaminant sources, transport mechanisms, and receptors associated with the conceptual site model are described below.

H-3.1 Potential Contaminant Sources

The sites in the DP Site Aggregate Area consist of two types. The first type is the wastewater treatment plant site, Consolidated Unit 21-026(a)-99. This site encompasses a large area and a broad suite of COPCs from waste streams. Consolidated Unit 21-026(a)-99 has surface and subsurface COPCs associated with old, inactive sludge beds, as well as an outfall.

The second type of sites is subsurface structures (septic tanks, seepage pits, manholes, and their associated piping). Although different COPCs may be found at each site depending on the materials discharged to them, the sites have relatively similar pathways for releases and exposures. The COPCs occur in the subsurface surrounding the structures, particularly at the junctions between tanks and piping or connections in the associated piping structures. Some of the septic tanks had outfall pipes; effluent at these outfalls could contribute to COPCs on the surface and in the subsurface. All of the structures associated with the septic tanks have been excavated and removed.

Releases at the sites addressed may have occurred as a result of potential leaks from septic systems, storage tanks, waste lines and drains; discharges from outfalls, sumps, waste treatment processes; and spills.

H-3.2 Receptors and Exposure Pathways

The primary exposure media for human receptors are surface soil and subsurface soil/tuff that may be brought to the surface through intrusive activities. Human receptors may be exposed through direct contact with soil or suspended particulates by ingestion, inhalation, dermal contact, and external irradiation pathways. Direct contact exposure pathways from surface contamination to human receptors are complete for the industrial, construction worker, and resident. Direct contact exposure pathways from subsurface contamination to human receptors are complete for the construction worker and resident. Migration of contamination to groundwater through the vadose zone is unlikely given the depth to groundwater (greater than 1000 ft bgs) at the site. Sources, exposure pathways, and receptors are shown in the conceptual site model (CSM) (Figure H-3.2-1).

The sites of the DP Site Aggregate Area are in an industrial area or on the slopes of canyon walls. The developed sites provide minimal potential habitat for ecological receptors, especially where sites are covered with asphalt. For unpaved sites or areas of sites, exposure pathways are complete to surface soil and tuff for ecological receptors. Exposure is assessed across the site to a depth of 0–5 ft. Weathering of tuff is the only viable natural process that may result in the exposure of receptors to COPCs in tuff. However, because of the slow rate of weathering expected for tuff, exposure to COPCs in tuff is negligible, although it is included in the assessments. Exposure pathways to subsurface contamination below 5 ft are not complete unless contaminated soil or tuff were excavated and brought to the surface. The potential pathways are root uptake by plants, inhalation of dust, dermal contact, incidental ingestion of soil, external irradiation, and food web transport. Pathways from subsurface releases may be complete for plants. Surface water was not evaluated because of the lack of surface water features. Sources, exposure pathways, and receptors are presented in the CSM (Attachment H-2).

H-3.3 Environmental Fate and Transport

The evaluation of environmental fate addresses the chemical processes affecting the persistence of a chemical in the environment; the evaluation of transport addresses the physical processes affecting mobility of a contaminant along a migration pathway. Migration through soil and tuff depends on properties such as soil pH, rate of precipitation or snowmelt, soil moisture content, soil/tuff hydraulic properties, and properties of the COPCs. Migration into and through tuff also depends on the unsaturated flow properties of the tuff and the presence of joints and fractures.

The most important factor with respect to the potential for COPCs to migrate to groundwater is the presence of saturated conditions. Downward migration in the vadose zone is also limited by a lack of hydrostatic pressure as well as the lack of a source for the continued release of contamination. Without sufficient moisture and a source, little or no potential migration of materials through the vadose zone to groundwater occurs.

Contamination at depth is addressed in the discussion of nature and extent in the main text. Results from the deepest samples collected at most sites showed either no detected concentrations of COPCs or low/trace-level concentrations of only a few inorganic, radionuclide, and/or organic COPCs in tuff. Consolidated Unit 21-006(c)-99 and SWMU 21-024(d) are the exceptions, as deeper sampling to define extent is required at these sites. The limited extent of contamination is related to the absence of the key factors that facilitate migration, as discussed above. Given how long the contamination has been present in the subsurface, physical and chemicals properties of the COPCs, and the lack of saturated conditions, the potential for contaminant migration to groundwater is very low.

The New Mexico Environment Department (NMED) guidance (NMED 2009, 108070) contains screening levels that consider the potential for contaminants in soil to result in groundwater contamination. These

screening levels consider equilibrium partitioning of contaminants among solid, aqueous, and vapor phases and account for dilution and attenuation in groundwater through the use of dilution attenuation factors (DAFs). These DAF soil screening levels (SSLs) can be used to identify chemical concentrations in soil that have the potential to contaminate groundwater (EPA 1996, 059902). Screening contaminant concentrations in soil against these DAF SSLs does not, however, provide an indication of the potential for contaminants to migrate to groundwater. The assumptions used in the development of these DAF SSLs include an assumption of uniform contaminant concentrations from the contaminant source to the water table (i.e., it is assumed that migration to groundwater has already occurred). Furthermore, this assumption is inappropriate for cases such as the DP Site Aggregate Area where sampling has shown that contamination is vertically bounded near the surface and the distance from the surface to the water table is large. For these reasons, screening of contaminant concentrations in soil against the DAF SSLs was not performed.

The relevant release and transport processes of the COPCs are a function of chemical-specific properties that include the relationship between the physical form of the constituents and the nature of the constituent transport processes in the environment. Specific properties include the degree of saturation, the potential for ion exchange or sorption, and the potential for natural bioremediation. The transport of volatile organic compounds (VOCs) occurs primarily in the vapor phase by diffusion or advection in subsurface air. The chemical and physical properties of the DP Site Aggregate Area COPCs are presented in Tables H-3.3-1, H-3.3-2, and H-3.3-3.

The primary release and transport mechanisms that may lead to the potential exposure of receptors in the DP Site Aggregate Area include

- dissolution and/or particulate transport of surface contaminants during precipitation and runoff events;
- vaporization and gaseous diffusion and advection of VOCs and tritium in air;
- water line breaks resulting in sheet flow;
- preferential flow paths along buried utility lines;
- airborne transport of contaminated surface soil;
- continued dissolution and advective/dispersive transport of contaminants contained in subsurface soil and tuff;
- infiltration of water through the vadose zone;
- disturbance of contaminants in shallow soil and subsurface tuff by construction, D&D, or Laboratory operations;
- biotic perturbation and/or translocation of contaminants in subsurface contaminated media; and
- uptake of contaminants from soil and water by biota.

Contaminant distributions at the sites indicate that after the initial deposition of contaminants from operational activities and historical remediation efforts, elevated levels of COPCs tend to remain concentrated in the vicinity of the original release points.

H-3.3.1 Inorganic Chemicals

In general, and particularly in a semiarid climate such as that found at the sites within the DP Site Aggregate Area, inorganic chemicals are not highly soluble or mobile in the environment. The primary

physical and chemical factors that determine and describe the distribution of inorganic COPCs within the soil and tuff are the water solubility of the inorganic chemical and the soil-water partition coefficient (K_d). Other factors besides the K_d values, such as speciation in soil and oxidation/reduction potential (Eh) potential and pH, also play a role in the likelihood that inorganic chemicals will migrate. The K_d values provide a general assessment of the potential for migration through the subsurface; chemicals with higher K_d values are less likely to be mobile than those with lower K_d values. Inorganic chemicals with K_d values greater than 40 are very unlikely to migrate through soil towards the water table (Kincaid et al. 1998, 093270). Table H-3.3-1 presents the K_d values for the inorganic COPCs identified at the DP Site Aggregate Area sites. Based on this criterion, aluminum, antimony, barium, beryllium, cadmium, calcium, chromium, cobalt, lead, lithium, manganese, mercury, nickel, thallium, uranium, vanadium, and zinc have a low potential to mobilize and migrate through soil and the vadose zone. The K_d values for arsenic, copper, cyanide, iron, molybdenum, nitrate, perchlorate, selenium, silver, and strontium are less than 40 and may indicate that these inorganic chemicals have a greater potential to mobilize and migrate through soil and the vadose zone.

The COPCs with K_d values less than 40 are discussed further in the following section. Information about the fate and transport properties of inorganic chemicals was obtained from individual chemical profiles published by the Agency for Toxic Substances and Disease Registry (ATSDR) (ATSDR 1997, 056531). Information for these inorganic chemicals is also available from the ATSDR website at http://www.atsdr.cdc.gov/toxpro2.html, with the exception of molybdenum, for which there is no profile.

- Arsenic may undergo a variety of reactions, including oxidation-reduction reactions, ligand exchange, precipitation, and biotransformation. Arsenic forms insoluble complexes with iron, aluminum, and magnesium oxides commonly found in soil, and in this form, arsenic is relatively immobile. However, under low pH and reducing conditions, arsenic can become soluble and may potentially leach into groundwater or result in runoff of arsenic into surface waters. Arsenic is expected to have low mobility under the environmental conditions (average soil pH is 7.9) present in the DP Site Aggregate Area.
- Copper movement in soil is determined by physical and chemical interactions with the soil components. Most copper deposited in soil is strongly adsorbed and remains in the upper few centimeters. Copper will adsorb to organic matter, carbonate minerals, clay minerals, hydrous iron, and manganese oxides. In most temperate soil, pH, organic matter, and ionic strength of the soil solutions are the key factors affecting adsorption. Copper binds to soil much more strongly than other divalent cations, and the distribution of copper in the soil solution is less affected by pH than other metals. Copper is expected to be bound to the soil and move in the system by way of transport of soil particles by water as opposed to movement as dissolved species. The average soil pH is 7.9 for the DP Site Aggregate Area determined from investigation sampling results, so leaching of copper is unlikely.
- Cyanide tends to adsorb onto various natural media, including clay and sediment; however, sorption is insignificant relative to the potential for cyanide to volatilize and/or biodegrade. At soil surfaces, volatilization of hydrogen cyanide is a significant mechanism for cyanide loss. Cyanide occurring at low concentrations in subsurface soil is likely to biodegrade under both aerobic and anaerobic conditions.
- Iron is naturally occurring in soil and tuff and may be relatively mobile under reducing conditions. Iron is sensitive to soil pH conditions and occurs in two oxidation states: iron(III), the insoluble oxidized form, and iron(II), the reduced soluble form. Most iron in well drained neutral to alkaline soil is present as precipitates of iron(III) hydroxides and oxides. With time, these precipitates are

mineralized and form various iron-bearing minerals, such as lepidcrocite, hematite, and goethite. The average soil pH is 7.9 for the DP Site Aggregate Area, so iron is not expected to be mobile.

- Molybdenum is naturally occurring in soil and tuff. It is considered an essential trace element, necessary for human health (http://rais.ornl.gov/tox/profiles/molybdenum_c_V1.html)
- Nitrate and to a lesser degree perchlorate, are highly soluble in water and may migrate with water molecules in saturated soil. As noted above, the subsurface material beneath the DP Site Aggregate Area sites has low moisture content, which would inhibit the mobility of nitrate and perchlorate as well as most other inorganic chemicals.
- Selenium is not often found in the environment in its elemental form but is usually combined with sulfide minerals or with silver, copper, lead, and nickel minerals. In soil, pH and Eh are determining factors in the transport and partitioning of selenium. In soil with a pH greater than 7.5, selenates, which have high solubility and a low tendency to adsorb onto soil particles, are the major selenium species and are very mobile. The average soil pH is 7.9 in the DP Site Aggregate Area so selenium is not particularly mobile.
- Silver sorbs onto soil and sediment and tends to form complexes with inorganic chemicals and humic substances in soil. Organic matter complexes with silver and reduces its mobility. Silver compounds tend to leach from well-drained soil so that it may potentially migrate into the subsurface.
- Strontium has moderate mobility in soil and sediment, and sorbs moderately to metal oxides and clays. Strontium can be easily absorbed into plants from soil via the roots to satisfy the plant's metabolic requirements for calcium because of strontium's similarity to calcium. Once absorbed in the plant, strontium translocates to other parts of the plant such as the leaves. The plant releases strontium to the soil surface through leaf fall.

H-3.3.2 Organic Chemicals

Table H-3.2-2 presents the physical and chemical properties (organic carbon-water partition coefficient [K_{oc}], logarithm to the base 10 octanol/water partition coefficient [log K_{ow}], and solubility) of the organic COPCs identified for the DP Site Aggregate Area. Physical and chemical properties of organic chemicals are important when evaluating their fate and transport. The following physiochemical property information illustrates some aspects of the fate and transport tendencies of the DP Site Aggregate Area COPCs. The information is summarized from Ney (1995, 058210).

Water solubility may be the most important chemical characteristic used to assess mobility of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, or persist in the environment. A highly soluble chemical (water solubility greater than 1000 mg/L) is prone to biodegradation and metabolism that may detoxify the parent chemical. Acetone, benzoic acid, bromomethane, butanone[2-], carbon disulfide, chloroaniline[4-], chloroform, dichloroethene[1,1-], dimethyl phthalate, methyl-2-pentanone[4-], methylene chloride, TCDD[2,3,7,8-] (2,3,7,8-tetrachlorodibenzo-p-dioxin), and trichlorofluoromethane have water solubilities greater than 1000 mg/L.

The lower the water solubility of a chemical, especially below 10 mg/L, the more likely it will be immobilized by adsorption. Chemicals with lower water solubilities are more likely to accumulate or bioaccumulate and persist in the environment, to be slightly prone to biodegradation, and to be metabolized in plants and animals. The COPCs identified as having water solubilities less than 10 mg/L are acenaphthene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene,

bis[2-ethylhexyl]phthalate, butylbenzylphthalate, carbazole, chrysene, DDT[4,4-] (dichlorodiphenyldichloroethane), dibenz[a,h]anthracene, dibenzofuran, fluoranthene, fluorene, hexachlorobenzene, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.

Vapor pressure is a chemical characteristic used to evaluate the tendency of organic chemicals to volatize. Chemicals with vapor pressure greater than 0.01 millimeters of mercury (mm Hg) are likely to volatilize, and therefore, concentrations at the site are reduced over time; vapors of these chemicals are more likely to travel toward the atmosphere and not migrate toward groundwater. Acetone, bromomethane, butanone[2-], carbon disulfide, chloroaniline[4-], chloroform, dichlorobenzene[1,2-], dichlorobenzene[1,3-], dichlorobenzene[1,4-], dichloroethene[1,1-], dimethylphenol[2,4-], ethylbenzene, isopropyltoluene[4-], methyl-2-pentanone[4-], methylene chloride, methylnaphthalene[2-], naphthalene, styrene, tetrachloroethene, toluene, trichloroethene, trichlorofluoromethane, trichloro-1,2,2-trifluoroethane[1,1,2-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have vapor pressures greater than 0.01 mm Hg.

Chemicals with vapor pressures less than 0.000001 mm Hg are less likely to volatilize and, therefore, tend to remain immobile. Anthracene, Aroclor-1254, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, carbazole, chrysene, DDT[4,4-], dibenz[a,h]anthracene, fluoranthene, indeno[1,2,3-cd]pyrene, pyrene, and TCDD[2,3,7,8-] have vapor pressures less than 0.000001 mm Hg.

The K_{ow} is an indicator of a chemical's potential to bioaccumulate or bioconcentrate in the fatty tissues of living organisms. The unitless K_{ow} value is an indicator of water solubility, mobility, sorption, and bioaccumulation. The higher the K_{ow} is above 1000, the greater the affinity the chemical has for bioaccumulation in the food chain, the greater its potential for sorption in the soil, and the lower its mobility (Ney 1995, 058210). The COPCs with a K_{ow} greater than 1000 include acenaphthene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2 ethylhexyl]phthalate, carbazole chrysene, dibenz[a,h]anthracene, dibenzofuran, dichlorobenzene[1,4-], di-n-butylphthalate, ethylbenzene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], methylnaphthalene[2-], naphthalene, phenanthrene, pyrene, tetrachloroethene, trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. A K_{ow} of less than 500 indicates high water solubility, high mobility, little to no affinity for bioaccumulation, and degradability by microbes, plants, and animals. Acetone, benzoic acid, bromomethane, butanone[2-], chloroform, DDT[4,4-], dimethylphenol[2,4-], methyl-2-pentanone[4-], methylene chloride, TCDD[2,3,7,8-], toluene, and trichlorofluoromethane have a K_{ow} less than 500.

The K_{oc} measures the tendency of a chemical to adsorb to organic carbon in soil. K_{oc} values above 500 L/kg indicate a strong tendency to adsorb to soil, leading to low mobility (NMED 2009, 108070). COPCs with K_{oc} values above 500 L/kg include acenaphthene, acenaphthylene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, butlybenzylphthalate, carbazole, chrysene, DDT[4,4-], dibenz[a,h]anthracene, dibenzofuran, di-n-butylphthalate, fluoranthene, fluorene, hexachlorobenzene, indeno[1,2,3-cd]pyrene, methylnaphthalene[2-], naphthalene, phenanthrene, pyrene, styrene, TCDD[2,3,7,8-], trimethylbenzene[1,2,4-], and trimethylbenzene[1,3,5-] have K_{oc} values above 500 L/kg, indicating a very low potential to migrate toward groundwater. The COPCs with K_{oc} values less than 500 L/kg are acetone, benzoic acid, bromomethane, butanone[2-], chloroform, dichlorobenzene[1,4-], dimethylphenol[2,4-], methyl-2-pentanone[4-], methylene chloride, tetrachloroethene, toluene, trichlorofluoromethane, and xylene[1,2-], and xylene[1,3-]+xylene[1,4-].

Acenaphthene, anthracene, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo(g,h,i)perylene, benzo[k]fluoranthene,

bis[2-ethylhexyl]phthalate, carbazole, chrysene, dibenz[a,h]anthracene, dibenzofuran, di-n-butylphthalate, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, methylnaphthalene[2-], naphthalene, phenanthrene, pyrene, and trimethylbenzene[1,2,4-] are the least mobile and the most likely to bioaccumulate. The more soluble and volatile COPCs acetone, benzoic acid, butanone[2-], chloroform, dichlorobenzene[1,4-], methyl-2-pentanone[4-], methylene chloride, tetrachloroethene, toluene, trichlorofluoromethane, and xylenes are more mobile but are also more likely to travel toward the atmosphere and not migrate toward groundwater. Because the organic COPCs were detected at low concentrations and the extent is defined, they are not likely to migrate to groundwater.

H-3.3.3 Radionuclides

Radionuclides are generally not highly soluble or mobile in the environment, particularly in the semiarid climate of the Laboratory. The physical and chemical factors that determine the distribution of radionuclides within soil and tuff are the K_d, the pH of the soil and other soil characteristics (e.g., sand or clay content), and the Eh. The interaction of these factors is complex, but K_d values provide a general assessment of the potential for migration through the subsurface: chemicals with higher K_d values are less likely to be mobile than those with lower values. Radionuclides with K_d values greater than 40 are very unlikely to migrate through soil towards the water table (Kincaid et al. 1998, 093270).

Table H-3.3-3 gives physical and chemical properties of the radionuclide COPCs identified at the DP Site Aggregate Area sites. Based on K_d values, americium-241, cesium-137, plutonium-238, and plutonium-239 have a very low potential to migrate towards groundwater at the sites within the DP Site Aggregate Area. The K_d values for strontium-90, uranium-234, uranium-235/236, uranium-238, and tritium are less than 40 and indicate a potential to migrate towards groundwater.

- A major portion of stable and radioactive strontium in soil dissolves in water, so it might move deeper into the subsurface. However, the K_d value of 35 indicates that strontium-90 is relatively immobile in the subsurface.

- Uranium is a natural and commonly occurring radioactive element present in nearly all rock and soil. The mobility of uranium in soil and its vertical transport to groundwater depend on properties of the soil such as pH, Eh, concentration of complexing anions, porosity of the soil, soil-particle size, and sorption properties as well as the amount of water available. In general, the actinide nuclides form comparatively insoluble compounds in the environment and are therefore not considered biologically mobile. The actinides are transported in ecosystems mainly by physical and sometimes chemical processes. They tend to attach, sometimes strongly, to surfaces; and tend to accumulate in soil and sediment, which ultimately serve as strong reservoirs. Subsequent movement is largely associated with geological processes such as erosion and sometimes leaching.

- Thorium is a naturally occurring, radioactive metal. Small amounts of thorium are present in all rock, soil, surface water, groundwater, plants, and animals. More than 99% of natural thorium exists in the form thorium-232. Thorium is strongly sorbed to soil and its mobility is very low.

- Tritium's initial behavior in the environment is determined by the source. If it is released as a gas or vapor to the atmosphere, substantial dispersion can be expected, and the rapidity of deposition is dependent on climatic factors. If tritium is released in liquid form, it is diluted in surface water and is subject to physical dispersion, percolation, and evaporation (Whicker and Schultz 1982, 058209, p. 147). Tritium concentrations in the subsurface at the area of elevated radioactivity are low (<1 pCi/g), indicating that the area of elevated radioactivity is not a significant source of tritium, although this radionuclide is relatively mobile. Because tritium migrates in association with

moisture, the low moisture content of the subsurface limits the potential for tritium to migrate to groundwater.

H-3.4 Exposure Point Concentration Calculations

The exposure point concentrations (EPCs) represent upper bound concentrations of COPCs. For comparison to risk-screening levels, the upper confidence limit (UCL) of the arithmetic mean was calculated when possible and used as the EPC. If an appropriate UCL of the mean could not be calculated or if the UCL exceeded the maximum concentration, the maximum detected concentration of the COPC was used as the EPC. The EPCs for dioxin and furan congeners are the sum of the detected congeners weighted by the World Health Organization 2005 toxic equivalent factors (TEFs) (http://www.who.int/ipcs/assessment/tef_update/en/index.html); the sum is expressed as the TCDD[2,3,7,8-] equivalent concentration. The summary statistics, including the EPC for each COPC for the human health and the ecological risk-screening assessments and the distribution used for the calculation, are presented in Tables H-2.2-1 to H-2.2-60. After initial sampling for dioxins and furans, NMED did not require additional sampling for these chemicals; therefore, dioxins and furans were not retained as COPCs. However, they have been included in the site risk assessments.

Calculation of UCLs of the mean concentrations was done using the U.S. Environmental Protection Agency (EPA) ProUCL 4.00.04 software (EPA 2007, 096530), which is based on EPA guidance (EPA 2002, 085640). The ProUCL program calculates 95%, 97.5%, and 99% UCLs and recommends a distribution and UCL. The UCL for the recommended calculation method was used as the EPC. The ProUCL software performs distributional tests on the data set for each COPC and calculates the most appropriate UCL based on the distribution of the data set. Environmental data may have a normal, lognormal, or gamma distribution but are often nonparametric (no definable shape to the distribution). Key aspects of the new version of ProUCL are that it tests data against an expanded range of distribution types, contains a larger suite of statistical tests, and can perform analyses on datasets with nondetected values. The ProUCL documentation strongly recommends against using the maximum detected concentration for the EPC. However, it also cautions against using statistical values calculated on less than four to six detected results in a large data set. Therefore, the maximum detected concentration was used to represent the EPC for COPCs with less than five detected values, because the resulting statistical estimate may not be reliable. In these cases, if the observations are highly skewed and result in significant risk because the maximum detected concentration is used, the COPC is further assessed in the uncertainty section. Input and output data files for ProUCL calculations are provided on CD as Attachment H-1.

H-4.0 HUMAN HEALTH RISK-SCREENING ASSESSMENTS

The human health risk-screening assessments were conducted for each site where extent is defined within the DP Site Aggregate Area. All sites were screened for the construction worker and residential scenarios using data from 0-10 ft bgs. Sites were also screened for the industrial scenario using data from 0–1 ft bgs, where available. The human health risk-screening assessments compare either the UCL of the mean concentration or the maximum detected concentration of each COPC with SSLs for chemicals and screening action levels (SALs) for radionuclides.

H-4.1 Soil Screening Levels

Human health risk-screening assessments for chemicals were conducted using SSLs for the industrial, construction worker, and residential scenarios obtained from NMED guidance (NMED 2009, 108070).

The NMED SSLs are based on a target noncarcinogenic hazard quotient (HQ) of 1.0 and a target cancer risk of 1×10^{-5} (NMED 2009, 108070). If SSLs were not available from NMED guidance, values from the EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) were used. The EPA SSLs for carcinogens were multiplied by 10 to adjust from a 10^{-6} cancer risk level to the NMED target cancer risk level of 10^{-5}. EPA regional screening levels are not available for construction workers, therefore, when regional screening levels were used for a COPC, the construction worker SSLs were calculated using toxicity values from EPA regional screening tables (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) and exposure parameters from NMED (2009, 108070). A surrogate SSL is used for some COPCs based on structural similarity or breakdown products. Exposure parameters used to calculate the industrial, construction worker, and residential SSLs are presented in Table H-4.1-1.

Radionuclide SALs are used for comparison with radionuclide concentrations and were derived using the residual radioactive (RESRAD) model, Version 6.5 (LANL 2005, 088493). The SALs are based on a 15-mrem/yr dose per U.S. Department of Energy (DOE) guidance (DOE 2000, 067489). Exposure parameters used to calculate the residential SALs, and the industrial and construction worker SALs are presented in Tables H-4.1-2 and H-4.1-3.

H-4.2 Results of the Human Health Risk Screening Evaluations

The EPC of each COPC was compared with the SSLs/SALs for the appropriate scenario(s). For carcinogenic chemicals, the EPCs were divided by the NMED or adjusted EPA SSL and then multiplied by 1×10^{-5}. The sum of the cancer risks was compared with the NMED target cancer risk level of 1×10^{-5}. For noncarcinogenic chemicals, a HQ was generated for each COPC by dividing the EPC by the NMED or EPA SSL. The HQs were summed to generate a hazard index (HI). The HI was compared with the NMED target HI of 1.0. The dose is determined by dividing the EPC by the SAL, multiplying the ratio by 15 mrem/yr, and summing the individual doses to obtain the total dose for the site. The sum of the doses was compared with the DOE target dose level of 15 mrem/yr (DOE 2000, 067489). The results of the human health risk-screening evaluations for the DP Site Aggregate Area are presented in Tables H-4.2-1 through H-4.2-204.

H-4.2.1 AOC 21-002(b)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-1 through H-4.2-3. The COPCs not detected in the 0–1-ft depth interval (acetone, dioxin/furans, methyl-2-pentanone[4-], methylene chloride, and xylene[1,3]+xylene[1,4]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-4. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-5 through H-4.2-7. The total excess cancer risk is approximately 6×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-4. The results of the risk/dose screening assessments for the residential scenario are

presented in Tables H-4.2-8 through H-4.2-10. The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.7, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.2 Consolidated Unit 21-006(c)-99

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-11. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-12 through H-4.2-14. The COPCs not detected in the 0–1-ft depth interval (antimony, anthracene, cyanide, methylene chloride, strontium-90, tetrachloroethene, toluene, tritium, xylene[1,2-], and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 6×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.04, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-11. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-15 through H-4.2-17. The total excess cancer risk is approximately 7×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.08, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-11. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-18 through H-4.2-20. The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene contributes 1.5×10^{-5} to the total risk. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 11 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.3 SWMU 21-009

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2.-21 through H-4.2 -23. The COPCs not detected in the 0–1-ft depth interval (anthracene, chloroform, dichloroethene[1,1-], dioxin/furans, and tetrachloroethene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 4×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.04 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-24. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-25 through H-4.2-27. The total excess cancer risk is approximately 4×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-24. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-28 through H-4.2-30. The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.4 SWMU 21-012(b)

Methylnaphthalene[2-] was detected only below 10 ft (15–16 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, methylnaphthalene[2-] was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared with the recommended daily allowance (RDA) for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-012(b) (39,300 mg/kg) at the EPA default adult soil ingestion rate of 100 mg/d of soil, an adult would ingest approximately 3.93 mg calcium per day. At the intake level of 3.93 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-012(b) at the EPA default child soil ingestion rate of 200 mg/d of soil, a child would ingest approximately 7.86 mg/d. At the intake level of 7.86 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 39,300 mg/kg, and calcium is eliminated as a COPC.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-31 through H-4.2-33. The COPCs not detected in the 0–1-ft depth interval (acetone, benzoic acid, chloroform, dichlorobenzene[1,4-], isopropyltoluene[4-], 2-methylnaphthalene, methylene chloride, toluene, trichloroethene, trimethylbenzene[1,2,4-], and xylene[1,3]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-34 through H-4.2-36. The total excess cancer risk is approximately 2×10^{-9}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-37 through H-4.2-39. The total excess cancer risk is approximately 7×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.5 SWMU 21-013(c)

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-40. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-41 through H-4.2-43. The total excess cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-44. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-45 through H-4.2-47. The total excess cancer risk is approximately 4×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-44. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-48 through H-4.2-50. The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.6 SWMU 21-022(f)

Risk/dose screening assessments for the industrial scenario were not conducted for SWMU 21-022(f) because samples were not collected in the 0–1-ft depth interval. Plutonium-239/240 was detected only below 10 ft (23.5–24.5 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, plutonium-239/240 was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-51. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-52 through H-4.2-54. The total excess cancer risk is approximately 4×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 3, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Manganese contributes an HQ of 2.4 to the HI. The total dose is approximately 0.1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-51. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-55 through H-4.2-57. The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.7 SWMU 21-022(h)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-58 through H-4.2-60. The COPCs not detected in the 0–1-ft depth interval (isopropyltoluene[4-], dioxin/furans, and methylene chloride) were excluded from the industrial risk-

screening evaluations. The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene contributes 2.5×10^{-5} to the total risk. The HI is approximately 5, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed a HQ of 4.5 to the HI; the HI without lead is less than 1.0. The lead EPC (3602 mg/kg) exceeds the industrial SSL (800 mg/kg) and indicates the blood lead level for a worker may be exceeded. The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-61. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-62 through H-4.2-64. The total excess cancer risk is approximately 8×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 2, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed approximately 2 to the total HI; the HI without lead is less than 1.0. The lead EPC (1556 mg/kg) exceeds the construction worker SSL (800 mg/kg) and indicates that the blood lead level for a worker may be exceeded. The total dose is approximately 23 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 14 mrem/yr to the total dose.

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-61. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-65 through H-4.2-67. The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene contributed 1.4×10^{-5} to the risk. The HI is approximately 4, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed approximately 4 to the HI; the HI without lead is less than 1.0. The lead EPC (1556 mg/kg) exceeds the residential SSL (400 mg/kg) and indicates that the blood lead level for a resident (child) may be exceeded. The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 16 mrem/yr to the total dose.

H-4.2.8 Consolidated Unit 21-023(a)-99

Styrene was detected only below 10 ft (16–17 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, styrene was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared to the RDA for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-023(a)-99 (42,700 mg/kg) at the EPA default adult soil ingestion rate of 100 mg of soil per day, an adult would ingest approximately 4.27 mg calcium per day. At the intake level of 4.27 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-023(a)-99 at the EPA default child soil ingestion rate of 200 mg of soil per day, a child would ingest approximately 8.54 mg/d. At the intake level of 8.54 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 42,700 mg/kg, and calcium is eliminated as a COPC.

Risk-screening assessments for the industrial scenario were not conducted for Consolidated Unit 21-023(a)-99 because samples were not collected in the 0–1-ft depth interval (subsurface septic systems).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-68. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-69 through H-4.2-71. The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-68. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-72 through H-4.2-74. The total excess cancer risk is approximately 5×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene contributed 4×10^{-5} to the risk. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.9 SWMU 21-024(a)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-75 through H-4.2-77. The COPCs not detected in the 0–1-ft depth interval (acetone, chloroform, dichlorobenzene[1,4-], dioxin/furans, isopropyltoluene[4-], methylene chloride, selenium, toluene, trichlorothene, and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-78. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-79 through H-4.2-81. The total excess cancer risk is approximately 6×10^{-9}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-78. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-82 through H-4.2-84. The total excess cancer risk is approximately 3×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.10 SWMU 21-024(b)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-85 through H-4.2-87. The COPCs not detected in the 0–1-ft depth interval (acenaphthene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[g,h,i]perylene, benzo(k)fluoranthene, bis[2-ethylhexyl]phthalate, dichlorobenzene[1,4-], di-n-butylphthalate, dioxin/furans,

indeno[1,2,3-cd]pyrene, selenium, strontium, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-88. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-89 through H-4.2-91. The total excess cancer risk is approximately 8×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 89 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The primary contributors to the dose are plutonium-239, with a dose of 75 mrem/yr, and to a lesser extent, americium-241, with a dose of 13 mrem/yr.

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-88. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-92 through H-4.2-94. The total excess cancer risk is approximately 2×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic with a risk of 1.2×10^{-5} is the primary contributor to the risk. The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 98 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 81 mrem/yr, and to a lesser extent, americium-241, with a dose of 15 mrem/yr.

H-4.2.11 SWMU 21-024(d)

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-95. The COPCs not detected in the 0–1-ft depth interval (anthracene, benzo(a)pyrene, benzo[g,h,i]perylene, benzo[k]fluoranthene, butylbenzylphthalate, carbazole, dibenz[a,h]anthracene, dichlorobenzene[1,4-], europium-152, fluorene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], methylene chloride, phenanthrene, toluene, and trichlorethene) were excluded from the industrial risk-screening evaluations. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-96 through H-4.2-98. The total excess cancer risk is approximately 5×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.07, which is below, the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-99. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-100 through H-4.2-102. The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-99. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-103 through H-4.2-105. The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic contributes 9.1×10^{-6} to the carcinogenic risk. The HI is approximately 0.8, which is below the NMED target HI of 1.0

(NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.12 SWMU 21-024(e)

Butanone[2-] was detected only below 10 ft (20–21 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, 2-butanone was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-106 through H-4.2-108. The COPCs not detected in the 0–1-ft depth interval (acenaphthene, benzo[g,h,i]perylene, bis[2-ethylhexyl]phthalate, butanone[2-], chloroaniline[4-], dichlorobenzene[1,4-], dioxin/furans, ethylbenzene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], methylene chloride, trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-109. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-110 through H-4.2-112. The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-109. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-113 through H-4.2-115. The total excess cancer risk is approximately 7×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 10 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.13 SWMU 21-024(g)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-116 through H-4.2-118. The COPCs not detected in the 0–1-ft depth interval (acenaphthylene, benzoic acid, chloroform, dioxin/furans, ethylbenzene, and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-119. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-120 through H-4.2-122. The total excess cancer risk is approximately 1×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is

approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-119. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-123 through H-4.2-125. The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.14 SWMU 21-024(h)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-126 through H-4.2-128. The COPCs not detected in the 0–1-ft depth interval (acenaphthene, acenaphthylene, acetone, benzo[a]anthracene, benzo[a]pyrene, benzo[g,h,i]perylene, benzoic acid, chloroform, dichlorobenzene[1,4-], di-n-butylphthalate, dioxin/furans, fluorene, indeno[1,2,3-cd]pyrene, isopropyltoluene[4-], naphthalene, tetrachloroethene, toluene, trimethylbenzene [1,2,4-], trimethylbenzene [1,3,5-], xylene [1,2-], and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-129. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-130 through H-4.2-132. The total excess cancer risk is approximately 7×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-129. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-133 through H-4.2-135 The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.15 SWMU 21-024(i)

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared to the RDA for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-024(i) (74,400 mg/kg) at the EPA default adult soil ingestion rate of 100 mg/d of soil, an adult would ingest approximately 7.44 mg calcium per day. At the intake level of 7.44 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at SWMU 21-024(i) at the EPA default child soil

ingestion rate of 200 mg/d of soil, a child would ingest approximately 14.88 mg/d. At the intake level of 14.88 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 39,300 mg/kg, and calcium is eliminated as a COPC.

Benzo(g,h,i)perylene, fluorene, indeno(1,2,3-cd)pyrene, methylnaphthalene(2-), and naphthalene were detected only below 10 ft (12–13 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, benzo(g,h,i)perylene, fluorene, methylnaphthalene[2-], and naphthalene were not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-136 through H-4.2-138. Bromomethane, DDT[4,4-], nitrate, and trichlorofluoromethane were not detected in the 0–1-ft depth interval and were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.1, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-139 through H-4.2-141. The total excess cancer risk is approximately 7×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-142 through H-4.2-144. The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose is in part from isotopic thorium, which is naturally occurring.

H-4.2.16 SWMU 21-024(j)

Carbon disulfide was detected only below 10 ft (17–18 ft bgs), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, carbon disulfide was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-145 through H-4.2-147. The COPCs not detected in the 0–1-ft depth interval (acetone, bis[2-ethylhexyl]phthalate, carbon disulfide, chloroform, dioxin/furans, isopropyltoluene[4-], methylene chloride, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-148. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-149 through H-4.2-151. The total excess cancer risk is approximately

7×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-148. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-152 through H-4.2-154. The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.17 Consolidated Unit 21-024(l)-99

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-155 through H-4.2-157. The COPCs not detected in the 0–1-ft depth interval (acenaphthylene, acetone, carbazole, chloroform, dibenzofuran, dichlorobenzene[1,4], isopropyltoluene[4-], methylnaphthalene[2-], naphthalene, toluene, and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-158 through H-4.2-160. The total excess cancer risk is approximately 4×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-161 through H-4.2-163. The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene contributes 1.08×10^{-5} to the total risk. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.18 SWMU 21-024(o)

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-164 through H-4.2-166. The COPCs not detected in the 0–1-ft depth interval (acetone, dioxin/furans, selenium, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-167. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-168 through H-4.2-170. The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is

approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-167. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-171 through H-4.2-173. The total excess cancer risk is approximately 6×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.19 Consolidated Unit 21-026(a)-99

Toluene was detected only below 10 ft (10–11 ft), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, toluene was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

Calcium was retained as a COPC because it was detected above background in soil and tuff; however, it does not have a published toxicity value. Calcium is among those elements identified in section 5.9.4 of EPA's Risk Assessment Guidance for Superfund (EPA 1989, 008021) as an essential macronutrient, which can be eliminated as a COPC on the basis of best professional judgment. As an essential nutrient, calcium may be compared to the RDA for adults and children. The RDA is 1200 mg/d of calcium for an adult and 800 mg/d for a child (National Research Council 1989, 064000). If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-026(a)-99 (42,800 mg/kg) at the EPA default adult soil ingestion rate of 100 mg/d of soil, an adult would ingest approximately 4.28 mg calcium per day. At the intake level of 4.28 mg/d, the adult's ingestion of calcium is far less than the RDA for calcium of 1200 mg/d. If all the daily incidental ingestion of soil were to occur at the location of the maximum detected concentration at Consolidated Unit 21-026(a)-99 at the EPA default child soil ingestion rate of 200 mg/d of soil, a child would ingest approximately 8.56 mg/d. At the intake level of 8.56 mg/d, the child's ingestion of calcium is far less than the RDA for calcium of 800 mg/d. Therefore, no adverse health effects are expected from calcium at 42,800 mg/kg, and calcium is eliminated as a COPC.

The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-174 through H-4.2-176. The COPCs not detected in the 0–1-ft depth interval (anthracene, chloroform, dioxin/furans, ethylbenzene, trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-]) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The elevated cancer risk is primarily from polycyclic aromatic hydrocarbons (PAHs) and arsenic. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-177. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-178 through H-4.2-180. The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The elevated cancer risk is primarily from PAHs. The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 13 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-177. The results of the risk/dose screening assessments for the residential scenario are

presented in Tables H-4.2-181 through H-4.2-183. The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The elevated cancer risk is primarily from PAHs and arsenic. The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 15 mrem/yr, which is equivalent to the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.2.20 SWMU 21-027(a)

Carbon disulfide was detected only below 10 ft (16–17 ft), which is below the depths relevant for exposure under the industrial, residential, and construction worker scenarios. Therefore, carbon disulfide was not included in the risk-screening evaluations because there is no complete pathway for exposure to a receptor.

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-184. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-185 through H-4.2-187. The COPCs not detected in the 0–1-ft depth interval (acetone, benzo[k]fluoranthene, butanone[2-], di-n-butylphthalate, naphthalene, tetrachloroethene, and toluene) were excluded from the industrial risk-screening evaluations. The total excess cancer risk is approximately 1×10^{-4}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor with a risk of 1×10^{-4}. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 12 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-188. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-189 through H-4.2-191. The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 6, which is above the NMED target HI of 1.0 (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor with an HQ of 5. The total dose is approximately 46 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 26 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 13 mrem/yr.

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-188. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-192 through H-4.2-194. The total excess cancer risk is approximately 4×10^{-4}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The greatest contributor to the total risk was TCDD[2,3,7,8-] equivalent concentration with a risk of 3.4×10^{-4}. The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 51 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 28 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 14 mrem/yr.

H-4.2.21 SWMU 21-027(c)

The dioxin and furan congener TEF calculations for the industrial scenario are presented in Table H-4.2-195. The results of the risk/dose screening assessments for the industrial scenario are presented in Tables H-4.2-196 through H-4.2-198. The COPCs not detected in the 0–1-ft depth interval (acenaphthylene, acetone, dichlorobenzene [1,4-], isopropyltoluene[4-], methylene chloride, naphthalene, toluene, and trichloroethene) were excluded from the industrial risk-screening evaluations. The total

excess cancer risk is approximately 6×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.07, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the construction worker scenario are presented in Table H-4.2-195. The results of the risk/dose screening assessments for the construction worker scenario are presented in Tables H-4.2-199 through H-4.2-201. The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 5 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

The dioxin and furan congener TEF calculations for the residential scenario are presented in Table H-4.2-195. The results of the risk/dose screening assessments for the residential scenario are presented in Tables H-4.2-202 through H-4.2-204. The total excess cancer risk is approximately 8×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 14 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489).

H-4.3 Evaluation of Vapor Intrusion

The vapor intrusion indoor air pathway was not evaluated because all buildings within the DP Site Aggregate Area are abandoned and are scheduled for D&D. There are no receptors in the reasonably foreseeable future; therefore, the pathway is incomplete. The vapor intrusion pathway was not evaluated for the DP Site Aggregate Area sites for several reasons.

1. VOCs are not being currently used at DP Site Aggregate Area SWMUs/Consolidated Units/AOCs. These sites were/are also not used for storage or disposal of any VOCs.

2. Most sites have only a few VOCs detected (1–6 compounds) with concentrations at or below estimated quantitation limits (EQLs). In addition, most detected concentrations are shallow (6 ft or less) and sporadic in nature (5 or fewer detections per VOC). Sites with more detected VOCs had very few detections at depth and most or all were below EQLs. The data indicate that VOCs are not commonly detected and are at trace levels. In addition, the extent of VOCs is defined and is relatively shallow. Given these conditions, a VOC plume is not present at any of these sites that would impact the vapor intrusion pathway.

3. Some sites in the DP Site Aggregate Area are wholly [e.g., SWMU 21-024(o)] or mostly located on the slope leading to the canyon wall (e.g., outfall portions of sites). These sites are unsuitable for building. There are currently no businesses occupying the property. Therefore, vapor intrusion modeling results for these areas would not be applicable to indoor workers or residents.

4. Some sites are located away from the mesa edge and, although currently vacant land, may have buildings erected on them in the future. During the pre-construction phase, earth moving and land contouring occur. The earth is usually scraped to a depth that allows for pouring a foundation and/or footings. After the earth has been moved by the developer to accommodate a building, the land will not be as it is currently. Because of the shallow nature of the VOCs detected at DP Site, any VOCs remaining after D&D of TA-21, regrading, and covering with fill material would not present a pathway for vapor intrusion into buildings that may be constructed in the future.

H-4.4 Uncertainty Analysis

The analyses presented in human health risk-screening assessments are subject to varying degrees and types of uncertainty. Aspects of data evaluation and COPC identification, exposure assessment, toxicity assessment, and the additive approach all contribute to uncertainties in the risk assessment process and may affect the results.

H-4.4.1 Data Evaluation and COPC Identification Process

A primary uncertainty associated with the COPC identification process is the possibility that a chemical may be inappropriately identified as a COPC when it is actually not a COPC or that a chemical may not be identified as a COPC when it actually should be identified as a COPC. Inorganic chemicals are appropriately identified as COPCs because only those inorganic chemicals detected or that have detection limits above background are retained for further analysis. However, established BVs may not accurately represent certain subunits of the Bandelier Tuff (e.g., fractured, clay-rich material) encountered during sampling because such data are not included in the background data set. There are no established BVs for organic chemicals, and all detected organic chemicals are identified as COPCs and are retained for further analysis. Radionuclides are also identified as COPCs based on background comparisons or detected status.

Other uncertainties may include errors in sampling, laboratory analysis, and data analysis. However, because concentrations used in the risk-screening evaluations include those detected less than estimated quantitation limits and nondetects above BVs, data evaluation uncertainties are expected to have little effect on the risk-screening results.

H-4.4.2 Exposure Assessment

An individual may be subject to exposures in a different manner than the exposure assumptions used to derive the industrial and construction worker SSLs. For the sites evaluated, individuals might not be on-site now or in the future for that frequency and duration. This is particularly true of the canyon edge/wall areas where elevated concentrations of some COPCs remain (e.g., an outfall). The industrial assumptions for the SSLs are that the potentially exposed individual is outside on-site for 8 h/d, 225 d/yr, and 25 yr (NMED 2009, 108070), while the construction worker SSLs are based on exposure of 8 h/d, 250 d/yr, and 1 yr (NMED 2009, 108070). The residential SSLs are based on exposure of 24 h/d, 350 d/yr, and 30 yr (NMED 2009, 108070). As a result, the industrial, construction worker, and residential scenarios evaluated at these sites likely overestimate the exposure and risk/dose.

A number of assumptions are made relative to exposure pathways, including input parameters, whether or not a given pathway is complete, the contaminated media to which an individual may be exposed, and intake rates for different routes of exposure. In the absence of site-specific data, the exposure assumptions used were consistent with default values (EPA 2007, 099314; NMED 2009, 108070). When several upper-bound values (as are found in NMED 2009, 108070) are combined to estimate exposure for any one pathway, the resulting risk can exceed the 99th percentile and, therefore, can exceed the range of risk that may be reasonably expected. Also, the assumption that residual concentrations of chemicals in the tuff are available and result in exposure in the same manner as if they were in soil overestimates the potential exposure and risk to receptors.

The exposure time of nine hours instead of eight hours for the construction worker radionuclide SALs is intended to account for time spent on-site for lunch, but not working because it is assumed that a construction worker is more likely to bring a lunch than go off-site for lunch. This extra hour is overly

protective of a construction worker because during this extra hour, the soil ingestion rate, inhalation rate, and particulate emission factor are much lower than during the eight active work hours. A longer construction work day was assumed for evaluating radionuclide dose with the RESRAD computer code because, unlike chemical intake, radiation dose for all construction exposure pathways is linearly related to the length of time spent in the contaminated area. The chemical SSLs are sufficiently protective and appropriate for this scenario using an eight-hour exposure time because the exposure parameters are conservative, as noted above.

Uncertainty is introduced in the concentration aggregation of data for estimating the EPCs at a site. The use of a UCL is intended to provide a protective, upper-bound estimate of the COPC concentration and is assumed to be representative of the average exposure to a COPC across the entire site. Potential risk and exposure from a single location or area with relatively high COPC concentrations may be overestimated if a representative, sitewide value is used. The use of the maximum detected concentration for the EPC overestimates the exposure to contamination because receptors are not consistently exposed to the maximum detected concentration across the site.

Lead

Lead was a COPC for all sites within the DP Site Aggregate Area with ratios less than 1 for all but one site. SWMU 21-022(h) has lead EPCs that exceed the SSLs for each scenario. The HIs without lead are less than 1, indicating that lead is the only COPC posing a potential risk to receptors. At Consolidated Unit 21-023(a)-99, lead is also the major contributor with ratios of 0.3 and 0.6 for the construction worker and resident, respectively. However, the HIs are less than 1 with and without lead included, indicating that there are no potential risks to receptors from lead or other noncarcinogenic COPCs at this consolidated unit.

Several sites within the DP Site Aggregate Area have potential risks that exceed NMED target levels. The potential risks may be overestimated because of uncertainties associated with the EPCs and/or the COPCs at these sites.

Consolidated Unit 21-006(c)-99

The potential cancer risk (approximately 2×10^{-5}) for the residential scenario is slightly above the NMED target risk level primarily from benzo(a)pyrene. Consolidated Unit 21-006(c)-99 consists of inactive underground seepage pits associated with buildings 21-002 and 21-003, which were used for plutonium processing and research, and also includes a drainline and outfall from a seepage pit. The operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene, which comprise the majority of the carcinogenic COPCs. In addition, the maximum detected concentration of benzo(a)pyrene is the EPC and is the only concentration above the SSL, with the sample located on the side of the canyon wall next to or near DP Road. PAHs are found in asphalt and are a product of incomplete combustion from the tailpipes of motor vehicles. The source of the benzo(a)pyrene and the other PAH COPCs is probably runoff from the asphalt road upslope from the outfall. At this consolidated unit, one of two detected concentrations of benzo(a)pyrene exceeded the residential SSL at location 21-600388 [SWMU 21-006(b)] at the outfall area. This outfall area received discharge from the brick manhole/trench (structure 21-118). Samples collected from under the manhole/trench, which discharged to the outfall, had no detected concentrations of organic chemicals. For the site as a whole, semivolatile organic compounds (SVOCs) were not detected in the majority of samples collected and analyzed for SVOCs (47 of 55). This supports the conclusion that PAHs detected at the site are not associated with operational discharges and the slightly elevated cancer risk from PAHs for the residential scenario is not related to releases from the site. Without benzo(a)pyrene, the potential cancer risk for the residential

scenario is approximately 9×10^{-6}, which is below the NMED target risk level. Therefore, the consolidated unit does not require further investigation or remediation, and there is no potential unacceptable risk for the residential scenario from site operations.

SWMU 21-022(f)

The construction worker HI of approximately 3 (HI of 2.5) is primarily from manganese, which has an HQ of 2.4. The manganese EPC is 1121 mg/kg, which is similar to the maximum soil background concentration (1100 mg/kg). In addition, the construction worker SSL (463 mg/kg) is within the ranges of background concentrations for Qbt 2,3,4 and soil (22 mg/kg to 752 mg/kg and 76 mg/kg to 1100 mg/kg, respectively). If manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. Therefore, this SWMU does not require further investigation or remediation and there is no potential unacceptable risk for the construction worker scenario from site operations.

Consolidated Unit 21-023(a)-99

The potential cancer risk (approximately 5×10^{-5}) for the residential scenario is above the NMED target risk level primarily from benzo(a)pyrene. Consolidated Unit 21-023(a)-99 consists of septic tanks and drainlines that reportedly serviced a janitor's mop sink in building 21-003; received wastewater from the shower room in building 21-003; and received industrial waste and sewage from building 21-003. Buildings 21-002 and 21-003 were used for plutonium processing and research. The operations associated with these buildings would not have resulted in the release of PAHs, such as benzo(a)pyrene. Benzo(a)pyrene was detected above the residential SSL at two locations (21-603010 and 21-601127) approximately 20 ft downslope from DP Road, a source of asphalt, and would result in detections of PAHs, including benzo(a)pyrene. These locations were sampled from under the former sewer discharge pipe south of an asphalt-paved road. There were no detections of PAHs under this pipe north of the road and south of building 21-003, indicating that the benzo(a)pyrene detected is from the asphalt road and not from building 21-003. For the site as a whole, SVOCs were not detected in the majority of samples collected and analyzed for SVOCs (42 of 71). Therefore, the slightly elevated cancer risk from PAHs for the residential scenario is not related to release from the site.

In addition, the potential cancer risk for the residential scenario is due in part to arsenic. However, exposure to arsenic across the site is similar to that at background locations. Although concentrations of arsenic were detected above background, the 95% UCL of the mean concentration (3.21 mg/kg) is within the ranges of arsenic background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at Consolidated Unit 21-023(a)-99 (only three sample results at three locations are above the maximum background concentration), the potential exposure to and residential risk from arsenic are substantially overestimated by the screening-level comparison.

The 95% UCL is intended to represent the average concentration of a contaminant and the reasonable maximum exposure (RME) over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

Because the arsenic EPC of 3.21 mg/kg falls within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the arsenic does not contribute to the potential risk at the RME concentration, which overestimates the potential incremental risk.

Without benzo(a)pyrene and arsenic, the residential cancer risk is approximately 5×10^{-6}, which is below the NMED target risk level. Therefore, the consolidated unit does not require further investigation or remediation, and there is no potential unacceptable risk for the residential scenario from site operations.

SWMU 21-024(b)

The potential cancer risk (approximately 2×10^{-5}) for the residential scenario is slightly above the NMED target risk level primarily from arsenic. However, exposure to arsenic across the site is similar to that at background locations. Although concentrations of arsenic were detected above background, the 95% UCL of the mean concentration (4.7 mg/kg) is within the ranges of arsenic background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at SWMU 21-024(b) (only three sample results at two locations are above the maximum background concentration), the potential exposure to and risk from arsenic are substantially overestimated by the screening-level comparison.

The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

Because the arsenic EPC of 4.7 mg/kg falls within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the arsenic does not contribute to the potential risk at the RME concentration, which overestimates the potential incremental risk.

Without arsenic, the total excess cancer risk for the residential scenario is approximately 3×10^{-6}, which is below the NMED target risk level.

SWMU 21-024(d)

The potential cancer risk (approximately 2×10^{-5}) for the residential scenario is slightly above the NMED target risk level primarily from arsenic. However, exposure to arsenic across the site is similar to that at background locations. Although concentrations of arsenic were detected above background, the 95% UCL of the mean concentration (3.56 mg/kg) is within the ranges of arsenic background concentrations, indicating no difference in potential risk from exposure across the site whether from the site EPC or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at SWMU 21-024(d) (only two sample results at one location are above the maximum background concentration), the potential exposure to and residential risk from arsenic are substantially overestimated by the screening-level comparison.

The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

Because the arsenic EPC of 3.56 mg/kg falls within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the arsenic does not contribute to the potential risk at the RME concentration, which overestimates the potential incremental risk.

Without arsenic, the total excess cancer risk for the residential scenario is approximately 1×10^{-5}, which is equivalent to the NMED target risk level.

SWMU 21-024(i)

The potential dose (approximately 26 mrem/yr) for the residential scenario is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The BVs for thorium-228 are 2.28 pCi/g in soil and 2.52 pCi/g in Qbt 3, and the BVs for thorium-230 are 2.29 pCi/g for soil and 1.98 pCi/g for Qbt 3. The dose contributed by background concentrations of isotopic thorium is approximately 14 mrem/yr. In addition, the EPCs for thorium-228 and thorium-230 are less than BVs (1.559 pCi/g and 1.168 pCi/g, respectively), the dose is comparable to background dose. The dose from the remaining COPCs is approximately 12 mrem/yr, which is less than the target limit of 15 mrem/yr (DOE 2000, 067489). Therefore, the SWMU does not require further investigation or remediation, and there is no unacceptable dose for the residential scenario from site operations.

Consolidated Unit 21-026(a)-99

The potential cancer risks (approximately 3×10^{-5}) for the industrial and residential scenarios are above the NMED target risk level in part from arsenic. However, exposure to arsenic across the site is similar to

that at background locations. Although concentrations of arsenic were detected above background, the 95% UCLs of the mean concentrations (4.4 mg/kg for industrial and 2.7 mg/kg for residential) are within the ranges of arsenic background concentrations, indicating no difference in potential risks from exposure across the site whether from the site EPCs or the ranges of background concentrations. Given the infrequent and isolated occurrence of arsenic concentrations above the maximum background concentrations at Consolidated Unit 21-026(a)-99 (only one sample result at one location is above the maximum background concentration), the potential exposure to and residential risk from arsenic are substantially overestimated by the screening-level comparison.

The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration during the exposure period. Although this concentration does not reflect the maximum concentration that a receptor could be exposed to at any one time (i.e., worst case), it is a reasonable estimate of the exposure concentration over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPC is within the ranges of background concentrations, then the receptor is exposed to an average concentration indistinguishable from naturally occurring levels.

Because the arsenic EPCs (4.4 mg/kg for industrial and 2.7 mg/kg for residential) fall within the ranges of arsenic background concentrations (0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4), the EPC is not a true reflection of an incremental cancer risk and indicates that site risk is not substantially different than the risk from background concentrations. Although statistically the arsenic site data set is different from the arsenic background data set(s), this does not necessarily indicate an unacceptable incremental risk, especially when the residential SSL is also within the ranges of background concentrations (residential SSL of 3.9 mg/kg and range of arsenic background concentrations of 0.3 to 9.3 mg/kg for soil and 0.25 mg/kg and 5 mg/kg for Qbt 2,3,4). Therefore, the arsenic does not contribute to the potential risks at the RME concentrations, which overestimates the potential incremental risks.

Without arsenic the total excess cancer risks are reduced but still slightly above the NMED target risk level.

H-4.4.3 Toxicity Assessment

The primary uncertainty associated with the screening values is related to the derivation of toxicity values used in their calculation. Toxicity values (slope factors [SFs] and reference doses [RfDs]) were used to derive the risk-based screening values used in the screening evaluation (NMED 2009, 108070). Uncertainties were identified in six areas with respect to the toxicity values: (1) extrapolation from other animals to humans, (2) extrapolation from one route of exposure to another route of exposure, (3) interindividual variability in the human population, (4) the derivation of RfDs and SFs, (5) the chemical form of the COPC, and (6) the use of surrogate chemicals.

Extrapolation from Animals to Humans: The SFs and RfDs are often determined by extrapolation from animal data to humans, which may result in uncertainties in toxicity values because differences exist between animals and humans in chemical absorption, metabolism, excretion, and toxic responses. Differences in body weight, surface area, and pharmacokinetic relationships between animals and humans are taken into account to address these uncertainties in the dose-response relationship. However, conservatism is usually incorporated in each of these steps, resulting in the overestimation of potential risk.

Extrapolation from One Route of Exposure to Another Route of Exposure: The SFs and RfDs often contain extrapolations from one exposure route to another that result in additional conservatism in the risk calculations. The extrapolation from the oral route to the inhalation and/or the dermal route is used in the derivation of some screening values (NMED 2009, 108070). Differences between the two exposure pathways contribute to the uncertainty in the estimation of potential risk.

Individual Variability in the Human Population: For noncarcinogenic effects, the degree of variability in human physical characteristics is important both in determining the risks that can be expected at low exposures and in defining the no-observed-adverse-effect level (NOAEL). The NOAEL uncertainty factor approach incorporates a 10-fold factor to reflect individual variability within the human population that can contribute to uncertainty in the risk assessment. This factor of 10 is generally considered to result in a conservative estimate of risk to noncarcinogenic COPCs.

Derivation of RfDs and SFs: The SFs and RfDs are often determined by extrapolation from animal data to humans, which may result in uncertainties in toxicity values because differences exist between other animals and humans in chemical absorption, metabolism, excretion, and toxic response. Differences in body weight, surface area, and pharmacokinetic relationships between animals and humans are taken into account to address these uncertainties in the dose-response relationship. However, conservatism is usually incorporated into each of these steps, resulting in the overestimation of potential risk.

Chemical Form of the COPC: COPCs may be bound to the environmental matrix and not available for absorption into the human body. However, the exposure scenarios default to the assumption that the COPCs are bioavailable. This assumption can lead to an overestimation of the total risk.

Use of Surrogate Chemicals: The use of surrogates for chemicals that do not have EPA-approved or provisional toxicity values also contributes to uncertainty in risk assessment. Surrogates were used to provide SSLs for acenaphthylene, benzo[g,h,i]perylene, and isopropyltoluene[4-], based on structural similarity. The overall impact of surrogates on the risk assessment is minimal because these COPCs were detected at low concentrations and the HQs were below 0.1.

H-4.4.4 Additive Approach

For noncarcinogens, the effects of exposure to multiple chemicals are generally unknown and possible interactions could be synergistic or antagonistic, resulting in either an overestimation or underestimation of the potential risk. Additionally, RfDs used in the risk calculations typically are not based on the same endpoints with respect to severity, effects, or target organs. Therefore, the potential for noncarcinogenic effects may be overestimated for individual COPCs that act by different mechanisms and on different target organs but are addressed additively.

H-4.5 Interpretation of Human Health Risk Screening Results

H-4.5.1 AOC 21-002(b)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 2×10^{-7}, based on a comparison with EPA's industrial preliminary remediation goals (PRGs) for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 6×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 9×10^{-8}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.7, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 4×10^{-7}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.2 Consolidated Unit 21-006(c)-99

Industrial Scenario

The total excess cancer risk is approximately 6×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.04, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 7×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.08, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 9×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), benzo(a)pyrene is not related to releases from site operations and is likely from runoff from the road upslope from the outfall. At this consolidated unit, one of two detected concentrations of benzo(a)pyrene exceeded the residential SSL at location 21-600388 in the outfall area. This outfall area received discharge from the brick manhole/trench (structure 21-118). Samples collected from under the brick manhole/trench, which discharged to the outfall, had no detected concentrations of organic chemicals. For the site as a whole, SVOCs were not detected in the majority of samples collected and analyzed for SVOCs (47 of 55). Therefore, PAHs detected at the site are not associated with operational discharges and the slightly elevated cancer risk

from PAHs for the residential scenario is not related to releases from the site. As a result, the total excess cancer risk is overestimated and if PAHs, in particular benzo(a)pyrene, are not included is approximately 9×10^{-6}, which is less than the NMED target risk level. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 11 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 3×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.3 SWMU 21-009

Industrial Scenario

The total excess cancer risk is approximately 4×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.04 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 9×10^{-8}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 4×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 9×10^{-8}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 2×10^{-7}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.4 SWMU 21-012(b)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 9×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-9}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 5×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 7×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.5 SWMU 21-013(c)

Industrial Scenario

The total excess cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 4×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 4×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 3×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 5×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.6 SWMU 21-022(f)

Industrial Scenario

Risk/dose screening assessments for the industrial scenario were not conducted for SWMU 21-022(f) because samples were not collected from the 0-1 ft depth interval.

Construction Worker Scenario

The total excess cancer risk is approximately 4×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 3, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Manganese is the primary contributor to the HI at this site. As discussed in the uncertainty analysis (section H-4.4.2), the manganese EPC and the construction worker SSL are similar to the range of background concentrations and result in an overestimation of the risk. Therefore, if manganese is not included, the HI for the construction worker is 0.1, which is less than the NMED target HI. The total dose is approximately 0.1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 2×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 2×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.7 SWMU 21-022(h)

Industrial Scenario

The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk. The HI is approximately 5, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed over 90% to the HI and exceeds the SSL; the HI without lead is approximately 0.1. The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 8×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 2, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed over 90% to the HI and exceeds the SSL; the HI without lead is approximately 0.1. The total dose is approximately 23 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 14.4 mrem/yr to the total dose. The total dose for the construction worker scenario is equivalent to a total risk of 8×10^{-6}, based on a comparison

with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk. The HI is approximately 4, which is above the NMED target HI of 1.0 (NMED 2009, 108070). Lead contributed over 90% to the HI and exceeds the SSL; the HI without lead is approximately 0.1. The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). Plutonium-239 contributed 16 mrem/yr to the total dose. The total dose for the residential scenario is equivalent to a total risk of 3×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.8 Consolidated Unit 21-023(a)-99

Industrial Scenario

Risk/dose screening assessments for the industrial scenario were not conducted for Consolidated Unit 21-023(a)-99 because samples were not collected from the 0–1-ft depth interval.

Construction Worker Scenario

The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 3×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 5×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene and arsenic are the primary contributors to the cancer risk at this site. Benzo(a)pyrene and arsenic are discussed in the uncertainty analysis (section H-4.4.2). The arsenic EPC is within the ranges of background concentrations and results in an overestimation of the risk. Benzo(a)pyrene is not related to releases from site operations and is likely from runoff from the road, which is upslope of the site. Benzo(a)pyrene concentrations exceeded the residential SSL at locations 21-603010 and 21-601127. These sample locations were under the former septic tank discharge pipe south of an asphalt-paved road. There were no detections of PAHs under this pipe north of the road and south of building 21-003, indicating that the benzo(a)pyrene detected is from the asphalt road and not from building 21-003 operations. For the site as a whole, SVOCs were not detected in the majority of samples collected and analyzed for SVOCs (42 of 71). Therefore, the total excess cancer risk is overestimated and if PAHs, in particular benzo(a)pyrene, and arsenic are not included the cancer risk is approximately 5×10^{-6}, which is less than the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.9 SWMU 21-024(a)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 7×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 6×10^{-9}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 4×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 3×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 8×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.10 SWMU 21-024(b)

Industrial Scenario

The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 8×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 89 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 75 mrem/yr, and to a lesser extent, americium-241, with a dose of 13 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic is the main contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is within the range of background concentrations and results in an overestimation of the risk. Therefore, if arsenic is not included, the cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 98 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The main contributors to the dose are plutonium-239, with a dose of 81 mrem/yr, and to a lesser extent, americium-241, with a dose of 15 mrem/yr. The total dose for the residential scenario is equivalent to a total risk of 1×10^{-4}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.11 SWMU 21-024(d)

Industrial Scenario

The total excess cancer risk is approximately 5×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.07, which is below, the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 4 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic is the main contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is within the range of background concentrations and results in an overestimation of the risk. Therefore, if arsenic is not included, the cancer risk approximately 1×10^{-5}, which is equivalent to the NMED target risk level. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.12 SWMU 21-024(e)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.05, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 3 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.09, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 7×10^{-6}, based on a comparison with EPA's PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 7×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 10 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.13 SWMU 21-024(g)

Industrial Scenario

The total excess cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 9×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 1×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.9 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 4×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 9×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.14 SWMU 21-024(h)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 6×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 7×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 5×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-5} which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.5, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 7×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.15 SWMU 21-024(i)

Industrial Scenario

The total excess cancer risk is approximately 3×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.1, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 3×10^{-4}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 7×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 4×10^{-4}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 26 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). As discussed in the uncertainty analysis (section H-4.4.2), the dose contributed by background concentrations of isotopic thorium is approximately 14 mrem/yr. Because the EPCs of thorium-228 and thorium-230 are less than background, the dose is comparable to background dose. The dose from the remaining COPCs is approximately 12 mrem/yr, which is less than the target limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario including background thorium is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.16 SWMU 21-024(j)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.03, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 7×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 7×10^{-8}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.9, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 3×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 1×10^{-5}, which is equivalent to the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 7×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.17 Consolidated Unit 21-024(l)-99

Industrial Scenario

The total excess cancer risk is approximately 1×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 4×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 4×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 7 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 3×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Benzo(a)pyrene is the primary contributor to the cancer risk at this site. The HI is approximately 0.8, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 8 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 1×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.18 SWMU 21-024(o)

Industrial Scenario

The total excess cancer risk is approximately 2×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.06, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 0.6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 6×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.3, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 4×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 6×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 2 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 8×10^{-6}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.19 Consolidated Unit 21-026(a)-99

Industrial Scenario

The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic is a contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is within the ranges of background concentrations and results in an overestimation of the risk. Without arsenic the total excess cancer risk is reduced but still slightly above the NMED target risk level. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 6 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-5}, which is slightly above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 13 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 7×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 3×10^{-5}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). Arsenic is a contributor to the cancer risk at this site. As discussed in the uncertainty analysis (section H-4.4.2), the arsenic EPC is within the ranges of background concentrations and results in an overestimation of the risk. Without arsenic the total excess cancer risk is reduced but still slightly above the NMED target risk level. The HI is approximately 0.6, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 15 mrem/yr, which is equivalent to the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.20 SWMU 21-027(a)

Industrial Scenario

The total excess cancer risk is approximately 1×10^{-4}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor

to the risk. The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 12 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 3×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 6, which is above the NMED target HI of 1.0 (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration was the greatest contributor to the HI. The total dose is approximately 46 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 26 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 13 mrem/yr. The total dose for the construction worker scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 4×10^{-4}, which is above the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The TCDD[2,3,7,8-] equivalent concentration is the greatest contributor to the total risk. The HI is approximately 1, which is equivalent to the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 51 mrem/yr, which is above the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The greatest contributor to the total dose is plutonium-239 with a dose of 28 mrem/yr, and to a lesser extent, plutonium-238 with a dose of 14 mrem/yr. The total dose for the residential scenario is equivalent to a total risk of 6×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-4.5.21 SWMU 21-027(c)

Industrial Scenario

The total excess cancer risk is approximately 6×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.07, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is 1 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the industrial scenario is equivalent to a total risk of 5×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Construction Worker Scenario

The total excess cancer risk is approximately 2×10^{-7}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.2, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 5 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the construction worker scenario is equivalent to a total risk of 4×10^{-6}, based on a comparison with EPA's industrial PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

Residential Scenario

The total excess cancer risk is approximately 8×10^{-6}, which is below the NMED target risk level of 1×10^{-5} (NMED 2009, 108070). The HI is approximately 0.4, which is below the NMED target HI of 1.0 (NMED 2009, 108070). The total dose is approximately 14 mrem/yr, which is below the DOE target dose limit of 15 mrem/yr (DOE 2000, 067489). The total dose for the residential scenario is equivalent to a total risk of 2×10^{-5}, based on a comparison with EPA's residential PRGs for radionuclides (http://epa-prgs.ornl.gov/radionuclides/download/rad_master_prg_table_pci.xls).

H-5.0 ECOLOGICAL RISK SCREENING ASSESSMENTS

The approach used to evaluate ecological risk is described in "Screening Level Ecological Risk Assessment Methods, Revision 2" (LANL 2004, 087630). The assessment consists of four parts: a scoping evaluation, a screening evaluation, an uncertainty analysis, and an interpretation of the results.

H-5.1 Scoping Evaluation

The scoping evaluation establishes the breadth and focus of the screening evaluation. The ecological scoping checklist (Attachment H-2) is a useful tool for organizing existing ecological information. The information in the scoping checklists was used to determine whether ecological receptors might be affected, to identify the types of receptors that might be present, and to develop the ecological conceptual site model for each site (Attachment H-2). Most of the area on the mesa top is developed and typically provides minimal potential habitat for ecological receptors, with the exception of SWMU 21-013(c) and Consolidated Unit 21-026(a)-99. The quality of the habitat at SWMU 21-013(c) and Consolidated Unit 21-026(a)-99 varies and, in some cases, includes native grasses, forbes, and trees that are suitable habitat for ecological receptors. Numerous sites that originate on the mesa top include outfalls that discharge into DP or Los Alamos Canyons. In most cases, the outfalls into DP and Los Alamos Canyons represent undisturbed and native habitat for ecological receptors.

The scoping evaluation indicated that terrestrial receptors were appropriate for evaluating the concentrations of COPCs in soil and tuff. Aquatic receptors were not evaluated because no aquatic communities and no aquatic habitat or perennial source of water exist at any of the sites within the aggregate area or in DP or Los Alamos Canyons below the sites. The depth of the regional aquifer (greater than 1000 ft bgs) and the semiarid climate limits transport to groundwater. The potential exposure pathways for terrestrial receptors in soil and tuff are root uptake, inhalation, soil ingestion, dermal contact, external irradiation, and food web transport (Attachment H-2). The weathering of tuff is the only viable natural process that may result in the exposure of receptors to contaminants in tuff. Because of the slow rate of weathering expected for tuff, exposure in tuff is negligible, although it is included in the assessment. Plant exposure in tuff is largely limited to fractures near the surface, which does not produce sufficient biomass to support an herbivore population. Consequently, the contaminants in tuff are unavailable to receptors.

The potential risk was evaluated in the risk-screening assessments for the following ecological receptors representing several trophic levels:

- a plant,
- soil-dwelling invertebrates (represented by the earthworm),
- the deer mouse (mammalian omnivore),

- the montane shrew (mammalian insectivore),
- the desert cottontail (mammalian herbivore),
- the red fox (mammalian carnivore),
- the American robin (avian insectivore, avian omnivore, and avian herbivore), and
- the American kestrel (avian intermediate carnivore and avian carnivore [surrogate for threatened and endangered (T&E) species (primarily the Mexican spotted owl)]).

The rationale for these receptors is presented in "Screening Level Ecological Risk Assessment Methods, Revision 2" (LANL 2004, 087630). The Mexican spotted owl is the only T&E species known to frequent the Laboratory area. The owl's primary habitat is densely forested canyons, and it has not been observed roosting in DP Canyon and Los Alamos Canyon or on DP Mesa. However, the owl may use the canyons and surrounding areas to forage.

H-5.2 Assessment Endpoints

An assessment endpoint is an explicit expression of the environmental value to be protected. The endpoints are ecologically relevant and help sustain the natural structure, function, and biodiversity of an ecosystem or its components (EPA 1998, 062809). In a screening-level ecological evaluation, receptors represent the populations and/or communities and assessment endpoints are any adverse effects on the chosen ecological receptors. The purpose of the ecological evaluation is to protect populations and communities of biota rather than individual organisms, except for listed or candidate T&E species and treaty-protected species, when individuals must be protected (EPA 1999, 070086) because populations of protected species tend to be small and the loss of an individual adversely affects the species as a whole (EPA 1997, 059370).

In accordance with this guidance, the Laboratory has developed generic assessment endpoints (LANL 1999, 064137) to ensure that values at all levels of ecological organization are considered in the ecological screening process. These general assessment endpoints can be measured using impacts on reproduction, growth, and survival to represent categories of effects that may adversely impact populations. In addition, specific receptor species were chosen to represent each functional group. The receptor species were chosen because of their presence at the site, their sensitivity to the COPCs, and their potential for exposure to those COPCs. These categories of effects and the chosen receptor species were used to select the types of effects seen in toxicity studies considered in the development of the toxicity reference values (TRVs). Toxicity studies used in the development of TRVs included only studies in which the adverse effect evaluated affected reproduction, survival, and/or growth.

The selection of receptors and assessment endpoints is designed to be protective of both the representative species used as screening receptors and the other species within their feeding guilds and the overall food web for the terrestrial and aquatic ecosystems. Focusing the assessment endpoints on the general characteristics of species that affect populations (rather than the biochemical and behavioral changes that may affect only the studied species) also ensures the applicability to the ecosystem of concern. It is assumed, for the purposes of ecological screening that nonradionuclides have common toxicological effects and that HQs may be added.

H-5.3 Screening Evaluation

The ecological risk-screening assessments identify chemicals of potential ecological concern (COPECs) and are based on the comparison of EPCs (UCLs or maximum detected concentrations) (LANL 2004,

087630) to ecological screening levels (ESLs) in accordance with Laboratory guidance (LANL 2004, 087630).

Ecological risk-screening assessments were not conducted for SWMUs 21-022(f) and 21-022(j) because samples were collected below 5 ft bgs and, therefore, there are no complete pathways for exposure to ecological receptors.

The ESLs were obtained from the ECORISK Database, Version 2.4 (LANL 2009, 107524) and are presented in Table H-5.3-1. The ESLs are based on similar species and are derived from experimentally determined NOAELs, lowest observed-adverse-effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and TRVs, is presented in the ECORISK Database, Version 2.4 (LANL 2009, 107524). The HQ calculated for each COPEC and screening receptor is the ratio of the EPC to the ESLs for each ecological receptor. The higher the contaminant levels relative to the ESLs, the higher the potential risk to receptors; conversely, the higher the ESLs relative to the contaminant levels, the lower the potential risk to receptors. The analysis begins with a comparison of the minimum ESL for each COPC with the EPC. HQs greater than 0.3 are used to identify COPECs (LANL 2004, 087630). Individual HQs for a receptor are summed to derive an HI; an HI greater than 1.0 is an indication that further assessment may be needed to be sure that exposure to multiple COPECs at a site will not lead to potential adverse impacts to a given receptor population. COPCs without ESLs are retained as COPECs and evaluated further in the uncertainty section. The HQ and HI analysis is a conservative indication of potential adverse effects and is designed to minimize the potential of overlooking possible COPECs at the site.

H-5.3.1 AOC 21-002(b)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-2. The results of the minimum ESL comparisons are presented in Table H-5.3-3. Arsenic, barium, cadmium, chromium, cyanide (total), lead, selenium, zinc, Aroclor-1254, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-4. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.2 Consolidated Unit 21-006(c)-99

The dioxin and furan congener TEF calculations are presented in Table H-5.3-5. The results of the minimum ESL comparisons are presented in Table H-5.3-6. Antimony, barium, chromium, copper, cyanide, lead, mercury, nickel, selenium, zinc, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, TCDD[2,3,7,8-] equivalent, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-7. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.3 SWMU 21-009

The dioxin and furan congener TEF calculations are presented in Table H-5.3-8. The results of the minimum ESL comparisons are presented in Table H-5.3-9. Barium, chromium, cyanide (total), lead, selenium, zinc, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-10. The HI analysis indicates that all of the receptors, except the American kestrel (top carnivore) and the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.4 SWMU 21-012(b)

The results of the minimum ESL comparisons are presented in Table H-5.3-11. Antimony, arsenic, barium, cadmium, chromium, copper, cyanide, lead, lithium, mercury, molybdenum, nickel, selenium, vanadium, zinc, and benzoic acid are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Calcium, iron, nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-12. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.5 SWMU 21-013(c)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-13. The results of the minimum ESL comparisons are presented in Table H-5.3-14. Arsenic, barium, cadmium, chromium, lead, mercury, nickel, selenium, thallium, vanadium, benzoic acid, bis(2-ethylhexyl)phthalate, and

TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-15. The HI analysis indicates that all of the receptors have HIs greater than 1, except for the red fox and cottontail. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.6 SWMU 21-022(h)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-16. The results of the minimum ESL comparisons are presented in Table H-5.3-17. Antimony, barium, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, zinc, acenaphthene, Aroclor-1254, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, di-n-butylphthalate, fluoranthene, naphthalene, phenanthrene, pyrene, TCDD[2,3,7,8-] equivalent, plutonium-238, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, isopropyltoluene[4-] and carbazole do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-18. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.7 Consolidated Unit 21-023(a)-99

The dioxin and furan congener TEF calculations are presented in Table H-5.3-19. The results of the minimum ESL comparisons are presented in Table H-5.3-20. Antimony, arsenic, barium, chromium, copper, lead, manganese, mercury, selenium, vanadium, acenaphthene, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, di-n-butylphthalate, fluoranthene, naphthalene, pyrene, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Calcium, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-21. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.8 SWMU 21-024(a)

The results of the minimum ESL comparisons are presented in Table H-5.3-22. Barium, chromium, copper, lead, mercury, nickel, selenium, vanadium, zinc, benzoic acid, bis(2-ethylhexyl)phthalate, and chloroaniline[4-] are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-23. The HI analysis indicates that all of the receptors, except the red fox and cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.9 SWMU 21-024(b)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-24. The results of the minimum ESL comparisons are presented in Table H-5.3-25. Arsenic, barium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, zinc, Aroclor-1254, Aroclor-1260, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, TCDD[2,3,7,8-] equivalent, americium-241 and plutonium-239 are retained as COPECs because the HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-26. The HI analysis indicates that all of the receptors, except the cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.10 SWMU 21-024(d)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-27. The results of the minimum ESL comparisons are presented in Table H-5.3-28. Arsenic, barium, chromium, copper, cyanide, lead, manganese, mercury, nickel, selenium, silver, zinc, Aroclor-1242, Aroclor-1254, Aroclor-1260, benzoic acid, bis(2-ethylhexyl)phthalate, dichlorobenzene[1,4-], di-n-butylphthalate, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-29. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.11 SWMU 21-024(e)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-30. The results of the minimum ESL comparisons are presented in Table H-5.3-31. Antimony, barium, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, selenium, uranium, zinc, bis(2-ethylhexyl)phthalate, chloroaniline[4-], di-n-butylphthalate, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-32. The HI analysis indicates that all of the receptors, except the red fox and cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.12 SWMU 21-024(g)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-33. The results of the minimum ESL comparisons are presented in Table H-5.3-34. Arsenic, barium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, zinc, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Iron, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-35. The HI analysis indicates that all of the receptors, except the cottontail and red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.13 SWMU 21-024(h)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-36. The results of the minimum ESL comparisons are presented in Table H-5.3-37. Antimony, arsenic, barium, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, vanadium, zinc, benzoic acid, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-38. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.14 SWMU 21-024(i)

The results of the minimum ESL comparisons are presented in Table H-5.3-39. Antimony, arsenic, barium, chromium, copper, lead, lithium, mercury, selenium, strontium, zinc, Aroclor-1254, Aroclor-1260, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Calcium, perchlorate, isopropylbenzene, trimethylbenzene[1,2,4-], bromomethane, and trichlorofluoromethane do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-40. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.15 SWMU 21-024(j)

The results of the minimum ESL comparisons are presented in Table H-5.3-41. Arsenic, barium, chromium, copper, lead, manganese, nickel, selenium, zinc, Aroclor-1254, Aroclor-1260, and bis(2-ethylhexyl)phthalate are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-42. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.16 Consolidated Unit 21-024(l)-99

The results of the minimum ESL comparisons are presented in Table H-5.3-43. Barium, cadmium, chromium, cobalt, copper, lead, lithium, mercury, selenium, zinc, acenaphthene, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, chrysene, phenanthrene, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Nitrate, perchlorate, xylene[1,3-]+[1,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was

eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-44. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.17 SWMU 21-024(o)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-45. The results of the minimum ESL comparisons are presented in Table H-5.3-46. Chromium, cyanide, lead, selenium, zinc, benzoic acid, bis(2-ethylhexyl)phthalate, hexachlorobenzene, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-47. The HI analysis indicates that all of the receptors, except the cottontail and red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.18 Consolidated Unit 21-026(a)-99

The dioxin and furan congener TEF calculations are presented in Table H-5.3-48. The results of the minimum ESL comparisons are presented in Table H-5.3-49. Antimony, arsenic, barium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, selenium, silver, zinc, acenaphthene, benzoic acid, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, phenanthrene, and plutonium-239/240 are retained as COPECs because the HQs were greater than 0.3.

Calcium, nitrate, perchlorate, dimethylphenol[2,4-], ethylbenzene, and trimethylbenzene[1,2,4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

Potential ecological risks associated with aluminum are based on soil pH. Aluminum is retained only in soil with a pH lower than 5.5, in accordance with EPA guidance (EPA 2003, 085645). Aluminum was eliminated as a COPEC and was not evaluated further because the mean soil pH for the DP Site Aggregate Area is 7.9.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-50. The HI analysis indicates that all of the receptors, except the red fox, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.19 SWMU 21-027(a)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-51. The results of the minimum ESL comparisons are presented in Table H-5.3-52. Antimony, arsenic, barium, cadmium, chromium, copper, lead, lithium, mercury, nickel, selenium, vanadium, zinc, Aroclor-1254, bis(2-

ethylhexyl)phthalate, di-n-butylphthalate, TCDD[2,3,7,8-] equivalent, americium-241, plutonium-238, plutonium-239/240, and uranium-234 are retained as COPECs because the HQs were greater than 0.3.

Nitrate and perchlorate do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-53. The HI analysis indicates that all of the receptors have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.3.20 SWMU 21-027(c)

The dioxin and furan congener TEF calculations are presented in Table H-5.3-54. The results of the minimum ESL comparisons are presented in Table H-5.3-55. Barium, chromium, copper, lead, mercury, selenium, zinc, acenaphthene, benzoic acid, bis(2-ethylhexyl)phthalate, di-n-butylphthalate, and TCDD[2,3,7,8-] equivalent are retained as COPECs because the HQs were greater than 0.3. No radionuclide HQs were greater than 0.3.

Nitrate, perchlorate, and isopropyltoluene[4-] do not have ESLs, are retained as a COPECs, and are discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table H-5.3-56. The HI analysis indicates that all of the receptors, except the cottontail, have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

H-5.4 Uncertainty Analysis

The uncertainty analysis describes the key sources of uncertainty related to the screening evaluations. This analysis can result in either adding or removing chemicals from the list of COPECs. This section contains a qualitative uncertainty analysis of the issues relevant to evaluating the potential ecological risk at each site.

H-5.4.1 Chemical Form

The assumptions used in the ESL derivations are conservative and not necessarily representative of actual conditions. These assumptions include maximum chemical bioavailability, maximum receptor ingestion rates, minimum bodyweight, and additive effects of multiple COPECs. These factors tend to result in conservative ESL estimates, which may lead to an overestimation of the potential risk. The assumption of additive effects for multiple COPECs may result in an over- or underestimation of the potential risk to receptors.

The chemical form of the individual COPCs was not determined as part of the investigation. Toxicological data are typically based on the most toxic and bioavailable chemical species, which are not typically found in the environment. Inorganic, radionuclide, and organic COPECs are generally not 100% bioavailable to receptors in the natural environment from interference from other natural processes, such as the adsorption of chemical constituents to matrix surfaces (e.g., soil) or rapid oxidation or reduction changes that render harmful chemical forms unavailable to biotic processes. The ESLs were calculated to ensure a conservative indication of potential risk (LANL 2004, 087630) and the values are biased toward overestimating the potential risk to receptors.

H-5.4.2 Exposure Assumptions

The EPCs used in the calculations of HQs are the UCLs or the maximum detected concentration in the soil/fill/tuff to a depth of 5 ft bgs and are conservative estimates of exposure to each COPEC. At SWMUs 21-022(f) and 21-022(j), samples were collected only at depths below 5 ft bgs, and therefore, there are no complete exposure pathways to ecological receptors. The sampling efforts focused on areas of suspected contamination, and receptors were assumed to ingest 100% of their food and spend 100% of their time at the site. These assumptions regarding the exposure for terrestrial receptors in the DP Site Aggregate Area are likely to result in an overestimation of potential ecological exposure and risk.

H-5.4.3 Toxicity Values

The HQs were calculated using ESLs, which are based on NOAELs as threshold effect levels; actual risk for a given COPEC/receptor combination occurs at a higher level, somewhere between the NOAEL-based threshold and the threshold based on the LOAEL. The use of NOAELs leads to an overestimation of potential risk to ecological receptors. ESLs are based on laboratory studies requiring extrapolation to wildlife receptors. Laboratory studies are typically based on “artificial” and maintained populations with genetically similar individuals and are limited to single chemical exposures in isolated and controlled conditions using a single exposure pathway. Wild species are concomitantly exposed to a variety of chemical and environmental stressors, potentially rendering them more susceptible to chemical stress. On the other hand, wild populations are probably more genetically diverse than laboratory populations, making wild populations, as a whole, less sensitive to chemical exposure than laboratory populations. The uncertainties associated with the ESLs tend to lead to an overestimation of potential risk.

H-5.4.4 Comparison with Background Concentrations

Although concentrations of inorganic chemicals were detected above background, the 95% UCLs for some inorganic chemicals were similar to the ranges of background concentrations, indicating no potential risk from exposure across the site. This relationship is presented in Tables H-5.4-1 to H-5.4-20. The 95% UCL is intended to represent the average concentration of a contaminant and the RME over time for a receptor at a site. The RME is the maximum exposure that is reasonably expected to occur at a site and represents the average concentration that is contacted over the exposure period. Although the RME concentration does not reflect the maximum concentration that could be contacted at any one time, it is regarded as a reasonable estimate of the concentration that could be contacted over time. This is because an assumption of long-term contact with the maximum concentration is generally not reasonable. If the EPCs are similar to the ranges of background concentrations, then the receptor is exposed to an average concentration, which is comparable to naturally occurring levels across the site. Whether some concentrations are elevated and reflect site releases is incorporated into the UCL calculations. If the EPC is similar to the ranges of background concentrations, the RME across the site is indistinguishable from background. For example, if the chromium EPC is 15 mg/kg and the ranges of background concentrations are 1.9 to 36.5 mg/kg for soil and 0.25 to 13 mg/kg for Qbt 2,3,4, the EPC is not a true reflection of potential toxicity. It is also an indication that site concentrations are not substantially different from background concentrations. Therefore, a conclusion that inorganic chemicals with EPCs similar to the ranges of background concentrations are contributing risk overestimates the potential risk and does not reflect actual exposure and risk.

H-5.4.4.1 AOC 21-002(b)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: arsenic, barium, cadmium, chromium, cyanide (Table H-5.4-1). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead, selenium, and zinc are retained as COPECs for further evaluation.

H-5.4.4.2 Consolidated Unit 21-006(c)-99

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, barium, chromium, copper, cyanide, lead, mercury, nickel, and selenium (Table H-5.4-2). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Zinc is retained as a COPEC for further evaluation.

H-5.4.4.3 SWMU 21-009

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: barium, chromium, cyanide, lead, and zinc (Table H-5.4-3). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Selenium is retained as a COPEC for further evaluation.

H-5.4.4.4 SWMU 21-012(b)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, arsenic, barium, cadmium, chromium, cyanide, lead, nickel, and selenium, (Table H-5.4-4). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, mercury, and zinc are retained as COPECs for further evaluation.

H-5.4.4.5 SWMU 21-013(c)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: arsenic, barium, cadmium, chromium, lead, nickel, and vanadium (Table H-5.4-5). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Mercury and selenium are retained as COPECs for further evaluation.

H-5.4.4.6 SWMU 21-022(h)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, barium, cadmium, calcium, cyanide, iron, nickel, and selenium (Table H-5.4-6). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Chromium, copper, lead, mercury, silver, and zinc are retained as COPECs for further evaluation.

H-5.4.4.7 Consolidated Unit 21-023(a)-99

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, arsenic, barium, calcium, chromium, copper, manganese, and vanadium (Table H-5.4-7). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead, mercury, and selenium are retained as COPECs for further evaluation.

H-5.4.4.8 SWMU 21-024(a)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: barium, chromium, lead, nickel, selenium, and vanadium (Table H-5.4-8). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations and therefore exposure of the receptors to these inorganic chemicals is similar to background. Copper and mercury are retained as COPECs for further evaluation.

H-5.4.4.9 SWMU 21-024(b)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: arsenic, barium, chromium, cyanide, lead, nickel, selenium, and zinc (Table H-5.4-9). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations and therefore exposure of the receptors to these inorganic chemicals is similar to background. Copper, mercury, and silver are retained as COPECs for further evaluation.

H-5.4.4.10 SWMU 21-024(d)

The EPCs of the following inorganic chemicals are similar to the ranges of background soil or tuff concentrations: arsenic, barium, chromium, cyanide, manganese, nickel, and zinc (Table H-5.4-10). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, lead, mercury, selenium, silver, and uranium are retained as COPECs for further evaluation.

H-5.4.4.11 SWMU 21-024(e)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, barium, cadmium, chromium, selenium, and zinc (Table H-5.4-11). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, cyanide, lead, mercury, and uranium are retained as COPECs for further evaluation.

H-5.4.4.12 SWMU 21-024(g)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, nickel, selenium, and zinc (Table H-5.4-12). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Mercury is retained as a COPEC for further evaluation.

H-5.4.4.13 SWMU 21-024(h)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, arsenic, barium, cadmium, chromium, cyanide, nickel, selenium, and vanadium (Table H-5.4-13). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Copper, lead, mercury, silver, and zinc are retained as COPECs for further evaluation.

H-5.4.4.14 SWMU 21-024(i)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: arsenic, barium, calcium, chromium, copper, and selenium (Table H-5.4-14). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Antimony, lead, mercury, and zinc are retained as COPECs for further evaluation.

H-5.4.4.15 SWMU 21-024(j)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: arsenic, barium, chromium, copper, lead, manganese, and nickel (Table H-5.4-15). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Selenium and zinc are retained as COPECs for further evaluation.

H-5.4.4.16 Consolidated Unit 21-024(l)-99

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: barium, cadmium, chromium, cobalt, copper, mercury, and selenium (Table H-5.4-16). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead and zinc are retained as COPECs for further evaluation.

H-5.4.4.17 SWMU 21-024(o)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: chromium, lead, and selenium (Table H-5.4-17). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Cyanide and zinc are retained as COPECs for further evaluation.

H-5.4.4.18 Consolidated Unit 21-026(a)-99

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, arsenic, barium, cadmium, calcium, nickel, selenium, and vanadium (Table H-5.4-18). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations and therefore exposure of the receptors to these inorganic chemicals is similar to background. Chromium, copper, cyanide, lead, mercury, silver, and zinc are retained as COPECs for further evaluation.

H-5.4.4.19 SWMU 21-027(a)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: antimony, arsenic, barium, cadmium, lead, nickel, selenium, and vanadium (Table H-5.4-19). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the ranges of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Chromium, copper, mercury, and zinc are retained as COPECs for further evaluation.

H-5.4.4.20 SWMU 21-027(c)

The EPCs of the following inorganic chemicals are similar to the range of background soil or tuff concentrations: barium, chromium, copper, mercury, selenium, and zinc (Table H-5.4-20). These inorganic chemicals are not retained as COPECs because their EPCs are similar to the range of background concentrations, and therefore, exposure of the receptors to these inorganic chemicals is similar to background. Lead is retained as a COPEC for further evaluation.

H-5.4.5 Area Use Factors

Area use factors (AUFs) are used to account for the amount of time that a receptor is likely to spend within the contaminated areas based on the size of the receptor's home range (HR). The AUF for an individual organism was developed by dividing the size of the site by the receptor's HR. Because T&E species must be assessed on an individual basis (EPA 1999, 070086), the AUF is used for the Mexican spotted owl. The kestrel (top carnivore) is used as the surrogate receptor for the Mexican spotted owl. The unadjusted HI for the kestrel (top carnivore) is above 1.0 for all but SWMU 21-009. The HR for the Mexican spotted owl is 366 ha and the site areas are presented in Tables H-5.4-21 to H-5.4-40. Application of the Mexican spotted owl AUFs to the HQs for the kestrel (top carnivore) results in adjusted HIs ranging from 0.0000001 to 0.007. Therefore, there are no potential adverse impacts to the Mexican spotted owl at the DP Site Aggregate Area sites because the adjusted HIs are less than 1.0.

H-5.4.6 Population Area Use Factors

EPA guidance is to manage the ecological risk to populations rather than to individuals, with the exception of T&E species (EPA 1999, 070086). One approach to address the potential effects on populations is to estimate the spatial extent of the area inhabited by the local population that overlaps with the contaminated area. The population area for a receptor is based on the individual receptor HR and its dispersal distance (Bowman et al. 2002, 073475). Bowman et al. estimates that the median dispersal distance for mammals is 7 times the linear dimension of the HR, which is equivalent to the square root of the HR area. If only the dispersal distances for the mammals with HRs within the range of the screening receptors are used (Bowman et al. 2002, 073475), the median dispersal distance becomes 3.6 times the square root of the HR ($R^2 = 0.91$). If it is assumed that the receptors can disperse the same distance in any direction, the population area is circular and the dispersal distance is the radius of the circle. Therefore, the population area can be derived by $\pi(3.6\sqrt{HR})^2$ or approximately 40 HR.

Population area use factors (PAUFs) are estimated by dividing the site area by the estimated population area of each receptor population (Tables H-5.4-21 to H-5.4-40). The HQs are recalculated minus the COPECs eliminated based on similarity to background (section H-5.5.4) and adjusted by multiplying by the PAUFs. If the PAUF is greater than 1, the HQ is not adjusted. The HQs for the plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs. The adjusted HQs are summed for each receptor to calculate the adjusted HIs (Tables H-5.4-41 to H-5.4-60).

H-5.4.7 LOAEL Analysis

Several sites have adjusted HIs greater than 1.0 for one or more receptors. To address these HIs and reduce the associated uncertainty, a LOAEL analysis was conducted using ESLs calculated based on a LOAEL rather than a NOAEL. The LOAEL-based ESLs were calculated based on toxicity information in the ECORISK Database, Version 2.4 and are presented in Table H-5.4-61, along with the basis for each LOAEL used in the ESL calculations. The analysis addresses some of the uncertainties and conservativeness of the ESLs used in the initial screening assessments. The HI analyses were conducted using the LOAEL-based ESLs. The HQs and HIs calculated for this subset of receptors and COPECs were also adjusted using the PAUFs (Tables H-5.4-21 to H-5.4-40) of the wildlife receptors HIs exceeded 1.0 using the LOAEL-based ESLs.

H-5.4.8 Site Discussions

H-5.4.8.1 AOC 21-002(b)

The adjusted HQs and HIs for AOC 21-002(b) are presented in Table H-5.4-41. The adjusted HIs are below 1, except for the earthworm and plant. The earthworm and plant HIs are primarily from selenium.

The LOAEL analysis results in HIs less than 1 for the earthworm and 2 for the plant (Table H-5.4-62). In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

H-5.4.8.2 Consolidated Unit 21-006(c)-99

The adjusted HQs and HIs for Consolidated Unit 21-006(c)-99 are presented in Table H-5.4-42. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore and omnivore), earthworm, and plant. The HIs for the American robin are primarily from bis(2-ethylhexyl)phthalate, which was detected in 2 of 21 samples. The HIs for the earthworm and plant are primarily from zinc.

The LOAEL analysis results in HIs less than 1 for the earthworm and plant (Table H-5.4-63). In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

The adjusted LOAEL HIs for the American robin (insectivore and omnivore) are less than 1 (Table H-5.4-64). Therefore, bis(2-ethylhexyl)phthalate is not retained as a COPEC for the American robin, and the HIs do not indicate potential risk to these receptors .

H-5.4.8.3 SWMU 21-009

The adjusted HQs and HIs for SWMU 21-009 are presented in Table H-5.4-43. The adjusted HIs are below 1, except for the earthworm and plant. The HIs for the earthworm and plant are primarily from selenium.

The LOAEL analysis results in HIs of less than 1 for the earthworm and 3 for the plant (Table H-5.4-65). In addition, field observations made during the site visit found minimal vegetation at the site as a result of physical disturbances of the area (Attachment H-2). Because the plant community does not appear to be affected by COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind, and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

H-5.4.8.4 SWMU 21-012(b)

The adjusted HQs and HIs for SWMU 21-012(b) are presented in Table H-5.4-44. The adjusted HIs are below or equivalent to 1, except for the earthworm and plant. The HI for the earthworm is primarily from mercury and the HI for the plant is primarily from copper and lithium.

Lithium was detected in all 53 samples with concentrations ranging from 2.5 mg/kg to 27.5 mg/kg; and the EPC is 12 mg/kg. Although there is no background data for lithium, it is naturally occurring and the EPC, if not the detected concentrations, reflects natural concentrations.

The LOAEL analysis results in HIs of 3 for the earthworm and equivalent to 1 for the plant (Table H-5.4-66). In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

H-5.4.8.5 SWMU 21-013(c)

The adjusted HQs and HIs for SWMU 21-013(c) are presented in Table H-5.4-45. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore and omnivore), deer mouse, earthworm, and plant. The HIs for the American robin (insectivore and omnivore) are primarily from bis(2-ethylhexyl)phthalate and mercury. The HIs for the deer mouse and plant are primarily from selenium. The HI for the earthworm is primarily from mercury and selenium.

The LOAEL analysis results in HIs less than 1 for the earthworm and plant (Table H-5.4-67). Therefore, there is no potential risk to these receptors.

The adjusted LOAEL HIs for the American robin (insectivore and omnivore) and the deer mouse are less than 1 (Table H-5.4-68). Bis(2-ethylhexyl)phthalate and mercury are not retained as COPECs for the American robin and selenium and TCDD[2,3,7,8-] equivalent are not retained as COPECs for the deer mouse. Therefore, the HIs do not indicate potential risk to these receptors.

H-5.4.8.6 SWMU 21-022(h)

The adjusted HQs and HIs for SWMU 21-022(h) are presented in Table H-5.4-46. The adjusted HIs are below or equivalent to 1.0, except for the earthworm and plant. The HI for the earthworm is primarily from chromium, copper, mercury, and zinc. The HI for the plant is from chromium and, to a lesser degree, copper, lead, molybdenum, zinc, acenaphthene, and naphthalene.

The LOAEL analysis results in HIs of 8 for the earthworm and 13 for the plant (Table H-5.4-69). The chromium NOAEL-based and LOAEL-based ESLs (0.34 mg/kg and 23 mg/kg, respectively, for the

earthworm and 0.35 mg/kg and 12 mg/kg, respectively, for the plant) are less than the maximum chromium soil background concentration (36.5 mg/kg) and overestimate potential risk to the earthworm and plant. The ratio of the maximum chromium soil background concentration to the EPC is approximately 3. Molybdenum was detected in all 28 samples and is naturally occurring, but has no established background concentration. The EPC (9.8 mg/kg) and the range of detected concentrations (0.15 mg/kg to 21.3 mg/kg) are likely naturally occurring. Acenaphthene had only two concentrations detected above the ESL, although naphthalene had only one concentration above the ESL. The maximum detected concentration of naphthalene was the EPC. The acenaphthene and naphthalene results overestimate the potential risk to the plant.

In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

H-5.4.8.7 Consolidated Unit 21-023(a)-99

The adjusted HQs and HIs for Consolidated Unit 21-023(a)-99 are presented in Table H-5.4-47. The adjusted HIs are below or equivalent to 1, except for the earthworm and plant. The HI for the earthworm is primarily from selenium and mercury. The HI for plant is primarily from lead, selenium, acenaphthene, and naphthalene.

Acenaphthene was detected in 3 of 36 samples with 2 detected concentrations exceeding the ESL, although naphthalene was detected in 2 of 36 samples with 1 detected concentration exceeding the ESL; the EPCs for both COPECs are the maximum detected concentrations. The acenaphthene and naphthalene results overestimate the potential risk to the plant.

The LOAEL analysis results in HIs of 2 for the earthworm and 3 for the plant (Table H-5.4-70). In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

H-5.4.8.8 SWMU 21-024(a)

The adjusted HQs and HIs for SWMU 21-024(a) are presented in Table H-5.4-48. The adjusted HIs are below 1, except for the earthworm. The HI for the earthworm is primarily from mercury.

The LOAEL analysis results in an HI less than 1 for the earthworm (Table H-5.4-71). Therefore, there is no potential risk to the earthworm.

H-5.4.8.9 SWMU 21-024(b)

The adjusted HQs and HIs for SWMU 21-024(b) are presented in Table H-5.4-49. The adjusted HIs are below or equivalent to 1, except for the earthworm. The HI for the earthworm is primarily from mercury, plutonium-239, and americium-241.

The LOAEL analysis results in an HI of 5 for the earthworm (Table H-5.4-72). Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HI is not consistent with field observations and does not indicate potential risk to the earthworm.

H-5.4.8.10 SWMU 21-024(d)

The adjusted HQs and HIs for SWMU 21-024(d) are presented in Table H-5.4-50. The adjusted HIs are below or equivalent to 1, except for the deer mouse, earthworm, and plant. The HI for the deer mouse is from the TCDD[2,3,7,8-] equivalent concentration. The HI for the earthworm is primarily from mercury, selenium, and copper. The HI for plant is primarily from selenium and copper.

The LOAEL analysis results in HIs equivalent to or less than 1 for the earthworm and plant (Table H-5.4-73). Therefore, there are no potential risks to these receptors.

The adjusted LOAEL HI for the deer mouse is less than 1 (Table H-5.4-74). TCDD[2,3,7,8-] equivalent is not retained as a COPEC for the deer mouse. Therefore, the HI does not indicate potential risk to the deer mouse.

H-5.4.8.11 SWMU 21-024(e)

The adjusted HQs and HIs for SWMU 21-024(e) are presented in Table H-5.4-51. The adjusted HIs are below or equivalent to 1, except for the earthworm and plant. The HI for the earthworm is primarily from copper, mercury, and plutonium-239. The HI for the plant is primarily from several metals and chloroaniline[4-], all with HQs less than 1.

Molybdenum was detected in 32 of 34 samples with concentrations ranging from 0.25 mg/kg to 2.2 mg/kg; the EPC is 0.87 mg/kg. Although there is no background data for molybdenum, it is naturally occurring and the EPC and the detected concentrations reflect natural concentrations. Chloroaniline[4-] was detected in two samples with the maximum detected concentration being the EPC, which overestimates potential risk to the plant.

The LOAEL analysis results in HIs equivalent to or less than 1 for the earthworm and plant (Table H-5.4-75). Therefore, there are no potential risks to these receptors.

H-5.4.8.12 SWMU 21-024(g)

The adjusted HQs and HIs for SWMU 21-024(g) are presented in Table H-5.4-52. The adjusted HIs are below or equivalent to 1, except for the earthworm. The HI for the earthworm is from mercury.

The LOAEL analysis results in an HI less than 1 for the earthworm (Table H-5.4-76). Therefore, there is no potential risk to the earthworm.

H-5.4.8.13 SWMU 21-024(h)

The adjusted HQs and HIs for SWMU 21-024(h) are presented in Table H-5.4-53. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore), earthworm, and plant. The HI for the

American robin (insectivore) is primarily from mercury. The HI for the earthworm is from copper, mercury, and zinc. The HI for plant is primarily from copper and, to a lesser degree, lead, molybdenum, and zinc.

Molybdenum was detected in two of two samples with concentrations ranging from 0.49 mg/kg to 0.72 mg/kg; the EPC is 0.72 mg/kg. Although there is no background data for molybdenum, it is naturally occurring and the EPC and the detected concentrations reflect natural concentrations.

The LOAEL analysis results in HIs of 13 for the earthworm and less than 1 for the plant (Table H-5.4-77). In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

The adjusted LOAEL HI for the American robin (insectivore) is less than 1 (Table H-5.4-78). Mercury is not retained as a COPEC for the American robin. Therefore, the HIs do not indicate potential risk to the American robin (insectivore and omnivore).

H-5.4.8.14 SWMU 21-024(i)

The adjusted HQs and HIs for SWMU 21-024(i) are presented in Table H-5.4-54. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore), earthworm, and plant. The HIs for the American robin (insectivore) and earthworm are primarily from mercury. The HI for the plant is primarily from antimony and lithium.

The LOAEL analysis results in HIs of 8 for the earthworm and 4 for the plant (Table H-5.4-79). The antimony NOAEL-based and LOAEL-based ESLs (0.05 mg/kg and 0.5 mg/kg, respectively) are less than the soil BV (0.83 mg/kg) and the maximum soil background concentration (1 mg/kg) and overestimate potential risk to the plant. The ratio is approximately 2 using the soil BV or the maximum soil background concentration, which indicates that the EPC is not substantially different from background. Lithium was detected in the one sample at 15 mg/kg. Although there is no background data for lithium, it is naturally occurring and the detected concentration reflects natural levels. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

The adjusted LOAEL HI for the American robin (insectivore) is less than 1 (Table H-5.4-80). Mercury is not retained as a COPEC for the American robin. Therefore, the HI does not indicate potential risk to the American robin (insectivore).

H-5.4.8.15 SWMU 21-024(j)

The adjusted HQs and HIs for SWMU 21-024(j) are presented in Table H-5.4-55. The adjusted HIs are below 1, except for the earthworm and plant. The HI for the earthworm is from selenium and zinc. The HI for the plant is primarily from selenium.

The LOAEL analysis results in HIs less than 1 for the earthworm and 2 for the plant (Table H-5.4-81). Field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also probably not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

H-5.4.8.16 Consolidated Unit 21-024(l)-99

The adjusted HQs and HIs for Consolidated Unit 21-024(l)-99 are presented in Table H-5.4-56. The adjusted HIs are below 1, except for the earthworm and plant. The HI for the earthworm is primarily from phenanthrene and zinc. The elevated HI for plant is primarily from lithium and lead.

Lithium was detected in 50 of 50 samples with concentrations ranging from 2.3 mg/kg to 17.8 mg/kg; the EPC is 12.7 mg/kg. Although there is no background data for lithium, it is naturally occurring and the EPC and detected concentrations reflect natural levels.

The LOAEL analysis results in HIs less than 1 for the earthworm and equivalent to 1 for the plant (Table H-5.4-82). Therefore, the HIs do not indicate potential risk to these receptors.

H-5.4.8.17 SWMU 21-024(o)

The adjusted HQs and HIs for SWMU 21-024(o) are presented in Table H-5.4-57. All of the adjusted HIs are below 1. Therefore, there are no potential risks to the receptors.

H-5.4.8.18 Consolidated Unit 21-026(a)-99

The adjusted HQs and HIs for Consolidated Unit 21-026(a)-99 are presented in Table H-5.4-58. The adjusted HIs are below or equivalent to 1, except for the American robin (omnivore and insectivore), earthworm, and plant. The HIs for the American robin (insectivore and omnivore) are primarily from mercury and cyanide, as well as bis(2-ethylhexyl)phthalate and di-n-butylphthalate for the robin (insectivore). The HI for the earthworm is primarily from mercury and, to a lesser degree, chromium and zinc. The HI for the plant is primarily from chromium and, to a lesser degree, copper, zinc, and acenaphthene.

The LOAEL analysis results in HIs of 8 for the earthworm and 4 for the plant (Table H-5.4-83). The chromium NOAEL-based and LOAEL-based ESLs (0.34 mg/kg and 23 mg/kg, respectively, for the earthworm and 0.35 mg/kg and 12 mg/kg, respectively, for the plant) are less than the maximum chromium soil background concentration (36.5 mg/kg) and overestimate potential risk. The ratios of the maximum chromium soil background concentration to the EPC are approximately 1, which indicates that the EPC is not substantially different from background. Acenaphthene was detected in only one sample above the ESL and overestimates the potential risk to the plant. Although evidence of distressed vegetation was found at the site during the site visit (Attachment H-2), it is probably from the discharge of water from the outfall rather than from COPECs. Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

The adjusted LOAEL HIs for the American robin (insectivore and omnivore) are less than 1 (Table H-5.4-84). Mercury, cyanide, bis(2-ethylhexyl)phthalate, and di-n-butylphthalate are not retained as COPECs for the American robin. Therefore, the HIs do not indicate potential risk to the American robin (insectivore and omnivore).

H-5.4.8.19 SWMU 21-027(a)

The adjusted HQs and HIs for SWMU 21-027(a) are presented in Table H-5.4-59. The adjusted HIs are below 1, except for the deer mouse, earthworm, plant, and montane shrew. The HIs for the deer mouse and montane shrew are from the TCDD[2,3,7,8-] equivalent concentration. The HI for the earthworm is primarily from chromium and, to a lesser degree, mercury, zinc, and plutonium-239. The HI for the plant is primarily from chromium and, to a lesser degree, lithium and zinc.

The LOAEL analysis results in HIs of 17 for the earthworm and 31 for the plant (Table H-5.4-85). The mercury EPC is less than the LOAEL-based ESL (0.5 mg/kg) and not substantially above the BV, thereby overestimating the potential risk to the earthworm. The chromium NOAEL-based and LOAEL-based ESLs (0.34 mg/kg and 23 mg/kg, respectively, for the earthworm and 0.35 mg/kg and 12 mg/kg, respectively, for the plant) are less than the maximum chromium soil background concentration (36.5 mg/kg) and overestimate potential risk. The ratios of the maximum chromium soil background concentration to the EPC are approximately 10. Lithium was detected in all 29 samples with concentrations ranging from 1.9 mg/kg to 18.1 mg/kg; the EPC is 9.7 mg/kg mg/kg. Although there is no background data for lithium, it is naturally occurring and the EPC and detected concentrations reflect natural levels. In addition, field observations made during the site visit found no indication of adverse effects on the plant community (Attachment H-2). Because the plant community does not appear to be affected by the COPECs, the earthworm population is also likely not affected. There were no field observations indicating adverse effects of any kind and there appears to be functioning ecological habitat for all terrestrial receptors, including plants, invertebrates, birds, and mammals. Therefore, the HIs are not consistent with field observations and do not indicate potential risk to these receptors.

The adjusted LOAEL HIs are 10 for the deer mouse and 4 for the shrew (Table H-5.4-86). TCDD[2,3,7,8-] equivalent is retained as a COPEC for the deer mouse and shrew and the HIs indicate a potential risk to receptors at this site.

H-5.4.8.20 SWMU 21-027(c)

The adjusted HQs and HIs for SWMU 21-027(c) are presented in Table H-5.4-60. The adjusted HIs are below or equivalent to 1, except for the American robin (insectivore and omnivore). The HIs for the American robin (insectivore and omnivore) are primarily from bis(2-ethylhexyl)phthalate.

The LOAEL analysis results in HIs of 90 for the American robin insectivore and 45 for the American robin omnivore (Table H-5.4-87). The adjusted LOAEL HIs for the American robin (insectivore and omnivore) are less than 1 (Table H-5.4-88). Bis(2-ethylhexyl)phthalate) is not retained as a COPEC for the American robin. Therefore, the HIs do not indicate potential risk to the American robin (insectivore and omnivore).

H-5.4.9 COPECs without ESLs

Several COPECs do not have ESLs for any receptor in version 2.4 of the ECORISK Database (LANL 2009, 107524) because literature searches for relevant toxicity data for these chemicals have not been completed. In an effort to address this uncertainty and provide a quantitative assessment of potential ecological risk, several online toxicity databases have been searched in order to determine if any relevant

toxicity information are available. The online databases searched were EPA Ecotox Database, EPA Office of Pesticide Programs Aquatic Life Benchmarks, U.S. Army Corps of Engineers/EPA Environmental Residue-Effects, California Cal/Ecotox Database, Pesticide Action Network Pesticide Database, U.S. Army Wildlife Toxicity Assessment Program, USDA Integrated Pesticide Management Database, American Bird Conservancy Pesticide Toxicity Database, and Oak Ridge National Laboratory Risk Assessment Information System. Toxicity data was obtained for several COPECs and receptors as a result of this online database search and interim ESLs were calculated. The ESLs are termed interim because the information and calculations are still undergoing review, and documentation required for the ECORISK Database has not yet been completed. As a result, the ESLs are not yet in the ECORISK Database. Once the development process is completed the interim ESLs will be finalized and included in the appropriate revision to the ECORISK Database. Although the majority of the COPECs listed did not have any relevant toxicity data in the online databases listed above, a search of the literature continues in an effort to determine if any relevant toxicity information exists.

In the absence of a chemical-specific ESL, COPEC concentrations can be compared to ESLs for a surrogate chemical. Comparison to surrogate ESLs provides an estimate of potential effects of a chemically related compound and a line of evidence to indicate the likelihood that ecological receptors are potentially impacted.

Some COPECs without ESLs do not have chemical-specific toxicity data or surrogate chemicals to be used in the screening assessments and cannot be assessed quantitatively for potential ecological risk. These COPECs are often infrequently detected across the site. In these cases, comparisons to residential human health SSLs are presented as part of a qualitative assessment. The comparison of COPEC concentrations to residential human health SSLs is a viable alternative for several reasons. Animal studies are used to infer effects on humans and is the basic premise of modern toxicology (EPA 1989, 008021). In addition, toxicity values derived for the calculation of human health SSLs are often based on potential effects that are more sensitive than the ones used to derive ESLs (e.g., cellular effects for humans versus survival or reproductive effects for terrestrial animals). The EPA also applies uncertainty factors or modifying factors to ensure that the toxicity values are protective (i.e., they are adjusted by uncertainty factors to values much lower than the study results). COPEC concentrations compared with these values are an order of magnitude or more below the SSLs, which corresponds to uncertainty factors of 10 or more. Therefore, it is assumed that the differences in toxicity would not be more than an order of magnitude for any given chemical. The relative difference between values provides a weight of evidence that the potential toxicity of the COPC is likely to be low or very low to the receptor(s). The COPECs without ESLs were common to many of the sites and are discussed below for each site.

H-5.4.9.1 AOC 21-002(b)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Xylene[1,3-]+xylene[1,4-] has surrogate ESLs for a structurally related compound (xylenes) in the current version of the ECORISK Database.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 18 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.0004. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Nitrate was detected in all 36 samples and had a maximum detected concentration of 13.8 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 36 samples and had a maximum detected concentration of 0.00127 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.2 Consolidated Unit 21-006(c)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Xylene[1,2-] and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for a structurally related compound (xylenes) in the current version of the ECORISK Database.

Xylene[1,2-] was detected in 1 of 15 samples with a maximum detected concentration of 0.0006 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.0004. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 15 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.0006 mg/kg) and results in a maximum HQ of 0.0004. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Nitrate was detected in 13 of 23 samples and had a maximum detected concentration of 66.1 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 2 of 21 samples and had a maximum detected concentration of 0.0345 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.3 SWMU 21-009

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 16 of 18 samples and had a maximum detected concentration of 19.3 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 2 of 16 samples and had a maximum detected concentration of 0.000659 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.4 SWMU 21-012(b)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, iron, nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-]. Calcium, iron, nitrate, and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene[4-], trimethylbenzene[1,2,4-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Isopropyltoluene[4-] was detected in 3 of 53 samples with a maximum detected concentration of 0.00153 mg/kg. The minimum ESL for toluene (23 mg/kg for the montane shrew) was used to screen the isopropyltoluene[4-] EPC (0.0015 mg/kg) and resulted in a maximum HQ of 0.000067. Because this HQ is less than 0.3, isopropyltoluene[4-] is not retained as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 2 of 53 samples with a maximum concentration of 0.000281 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.00028 mg/kg) and results in a maximum HQ of 0.000012. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 3 of 48 samples with a maximum detected concentration of 0.000553 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.00055 mg/kg) and results in a maximum HQ of 0.00040. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Calcium and iron were not retained as COPECs because their EPCs are similar to background concentrations, and therefore, exposure to these inorganic chemicals is similar to background (section H-5.4.4.4 and Table H-5.4-4).

Nitrate was detected in 57 of 75 samples and had a maximum detected concentration of 19.5 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 31 of 75 samples and had a maximum detected concentration of 0.00397 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.5 SWMU 21-013(c)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 28 of 46 samples and had a maximum detected concentration of 5.7 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the

potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 17 of 46 samples and had a maximum detected concentration of 0.00726 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.6 SWMU 21-022(h)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, isopropyltoluene[4-], and carbazole. Nitrate, perchlorate, and carbazole do not have interim or surrogate ESLs and are assessed qualitatively. However, isopropyltoluene[4-] has surrogate ESLs for a structurally related compounds (toluene) in the current version of the ECORISK Database.

Isopropyltoluene[4-] was detected in 1 of 14 samples with an a maximum detected concentration of 0.0019 mg/kg. The minimum ESL for toluene (23 mg/kg for the montane shrew) was used to screen the isopropyltoluene[4-] EPC (0.0019 mg/kg) and resulted in a maximum HQ of 0.00008. Because this HQ is less than 0.3, isopropyltoluene[4-] is not retained as a COPEC.

Carbazole was detected in 3 of 22 samples with a maximum detected concentration of 1.5 mg/kg. The EPA Region 6 residential SSL for carbazole is 240 mg/kg, indicating that potential toxicity is low. Because of the infrequent detection and the potentially low toxicity, carbazole is eliminated as a COPEC.

Nitrate was detected in 21 of 28 samples and had a maximum detected concentration of 72 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 3 of 27 samples and had a maximum detected concentration of 0.015 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.7 Consolidated Unit 21-023(a)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Calcium, nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Ethylbenzene, isopropyltoluene[4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (benzene, toluene, total xylenes, respectively) in the current version of the ECORISK Database.

Ethylbenzene was detected in 1 of 36 samples with a maximum detected concentration of 0.0006 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.0006 mg/kg) and results in a maximum HQ of 0.00003. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Isopropyltoluene [4-] was detected in 2 of 36 samples with a maximum detected concentration of 0.0004 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Xylene[1,2-] was detected in 1 of 36 samples and with a maximum detected concentration of 0.001 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.001 mg/kg) and results in a maximum HQ of 0.0007. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 36 samples with a maximum detected concentration of 0.002 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.001. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Calcium was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.7 and Table H-5.4-7).

Nitrate was detected in 22 of 36 samples and had a maximum detected concentration of 11.6 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 7 of 36 samples and had a maximum detected concentration of 0.00649 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.8 SWMU 21-024(a)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene[4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene [4-] has surrogate ESLs for a structurally related compound (toluene), in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 1 of 17 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.000002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 26 of 34 samples and had a maximum detected concentration of 6.31 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 34 samples and had a maximum detected concentration of 0.00177 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.9 SWMU 21-024(b)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 18 of 22 samples and had a maximum detected concentration of 67.2 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 11 of 21 samples and had a maximum detected concentration of 0.018 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.10 SWMU 21-024(d)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene [4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. However, isopropyltoluene [4-] has surrogate ESLs for a structurally related compound (toluene) in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 1 of 40 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.000002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 30 of 50 samples and had a maximum detected concentration of 121 mg/kg. Nitrate is naturally occurring and most of the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 49 samples and had a maximum detected concentration of 0.00591 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.11 SWMU 21-024(e)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-], trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Ethylbenzene, isopropyltoluene[4-], trimethylbenzene[1,2,4-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (benzene, toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Ethylbenzene was detected in 1 of 33 samples with a maximum detected concentration of 0.0007 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.0007 mg/kg) and results in a maximum HQ of 0.00003. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Isopropyltoluene [4-] was detected in 5 of 33 samples with a maximum detected concentration of 0.05 mg/kg The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.05 mg/kg) and results in a maximum HQ of 0.002. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 1 of 33 samples with a maximum concentration of 0.0003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.0003 mg/kg) and results in a maximum HQ of 0.00001. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Xylene[1,2-] was detected in 1 of 33 samples with a maximum concentration of 0.002 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.001. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 33 samples with a maximum detected concentration of 0.004 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.004 mg/kg) and results in a maximum HQ of 0.003. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Nitrate was detected in 26 of 40 samples and had a maximum detected concentration of 23.8 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 40 samples and had a maximum detected concentration of 0.00284 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.12 SWMU 21-024(g)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for iron, nitrate, perchlorate, ethylbenzene, isopropyltoluene[4-],and xylene [1,3-]+xylene[1,4-]. Iron, nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Ethylbenzene, isopropyltoluene[4-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (benzene, toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Ethylbenzene was detected in 2 of 40 samples with a maximum detected concentration of 0.001 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.001 mg/kg) and results in a maximum HQ of 0.00004. Because this HQ is less than 0.3, ethylbenzene is eliminated as a COPEC.

Isopropyltoluene[4-] was detected in 3 of 40 samples with a maximum detected concentration of 0.002 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.00009. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 2 of 40 samples with a maximum detected concentration of 0.003 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.003 mg/kg) and results in a maximum HQ of 0.0002. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Iron was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.12 and Table H-5.4-12).

Nitrate was detected in 27 of 65 samples and had a maximum detected concentration of 4.6 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 4 of 65 samples and had a maximum observed concentration of 0.0029 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.13 SWMU 21-024(h)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, isopropyltoluene[4-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene[4-], trimethylbenzene[1,2,4-], trimethylbenzene[1,3,5-], xylene[1,2-], and xylene[1,3-]+xylene[1,4-] have surrogate ESLs for structurally related compounds (toluene, benzene, and xylenes, respectively) in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 2 of 24 samples with a maximum concentration of 0.0006 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0006 mg/kg) and results in a maximum HQ of 0.00003. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 1 of 24 samples with a maximum concentration of 0.0004 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, trimethylbenzene[1,2,4-] is eliminated as a COPEC.

Trimethylbenzene [1,3,5-] was detected in 1 of 24 samples with a maximum concentration of 0.0003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,3,5-] EPC (0.0003 mg/kg) and results in a maximum HQ of 0.00001. Because this HQ is less than 0.3, trimethylbenzene[1,3,5-] is eliminated as a COPEC.

Xylene[1,2-] was detected in 1 of 24 samples with a maximum concentration of 0.0002 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,2-] EPC (0.0002 mg/kg) and results in a maximum HQ of 0.0001. Because this HQ is less than 0.3, xylene[1,2-] is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 2 of 24 samples with a maximum concentration of 0.0004 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.0003. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

Nitrate was detected in 14 of 35 samples and had a maximum detected concentration of 1.84 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 12 of 35 samples and had a maximum detected concentration of 0.00434 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.14 SWMU 21-024(i)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, perchlorate, isopropylbenzene, trimethylbenzene[1,2,4-], bromomethane, and trichlorofluoromethane. Calcium, perchlorate, bromomethane, and trichlorofluoromethane do not have interim or surrogate ESLs and are assessed qualitatively. However, isopropylbenzene and trimethylbenzene[1,2,4-] have surrogate ESLs for structurally related compounds (benzene) in the current version of the ECORISK Database.

Isopropylbenzene was detected in 1 of 15 samples with a maximum detected concentration of 0.003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) was used to screen the isopropylbenzene EPC (0.003 mg/kg) and resulted in a maximum HQ of 0.0001. Because this HQ is less than 0.3, isopropylbenzene is not retained as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 2 of 15 samples with a maximum detected concentration of 0.003 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) was used to screen the trimethylbenzene[1,2,4-] EPC (0.003 mg/kg) and resulted in a maximum HQ of 0.0001. Because this HQ is less than 0.3, trimethylbenzene[1,2,4-] is not retained as a COPEC.

Bromomethane was detected in 1 of 15 samples with a maximum detected concentration of 0.003 mg/kg. The NMED residential SSL for bromomethane is 22.3 mg/kg, indicating that potential toxicity is low. Because of the infrequent detection and the potentially low toxicity, bromomethane is not retained as a COPEC.

Trichlorofluoromethane was detected in 2 of 15 samples with a maximum detected concentration of 0.002 mg/kg. The NMED residential SSL for trichlorofluoromethane is 2,010 mg/kg, indicating that potential toxicity is low. Because of the infrequent detection and the potentially low toxicity, trichlorofluoromethane is not retained as a COPEC.

Calcium was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.14 and Table H-5.4-14).

Perchlorate was detected in one of seven samples with a maximum detected concentration of 0.0532 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.15 SWMU 21-024(j)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene[4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene[4-] has a surrogate ESL for a structurally related compound (toluene), in the current version of the ECORISK Database.

Isopropyltoluene[4-] was detected in 1 of 22 samples with a maximum concentration of 0.0004 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00001. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 11 of 29 samples and had a maximum detected concentration of 5.43 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 29 samples and had a maximum detected concentration of 0.0161 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.16 Consolidated Unit 21-024(l)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and xylene[1,3-]+xylene[1,4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Xylene[1,3-]+xylene[1,4-] has a surrogate ESL for a structurally related compound (xylene) in the current version of the ECORISK database.

Nitrate was detected in 30 of 48 samples and had a maximum detected concentration of 6.1 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 15 of 50 samples and had a maximum detected concentration of 0.00632 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

Xylene[1,3-]+xylene[1,4-] was detected in 1 of 37 samples with a maximum concentration of 0.000381 mg/kg. The minimum ESL for xylenes (1.4 mg/kg for the shrew) is used to screen the xylene[1,3-]+xylene[1,4-] EPC (0.00038 mg/kg) and results in a maximum HQ of 0.00027. Because this HQ is less than 0.3, xylene[1,3-]+xylene[1,4-] is not retained as a COPEC.

H-5.4.9.17 SWMU 21-024(o)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 17 of 22 samples and had a maximum detected concentration of 38 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 10 of 22 samples and had a maximum observed concentration of 0.00141 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.18 Consolidated Unit 21-026(a)-99

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for calcium, nitrate, perchlorate, dimethylphenol[2,4-], ethylbenzene, and trimethylbenzene[1,2,4-]. Calcium, nitrate, and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Dimethylphenol[2,4-], ethylbenzene, and trimethylbenzene[1,2,4-] have surrogate ESLs for structurally related compounds (phenol and benzene, respectively) in the current version of the ECORISK Database.

Dimethylphenol[2,4-] was detected in 1 of 51 samples with a maximum detected concentration of 0.06 mg/kg. The minimum ESL for phenol (0.79 mg/kg for the plant) is used to screen the dimethylphenol[2,4-] EPC (0.06 mg/kg) and results in a maximum HQ of 0.08. Because this HQ is less than 0.3, dimethylphenol[2,4-] is not retained as a COPEC.

Ethylbenzene was detected in 1 of 26 samples with a maximum detected concentration of 0.0004 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the ethylbenzene EPC (0.0004 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, ethylbenzene is not retained as a COPEC.

Trimethylbenzene[1,2,4-] was detected in 2 of 26 samples with a maximum detected concentration of 0.0005 mg/kg. The minimum ESL for benzene (24 mg/kg for the deer mouse) is used to screen the trimethylbenzene[1,2,4-] EPC (0.0005 mg/kg) and results in a maximum HQ of 0.00002. Because this HQ is less than 0.3, trimethylbenzene[1,2,4-] is not retained as a COPEC.

Calcium was not retained as a COPEC because the EPC is similar to background concentrations and therefore exposure is similar to background (section H-5.4.4.18 and Table H-5.4-18).

Nitrate was detected in 23 of 50 samples with a maximum detected concentration of 9.8 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 5 of 50 samples with a maximum detected concentration of 0.00154 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.19 SWMU 21-027(a)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate and perchlorate. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively.

Nitrate was detected in 21 of 29 samples and had a maximum detected concentration of 13.9 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 6 of 29 samples and had a maximum detected concentration of 0.00364 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.9.20 SWMU 21-027(c)

No ESLs are available in the ECORISK Database, Version 2.4 (LANL 2009, 107524) for nitrate, perchlorate, and isopropyltoluene [4-]. Nitrate and perchlorate do not have interim or surrogate ESLs and are assessed qualitatively. Isopropyltoluene [4-] has surrogate ESLs for a structurally related compound (toluene) in the current version of the ECORISK Database.

Isopropyltoluene [4-] was detected in 2 of 17 samples with a maximum detected concentration of 0.002 mg/kg. The minimum ESL for toluene (23 mg/kg for the shrew) is used to screen the isopropyltoluene[4-] EPC (0.002 mg/kg) and results in a maximum HQ of 0.00009. Because this HQ is less than 0.3, isopropyltoluene[4-] is eliminated as a COPEC.

Nitrate was detected in 10 of 31 samples and had a maximum detected concentration of 2.75 mg/kg. Nitrate is naturally occurring and the detected concentrations likely reflect natural levels, but no background data are available. The NMED residential SSL for nitrate is 125,000 mg/kg, indicating that the potential toxicity is very low. Because of the potential very low toxicity and the naturally occurring concentrations, nitrate is eliminated as a COPEC.

Perchlorate was detected in 3 of 31 samples and had a maximum detected concentration of 0.00155 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that the potential toxicity is low. Because of the potentially low toxicity, perchlorate is not retained as a COPEC.

H-5.4.10 DOE Tier I Bioconcentration Guide

The DOE Tier I Biota Concentration Guide (BCG) (DOE 2002, 085637) is a lower value for cesium-137 (21.6 pCi/g) and stronitium-90 (21.6 pCi/g) than the ECORISK Database final ESLs (680 pCi/g and 560 pCi/g, respectively). Cesium-137 was a COPC at 20 sites. Strontium-90 was a COPC at 15 sites. Using the EPCs for cesium-137 and strontium-90 for each of these sites and the DOE Tier I BCG, the HQs for these radionuclides are all less than 1.0. These HQs are too small to impact the HIs for these sites. In addition, the DOE BCG incorporates bioaccumulation factors that are orders of magnitude higher than those in the ECORISK Database. Environmental surveillance and monitoring at the Laboratory indicate that bioaccumulation factors are not as high as those used by DOE (Bennett et al. 1996, 056035). Therefore, the ESL comparison is more representative than the BCG comparison.

H-5.4.11 Comparison with Results of Previous Field and Laboratory Studies

Biota investigations have been conducted in canyon reaches in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453). Field and laboratory studies included collection and analysis of soil, sediment, and water samples; cavity-nesting bird monitoring and analysis of eggs; small mammal trapping and analysis of whole organisms; earthworm bioaccumulation tests (measures of growth and survival, and analysis of whole organisms); laboratory testing of sensitive organisms; and seedling germination tests.

The field and laboratory results included reaches with COPEC concentrations comparable to those detected at sites within the DP Site Aggregate Area (Table H-5.4-89). The studies generally found no effects from exposure to COPECs in any of the canyon reaches further supporting the conclusion that there is no potential ecological risk at these sites. The exceptions are lead at SWMU 21-022(h) and 2,3,7,8-TCDD equivalent at SWMU 21-027(a), which have concentrations markedly elevated above those in the canyons.

H-5.5 Interpretation of Ecological Risk Screening Results

H-5.5.1 Receptor Lines of Evidence

Based on the ecological risk-screening assessments, several COPECs (including COPECs without an ESL) were identified within the DP Site Aggregate Area (Table H-5.3-0). Receptors were evaluated using several lines of evidence: minimum ESL comparisons, HI analyses, comparison to background concentrations, potential effects to populations (individuals for T&E species), the relative toxicity of related compounds, LOAEL analyses, and comparisons to previous field and laboratory canyon investigations.

Plant

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the plant, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the plant at all sites. HIs were evaluated as to the component HQs, and many were found to be overestimates of the potential risk. The overestimation was primarily from ESLs below BVs, which resulted in elevated HQs and HIs.
- A LOAEL analysis was conducted and resulted in HIs less than or equivalent to 1, except at Consolidated Units 21-023(a)-99 and 21-026(a)-99, and SWMUs 21-002(b), 21-009, 21-022(h), 21-024(i), 21-024(j), and 21-027(a).
- The plant communities were evaluated at all sites during site visits. No evidence of adverse impacts of contamination to the plant community based on field observations was found during site visits (Attachment H-2); the plant community is typical of the surrounding area and appears healthy. No marked differences in vegetation were observed between the sites with elevated plant HIs and the sites with similar topography that did not have elevated HIs. However, there were a few sites where the area was physically disturbed by site operations and distressed vegetation was noted from the water discharged from outfalls.
- Field and laboratory studies on plants in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar COPEC concentrations and found no effects from exposure. The exception is for lead at SWMU 21-022(h), which is recommended for remediation based on human health.

These lines of evidence support the conclusion no potential ecological risk to the plants exists at the DP Site Aggregate Area.

Earthworm (Invertebrate)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the earthworm, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the earthworm at all sites. HIs were evaluated as to the component HQs and many were found to be overestimates of the potential risk. The overestimation was primarily from ESLs below BVs, which resulted in elevated HQs and HIs.

- A LOAEL analysis was conducted and resulted in HIs less than or equivalent to 1, except at Consolidated Units 21-026(a)-99 and 21-023(a)-99, and SWMUs 21-012(b), 21-022(h), 21-024(b), 21-024(h), 21-024(i), and 21-027(a).
- Laboratory studies on earthworms in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar COPEC concentrations and found no effects from exposure.

These lines of evidence support the conclusion no potential ecological risk to the earthworm exists at the DP Site Aggregate Area.

Montane Shrew (Insectivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the shrew, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the shrew at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the shrew's population area. The adjusted HIs were less than 1.0 for all sites, except at SWMU 21-027(a).
- A LOAEL analysis was conducted for SWMU 21-027(a) and the adjusted HI for the shrew is 4. Therefore, the HI may indicate potential risk to the shrew at SWMU 21-027(a)
- Field studies and laboratory analyses on small mammals in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Cañon de Valle (LANL 2003, 077965), and Sandia Canyon (LANL 2009, 107453) included reaches with similar concentrations of COPECs and found no effects from exposure. The exception is the EPC for 2,3,7,8-TCDD equivalent at SWMU 21-027(a), which is higher than detected elsewhere.

These lines of evidence support the conclusion that no potential ecological risk to the montane shrew exists at the DP Site Aggregate Area, except at SWMU 21-027(a).

Deer Mouse (Omnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the deer mouse, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the deer mouse at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the deer mouse's population area. The adjusted HIs were less than or equivalent to 1.0 at all sites, except at SWMUs 21-013(c), 21-024(d), and 21-027(a).
- A LOAEL analysis was conducted for SWMUs 21-013(c), 21-024(d), and 21-027(a). The adjusted HIs for the deer mouse were less than 1 at SWMUs 21-013(c) and 21-024(d); however, the adjusted HI was 10 at SWMU 21-027(a).Therefore, the HI may indicate potential risk to the deer mouse at SWMU 21-027(a).
- Field studies and laboratory analyses on small mammals in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Cañon de Valle

(LANL 2003, 077965), and Sandia Canyon (LANL 2009, 107453) included reaches with similar concentrations of COPECs and found no effects from exposure except for SWMU 21-027(a). The exception is the EPC for 2,3,7,8-TCDD equivalent at SWMU 21-027(a), which is higher than detected elsewhere.

These lines of evidence support the conclusion that no potential ecological risk to the deer mouse exists at the DP Site Aggregate Area, except at SWMU 21-027(a).

Desert Cottontail (Herbivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the cottontail, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the cottontail at all sites, except SWMUs 21-013(c), 21-024(a), 21-024(b), 21-024(e), 21-024(g), 21-024(o), and 21-027(c). HIs were adjusted by the PAUF, which is the ratio of the site area to the cottontail's population area. The adjusted HIs were less than 1.0 for the cottontail at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the cottontail exists at the DP Site Aggregate Area.

Red Fox (Carnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the fox, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the fox at all sites, except Consolidated Unit 21-026(a)-99 and 21-024(l)-99 and SWMUs 21-009, 21-012(b), 21-013(c), 21-024(a), 21-024(e), 21-024(g), 21-024(h), 21-024(j), and 21-024(o). HIs were adjusted by the PAUF, which is the ratio of the site area to the fox's population area. The adjusted HIs were less than 1.0 at all sites.

These lines of evidence support the conclusion that no potential ecological risk to the fox exists at the DP Site Aggregate Area.

Robin (All Feeding Guilds)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the robin, were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the robin (all feeding guilds) at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the robin's population area. The adjusted HIs were less than or equivalent to 1.0 at all sites, except at Consolidated Units 21-006(c)-99 and 21-026(a)-99 and SWMUs 21-013(c), 21-024(h), 21-024(i), and 21-027(c).

- A LOAEL analysis was conducted at Consolidated Units 21-006(c)-99 and 21-026(a)-99 and SWMUs 21-013(c), 21-024(h), 21-024(i), and 21-027(c) and resulted in HIs less than 1.
- Field studies and laboratory analyses on birds in Los Alamos/Pueblo Canyon (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) included reaches with similar COPEC concentrations and found no effects from exposure.

These lines of evidence support the conclusion that no potential ecological risk to the robin (all feeding guilds) exists at the DP Site Aggregate Area.

Kestrel (Intermediate Carnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (intermediate carnivore), were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the kestrel (intermediate carnivore) at all sites. HIs were adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HIs were less than 1.0 for all sites.

These lines of evidence support the conclusion that no potential ecological risk to the kestrel (intermediate carnivore) exists at the DP Site Aggregate Area.

Kestrel (Top Carnivore)

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (top carnivore), were less than 0.3.
- Several COPECs were eliminated because their EPCs were similar to background concentrations.
- HIs were greater than 1.0 for the kestrel (top carnivore) at all sites, except SWMU 21-009. HIs were adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HIs were less than 1.0 for all sites.
- The kestrel (top carnivore) is a surrogate for the Mexican spotted owl. The HIs were adjusted for the owl's AUF. The adjusted HIs were less than 1.0 for all sites.

These lines of evidence support the conclusion that no potential ecological risks to the kestrel (top carnivore) and the Mexican spotted owl exist at the DP Site Aggregate Area.

H-5.5.2 COPECs with No ESLs

COPECs with no ESLs were not evaluated for each receptor. If a surrogate chemical could be identified or an interim ESL(s) was available, the minimum ESL was used to screen the COPEC. If an interim or surrogate ESL was not available and a residential SSL was available, the residential SSL was used to estimate potential toxicity. In addition, the frequency of detection and the concentrations detected were also evaluated. All COPECs without ESLs were eliminated based on these comparisons.

The analysis of COPECs with no ESLs supports the conclusion that there is no potential ecological risk to receptors at the DP Site Aggregate Area other than to the deer mouse and shrew at SWMU 21-027(a).

H-5.5.3 Summary

Based on evaluations of the minimum ESL, HI analysis, comparisons to background, potential effects to populations (individuals for T&E species), the relative toxicity of related compounds, LOAEL analyses, and previous canyon studies, there is no potential ecological risk to the earthworm, plant, American robin, American kestrel, desert cottontail, red fox, and Mexican spotted owl at any site within the DP Site Aggregate Area. The risk-screening assessments indicate potential ecological risks to deer mouse and shrew at SWMU 21-027(a) from the TCDD[2,3,7,8-] equivalent concentration.

H-6.0 CONCLUSIONS

H-6.1 Human Health Risk

The human health risk-screening assessments found no unacceptable risks or doses under the industrial, construction worker, and residential scenarios for the following sites:

- AOC 21-002(b)
- Consolidated Unit 21-006(c)-99
- SWMU 21-009
- SWMU 21-012(b)
- SWMU 21-013(c)
- SWMU 21-022(f)
- Consolidated Unit 21-023(a)-99
- SWMU 21-024(a)
- SWMU 21-024(d)
- SWMU 21-024(e)
- SWMU 21-024(g)
- SWMU 21-024(h)
- SWMU 21-024(i)
- SWMU 21-024(j)
- SWMU 21-024(o)
- SWMU 21-027(c)

For Consolidated Units 21-006(c)-99 and 21-023(a)-99 and SWMUs 21-022(f) and 21-024(d), the total excess cancer risks or HIs were slightly or more above the NMED target levels. However, further evaluation of the EPCs and/or COPCs contributing to the risks indicated that either the COPCs were not site related or the EPCs were similar to background concentrations. This evaluation resulted in concluding that no potential unacceptable risks exist at these sites for all scenarios.

The human health risk-screening assessments at the remaining sites concluded the following.

- SWMU 21-022(h) has HIs above NMED target level for all scenarios; total excess cancer risks above NMED target level for the industrial and residential scenarios; and total doses above the DOE target level for the construction worker and residential scenarios;
- SWMU 21-024(b) has total doses above the DOE target level for the construction worker and residential scenarios;
- Consolidated Unit 21-024(l)-99 has total excess cancer risks above NMED target level for the residential scenario;
- Consolidated Unit 21-026(a)-99 has total excess cancer risks above NMED target level for all scenarios;
- SWMU 21-027(a) has HI above NMED target level for the construction worker scenario; total excess cancer risks above NMED target level for the industrial and residential scenarios; and total doses above the DOE target level for the construction worker and residential scenarios.

Sites at TA-21 are not accessible by the public and are not planned for release by DOE in the foreseeable future. Therefore, an as low as reasonably achievable (ALARA) evaluation for radiological exposure to the public is not currently required. Should DOE's plans for releasing these areas change, an ALARA evaluation will be conducted at that time. It should be noted that the Laboratory addresses considerations for radiation exposures to workers under the Laboratory's occupational radiological protection program in compliance with 10 Code of Federal Regulations 835. The Laboratory's radiation protection program implements ALARA and consists of the following elements: management commitment, training, design review, radiological work review, performance assessments, and documentation.

H-6.2 Ecological Risk

Based on evaluations of the minimum ESL, HI analysis, comparisons to background, potential effects to populations (individuals for T&E species), the relative toxicity of related compounds, LOAEL analyses, and previous canyon studies, there is no potential ecological risk to the earthworm, plant, American robin, American kestrel, desert cottontail, red fox, and Mexican spotted owl at all sites and to the deer mouse and montane shrew at all but one site. Field and laboratory studies conducted and reported as part of the ecological investigations in Los Alamos and Pueblo Canyons (LANL 2004, 087390), Mortandad Canyon (LANL 2006, 094161; LANL 2007, 098279), Cañon de Valle (LANL 1993, 077965) , Pajarito Canyon (LANL 2008, 104909; LANL 2009, 106939), and Sandia Canyon (LANL 2009, 107453) found similar concentrations of COPCs have not adversely impacted small mammal, bird, earthworm, and plant populations, and individual Mexican spotted owls. However, the lead EPC at SWMU 21-022(h) is higher than measured in the canyons, but is recommended for remediation based on human health and TCDD[2,3,7,8-]. The risk-screening evaluations indicated that there is a potential ecological risk to the montane shrew and the deer mouse at SWMU 21-027(a) from dioxin/furans. Previous field and laboratory studies conducted in the canyons have not encountered the TCDD[2,3,7,8-] equivalent concentration calculated and screened for SWMU 21-027(a). The screening assessment resulted in elevated HIs for the deer mouse and shrew indicating potential risk to these receptors. As a result, additional investigations or corrective actions may be warranted at this site.

H-7.0 REFERENCES

The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.

Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.

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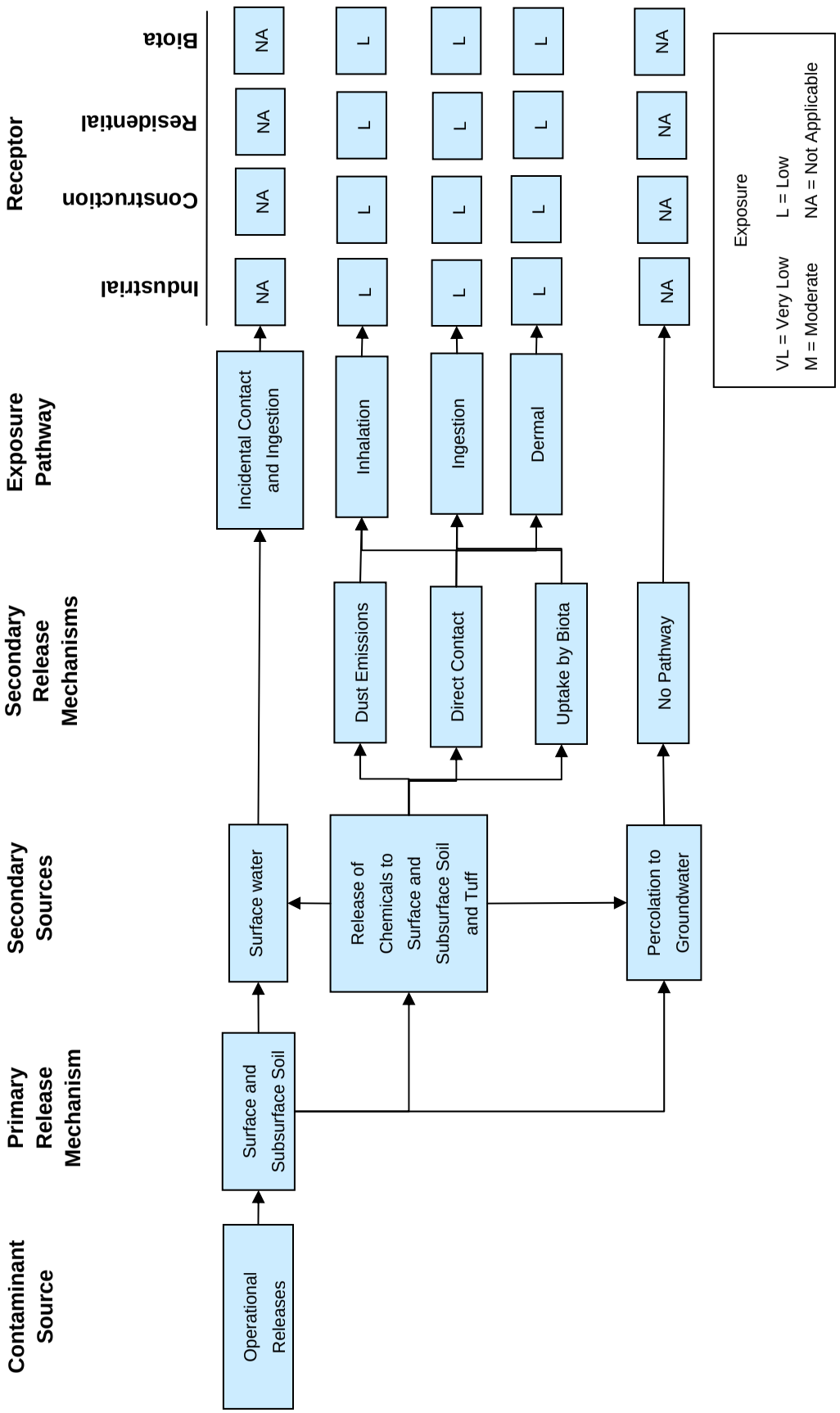

Figure H-3.2-1 Conceptual site model for DP Site Aggregate Area

Table H-2.2-1
Exposure Point Concentrations for AOC 21-002(b) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Inorganic Chemicals (mg/kg)							
Aluminum	18	18	2330	11000	Normal	9137	95% Student's-t
Arsenic	18	17	1.24 (J)	3.57	Nonparametric	2.742	95% KM (t)
Barium	18	18	47.1	188	Normal	121.9	95% Student's-t
Cadmium	18	10	0.198 (J)	0.984	Nonparametric	0.575	95% KM (t)
Chromium	18	18	4.9	28.6	Gamma	13.99	95% Approximate Gamma
Cyanide (Total)	18	11	0.088 (J)	1.49	Nonparametric	0.574	95% KM (t)
Lead	20	20	3.88	451	Lognormal	171.4	95% Chebyshev (MVUE)
Nitrate	18	16	0.726 (J)	13.8	Nonparametric	5.742	95% KM (BCA)
Perchlorate	18	3	0.000785 (J)	0.00246 (U)	n/a*	0.00127	Maximum detected concentration
Selenium	20	8	0.054 (U)	8.27	Nonparametric	6.915	95% KM (Percentile Bootstrap)
Silver	18	18	0.048 (J)	2.15	Gamma	0.569	95% Approximate Gamma
Zinc	20	20	22	262	Gamma	121.4	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Anthracene	19	4	0.0075 (J)	0.34 (U)	n/a	0.0149	Maximum detected concentration
Benzo(a)anthracene	19	1	0.0248 (U)	0.34 (U)	n/a	0.0654	Maximum detected concentration
Benzo(a)pyrene	19	2	0.0357 (U)	0.34 (U)	n/a	0.076	Maximum detected concentration
Benzo(b)fluoranthene	19	6	0.0362 (U)	0.358	Nonparametric	0.167	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	19	1	0.0357 (U)	0.34 (U)	n/a	0.139	Maximum detected concentration
Benzo(k)fluoranthene	19	3	0.0357 (U)	0.41	n/a	0.41	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	19	2	0.178 (U)	1.99	n/a	1.99	Maximum detected concentration

Table H-2.2-1 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Chrysene	19	5	0.0352 (J)	0.34 (U)	Nonparametric	0.0656	95% KM (Percentile Bootstrap)
Di-n-butylphthalate	19	2	0.0433 (J)	1.53 (U)	n/a	0.47	Maximum detected concentration
Dimethylphthalate	19	1	0.12 (J)	1.59 (U)	n/a	0.12	Maximum detected concentration
Fluoranthene	19	15	0.0164 (J)	0.34 (U)	Nonparametric	0.0733	95% KM (t)
Indeno(1,2,3-cd)pyrene	19	2	0.0357 (U)	0.34 (U)	n/a	0.144	Maximum detected concentration
Phenanthrene	19	3	0.0124 (J)	0.34 (U)	n/a	0.0368	Maximum detected concentration
Pyrene	19	13	0.0168 (J)	0.34 (U)	Nonparametric	0.0708	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	19	11	0.0069 (U)	0.133	Nonparametric	0.0673	95% KM (Percentile Bootstrap)
Plutonium-238	21	9	0.00412 (U)	0.14	Nonparametric	0.0406	95% KM (t)
Plutonium-239/240	21	20	0.00154 (U)	5.2 (J-)	Nonparametric	2.112	95% KM (Chebyshev)
Tritium	18	2	-0.0108561 (U)	0.042295	n/a	0.0423	Maximum detected concentration

*n/a = Not applicable.

Table H-2.2-2
Exposure Point Concentrations for AOC 21-002(b) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	36	36	765	13600	Normal	8486	95% Student's-t
Arsenic	35	36	1.24 (J)	9.49	Nonparametric	3.805	95% KM (Chebyshev)
Barium	36	36	9.13	188	Normal	92.5	95% Student's-t
Cadmium	19	36	0.131 (J)	2.69 (U)	Nonparametric	0.403	95% KM (t)
Chromium	36	36	4.9	28.6	Gamma	14.85	95% Approximate Gamma
Cyanide (total)	14	36	0.088 (J)	1.49	Nonparametric	0.4	95% KM (t)
Lead	38	38	3.76 (J-)	451	Nonparametric	132.3	97.5% KM (Chebyshev)
Nitrate	25	36	0.726 (J)	13.8	Nonparametric	3.316	95% KM (BCA)
Perchlorate	6	36	0.000696 (J)	0.00246 (U)	Nonparametric	0.00117	95% KM (t)
Selenium	16	38	0.054 (U)	8.27	Nonparametric	4.694	95% KM (Percentile Bootstrap)
Silver	27	36	0.048 (J)	2.15	Nonparametric	0.346	95% KM (BCA)
Zinc	38	38	7.8	262	Nonparametric	102.4	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acetone	2	18	0.00331 (U)	0.0279 (U)	n/a*	0.0123	Maximum detected concentration
Anthracene	4	37	0.0075 (J)	0.34 (U)	n/a	0.0149	Maximum detected concentration
Aroclor-1254	2	2	0.0394	0.0418	n/a	0.0418	Maximum detected concentration
Aroclor-1260	2	2	0.0148	0.017	n/a	0.017	Maximum detected concentration
Benzo(a)anthracene	1	37	0.0248 (U)	0.34 (U)	n/a	0.0654	Maximum detected concentration
Benzo(a)pyrene	3	37	0.0348 (U)	0.34 (U)	n/a	0.0807	Maximum detected concentration
Benzo(b)fluoranthene	7	37	0.0348 (U)	0.358	Nonparametric	0.166	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	2	37	0.0348 (U)	0.34 (U)	n/a	0.172	Maximum detected concentration
Benzo(a)anthracene	1	37	0.0248 (U)	0.34 (U)	n/a	0.0654	Maximum detected concentration
Benzo(a)pyrene	3	37	0.0348 (U)	0.34 (U)	n/a	0.0807	Maximum detected concentration

Table H-2.2-2 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(b)fluoranthene	7	37	0.0348 (U)	0.358	Nonparametric	0.166	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	2	37	0.0348 (U)	0.34 (U)	n/a	0.172	Maximum detected concentration
Benzo(k)fluoranthene	3	37	0.0348 (U)	0.41	n/a	0.41	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	37	0.174 (U)	1.99	n/a	1.99	Maximum detected concentration
Chrysene	6	37	0.0348 (U)	0.34 (U)	Nonparametric	0.0601	95% KM (Percentile Bootstrap)
Dimethyl phthalate	1	37	0.12 (J)	1.59 (U)	n/a	0.12	Maximum detected concentration
Di-n-butylphthalate	2	37	0.0433 (J)	1.53 (U)	n/a	0.47	Maximum detected concentration
Fluoranthene	16	37	0.0164 (J)	0.34 (U)	Nonparametric	0.0509	95% KM (Percentile Bootstrap)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.00000263	0.00000263	n/a	0.00000263	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.00000107 (J)	0.00000107 (J)	n/a	0.00000107	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	0.000000196	0.000000196	n/a	0.000000196	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	0.000000124 (J)	0.000000124 (J)	n/a	0.000000124	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	9.43E-08 (J)	9.43E-08 (J)	n/a	9.43E-08	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	3	37	0.0348 (U)	0.34 (U)	n/a	0.166	Maximum detected concentration
Methyl-2-pentanone[4-]	1	18	0.00171 (J)	0.00853 (U)	n/a	0.00171	Maximum detected concentration
Methylene chloride	2	18	0.00266 (U)	0.00755 (U)	n/a	0.00547	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.000025	0.000025	n/a	0.000025	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.00000278 (J)	0.00000278 (J)	n/a	0.00000278	Maximum detected concentration
Pentachlorodibenzodioxin [1,2,3,7,8-]	1	1	8.52E-08 (J)	8.52E-08 (J)	n/a	8.52E-08	Maximum detected concentration

Table H-2.2-2 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	0.000000204 (J)	0.000000204 (J)	n/a	0.000000204	Maximum detected concentration
Phenanthrene	3	37	0.0124 (J)	0.34 (U)	n/a	0.0368	Maximum detected concentration
Pyrene	14	37	0.0168 (J)	0.34 (U)	Nonparametric	0.0485	95% KM (t)
Tetrachlorodibenzofuran [2,3,7,8-]	1	1	0.000000466 (J)	0.000000466 (J)	n/a	0.000000466	Maximum detected concentration
Xylene[1,3-]+Xylene[1,4-]	1	18	0.000369 (U)	0.00341 (U)	n/a	0.000502	Maximum detected concentration
RadionucIdies (pCi/g)							
Americium-241	11	37	-0.0113 (U)	0.133	Nonparametric	0.0549	95% KM (Percentile Bootstrap)
Plutonium-238	11	39	-0.0015 (U)	0.14	Nonparametric	0.0376	95% KM (Percentile Bootstrap)
Plutonium-239/240	26	39	-0.0285 (UJ)	5.2 (J-)	Nonparametric	0.848	95% KM (Percentile Bootstrap)
Tritium	12	36	-0.0109 (U)	0.0423	Nonparametric	0.02	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-3
Exposure Point Concentrations for AOC 21-002(b) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Inorganic Chemicals (mg/kg)							
Aluminum	36	36	765	13600	Normal	8486	95% Student's-t
Arsenic	36	35	1.24 (J)	9.49	Nonparametric	3.805	95% KM (Chebyshev)
Barium	38	38	9.13	188	Gamma	92.65	95% Approximate Gamma
Cadmium	36	19	0.131 (J)	2.69 (U)	Nonparametric	0.403	95% KM (t)
Chromium	36	36	4.9	28.6	Gamma	14.85	95% Approximate Gamma
Cyanide (total)	36	14	0.088 (J)	1.49	Nonparametric	0.4	95% KM (t)
Lead	38	38	3.76 (J-)	451	Nonparametric	183.5	99% Chebyshev (Mean, Sd)
Nitrate	36	25	0.726 (J)	13.8	Nonparametric	3.481	95% KM (BCA)
Perchlorate	36	6	0.000696 (J)	0.00246 (U)	Nonparametric	0.00117	95% KM (t)
Selenium	40	16	0.029 (U)	8.27	Nonparametric	4.648	95% KM (Percentile Bootstrap)
Silver	36	27	0.048 (J)	2.15	Nonparametric	0.334	95% KM (BCA)
Zinc	38	38	7.8	262	Lognormal	78.6	95% H
Organic Chemicals (mg/kg)							
Acetone	18	2	0.00331 (U)	0.0279 (U)	n/a*	0.0123	Maximum detected concentration
Anthracene	38	4	0.0075 (J)	0.35 (U)	n/a	0.0149	Maximum detected concentration
Aroclor-1254	2	2	0.0394	0.0418	n/a	0.0418	Maximum detected concentration
Aroclor-1260	2	2	0.0148	0.017	n/a	0.017	Maximum detected concentration
Benzo(a)anthracene	38	1	0.0248 (U)	0.35 (U)	n/a	0.0654	Maximum detected concentration
Benzo(a)pyrene	38	3	0.0348 (U)	0.35 (U)	n/a	0.0807	Maximum detected concentration
Benzo(b)fluoranthene	38	7	0.0348 (U)	0.358	Nonparametric	0.168	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	38	2	0.0348 (U)	0.35 (U)	n/a	0.172	Maximum detected concentration
Benzo(k)fluoranthene	38	3	0.0348 (U)	0.41	n/a	0.41	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	38	3	0.085 (J)	1.99	n/a	1.99	Maximum detected concentration

Table H-2.2-3 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Chrysene	38	6	0.0348 (U)	0.35 (U)	Nonparametric	0.0594	95% KM (Percentile Bootstrap)
Di-n-butylphthalate	38	3	0.0433 (J)	1.53 (U)	n/a	0.47	Maximum detected concentration
Dimethylphthalate	38	1	0.12 (J)	1.59 (U)	n/a	0.12	Maximum detected concentration
Fluoranthene	38	16	0.0164 (J)	0.35 (U)	Nonparametric	0.0517	95% KM (Percentile Bootstrap)
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	2.63E-06	2.63E-06	n/a	2.63E-06	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	1.07E-06 (J)	1.07E-06 (J)	n/a	1.07E-06	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1	1	1.96E-07	1.96E-07	n/a	1.96E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	1.24E-07 (J)	1.24E-07 (J)	n/a	1.24E-07	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	9.43E-08 (J)	9.43E-08 (J)	n/a	9.43E-08	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	38	3	0.0348 (U)	0.35 (U)	n/a	0.166	Maximum detected concentration
Methyl-2-pentanone[4-]	18	1	0.00171 (J)	0.00853 (U)	n/a	0.00171	Maximum detected concentration
Methylene chloride	18	2	0.00266 (U)	0.00755 (U)	n/a	0.00547	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000025	0.000025	n/a	2.5E-05	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	2.78E-06 (J)	2.78E-06 (J)	n/a	2.78E-06	Maximum detected concentration
Pentachlorodibenzodioxin[1,2,3,7,8-]	1	1	8.52E-08	8.52E-08	n/a	8.52E-08	Maximum detected concentration
Pentachlorodibenzofuran[2,3,4,7,8-]	1	1	2.04E-07 (J)	2.04E-07 (J)	n/a	2.04E-07	Maximum detected concentration
Phenanthrene	38	3	0.0124 (J)	0.35 (U)	n/a	0.0368	Maximum detected concentration
Pyrene	38	14	0.0168 (J)	0.35 (U)	Nonparametric	0.0485	95% KM (t)
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	4.66E-07 (J)	4.66E-07 (J)	n/a	4.66E-07	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	18	1	0.000369 (U)	0.00341 (U)	n/a	0.000502	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	37	11	-0.0113 (U)	0.133	Nonparametric	0.0546	95% KM (Percentile Bootstrap)
Plutonium-238	40	11	-0.0015 (U)	0.14	Nonparametric	0.0373	95% KM (Percentile Bootstrap)
Plutonium-239/240	40	27	-0.0285 (UJ)	5.2 (J-)	Nonparametric	0.844	95% KM (Percentile Bootstrap)
Tritium	36	12	-0.0108561 (U)	0.042295	Nonparametric	0.0199	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-4
Exposure Point Concentrations for Consolidated Unit 21-006(c)-99 for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Barium	6	6	21.5	66.5	Normal	59.84	95% Student's-t
Chromium	6	6	2.08	7.72	Normal	6.719	95% Student's-t
Copper	6	6	2.51	6.71	Normal	5.627	95% Student's-t
Lead	6	6	10.9	34.4	Gamma	32.77	95% Approximate Gamma
Mercury	6	6	0.009 (J)	0.0209	Normal	0.0182	95% Student's-t
Nickel	6	6	1.67	4.4	Normal	3.55	95% Student's-t
Nitrate	8	7	1.2 (U)	66.1	Nonparametric	45.91	95% KM (t)
Perchlorate	6	1	0.00204 (U)	0.068 (U)	n/a*	0.0345	Maximum detected concentration
Selenium	6	2	0.721 (J)	1.54 (U)	n/a	1.3	Maximum detected concentration
Zinc	6	6	24.2	53.1	Normal	42.94	95% Student's-t
Organic Chemicals (mg/kg)							
Benzo(a)anthracene	6	1	0.0341 (U)	1.13 (U)	n/a	0.98	Maximum detected concentration
Benzo(a)pyrene	6	1	0.0341 (U)	1.13 (U)	n/a	0.948	Maximum detected concentration
Benzo(b)fluoranthene	6	3	0.0249 (J)	1.81	n/a	1.81	Maximum detected concentration
Benzo(g,h,i)perylene	6	1	0.0341 (UJ)	2.81 (J)	n/a	2.81	Maximum detected concentration
Benzo(k)fluoranthene	6	1	0.0341 (U)	1.13 (U)	n/a	0.635	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	6	2	0.079 (J)	8.73	n/a	8.73	Maximum detected concentration
Chrysene	6	1	0.0341 (U)	1.5	n/a	1.5	Maximum detected concentration
Fluoranthene	6	4	0.0364	2.92	n/a	2.92	Maximum detected concentration
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	2.19E-05	2.19E-05	n/a	2.19E-05	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	5.17E-06	5.17E-06	n/a	5.17E-06	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	1	1	2.89E-07 (J)	2.89E-07 (J)	n/a	2.89E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	1	1	3E-07 (J)	3E-07 (J)	n/a	3E-07	Maximum detected concentration

Table H-2.2-4 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1	1	8.57E-07 (J)	8.57E-07 (J)	n/a	8.57E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1	1	8.93E-07 (J)	8.93E-07 (J)	n/a	8.93E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1	1	2.51E-07 (J)	2.51E-07 (J)	n/a	2.51E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	2.46E-07 (J)	2.46E-07 (J)	n/a	2.46E-07	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	2.68E-07 (J)	2.68E-07 (J)	n/a	2.68E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	6	1	0.0341 (UJ)	2.25 (J)	n/a	2.25	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000241	0.000241	n/a	0.000241	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	1.59E-05	1.59E-05	n/a	1.59E-05	Maximum detected concentration
Pentachlorodibenzofuran[1,2,3,7,8-]	1	1	9.64E-08 (J)	9.64E-08 (J)	n/a	9.64E-08	Maximum detected concentration
Pentachlorodibenzofuran[2,3,4,7,8-]	1	1	1.9E-07 (J)	1.9E-07 (J)	n/a	1.9E-07	Maximum detected concentration
Phenanthrene	6	3	0.0146 (J)	1.38	n/a	1.38	Maximum detected concentration
Pyrene	6	4	0.0292 (J)	2.26	n/a	2.26	Maximum detected concentration
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	2.12E-07 (J)	2.12E-07 (J)	n/a	2.12E-07	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	6	5	0.0261 (U)	0.483	Nonparametric	0.308	95% KM (t)
Cesium-137	7	7	0.382	1.69	Gamma	1.144	95% Approximate Gamma
Plutonium-238	7	5	0.00797 (U)	0.162 (J)	Nonparametric	0.096	95% KM (t)
Plutonium-239/240	7	7	0.219	15.8 (J)	n/a	15.8	Maximum detected concentration
Uranium-234	7	7	0.785	3.39	Normal	2.249	95% Student's-t
Uranium-235/236	7	6	0.048 (U)	0.23	Nonparametric	0.154	95% KM (BCA)
Uranium-238	7	7	0.656	2.33	Normal	1.742	95% Student's-t

* n/a = Not applicable.

Table H-2.2-5
Exposure Point Concentrations for Consolidated Unit 21-006(c)-99 for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Antimony	1	19	0.331 (J)	1.33	n/a*	1.33	Maximum detected concentration
Barium	21	21	3.27	133	Nonparametric	70.96	95% KM (Chebyshev)
Chromium	21	21	1.06	9.67	Nonparametric	6.163	95% KM (t)
Copper	22	22	0.605 (J)	19.2 (J)	Nonparametric	8.834	95% KM (Chebyshev)
Cyanide (total)	1	21	0.106 (J)	8.42 (U)	n/a	0.106	Maximum detected concentration
Lead	21	21	4.48	34.4	Nonparametric	15.83	95% KM (BCA)
Mercury	17	21	0.0023 (J)	0.2	Nonparametric	0.0623	95% KM (Chebyshev)
Nickel	21	21	0.47	10.8	Nonparametric	5.629	95% KM (Chebyshev)
Nitrate	13	23	0.679 (J-)	66.1	Nonparametric	52.74	99% KM (Chebyshev)
Perchlorate	2	21	0.00131 (J)	0.068 (U)	n/a	0.0345	Maximum detected concentration
Selenium	11	21	0.67 (J)	3.55	Nonparametric	1.744	95% KM (t)
Zinc	21	21	13.8	1390	Nonparametric	379.8	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Benzo(a)anthracene	1	21	0.0338 (U)	1.13 (U)	n/a	0.98	Maximum detected concentration
Benzo(a)pyrene	2	21	0.0116 (J)	1.13 (U)	n/a	0.948	Maximum detected concentration
Benzo(b)fluoranthene	4	21	0.0156 (J)	1.81	n/a	1.81	Maximum detected concentration
Benzo(g,h,i)perylene	1	21	0.0338 (UJ)	2.81 (J)	n/a	2.81	Maximum detected concentration
Benzo(k)fluoranthene	2	21	0.0114 (J)	1.13 (U)	n/a	0.635	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	21	0.079 (J)	8.73	n/a	8.73	Maximum detected concentration
Chrysene	2	21	0.0184 (J)	1.5	n/a	1.5	Maximum detected concentration
Fluoranthene	6	21	0.0192 (J)	2.92	Nonparametric	0.481	95% KM (t)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.0000219	0.0000219	n/a	0.0000219	Maximum detected concentration

Table H-2.2-5 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.00000517	0.00000517	n/a	0.00000517	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	1	1	0.000000289 (J)	0.000000289 (J)	n/a	0.000000289	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	1	1	0.0000003 (J)	0.0000003 (J)	n/a	0.0000003	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	1	0.000000857 (J)	0.000000857 (J)	n/a	0.000000857	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	0.000000893 (J)	0.000000893 (J)	n/a	0.000000893	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	0.000000251 (J)	0.000000251 (J)	n/a	0.000000251	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	0.000000246 (J)	0.000000246 (J)	n/a	0.000000246	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	0.000000268 (J)	0.000000268 (J)	n/a	0.000000268	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	1	21	0.0338 (UJ)	2.25 (J)	n/a	2.25	Maximum detected concentration
Methylene Chloride	1	15	0.00223 (J)	0.106 (UJ)	n/a	0.00223	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.000241	0.000241	n/a	0.000241	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.0000159	0.0000159	n/a	0.0000159	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	1	1	9.64E-08 (J)	9.64E-08 (J)	n/a	0.0000000964	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	0.00000019 (J)	0.00000019 (J)	n/a	0.00000019	Maximum detected concentration
Phenanthrene	3	21	0.0146 (J)	1.38	n/a	1.38	Maximum detected concentration
Pyrene	6	21	0.0171 (J)	2.26	Nonparametric	0.381	95% KM (t)
Tetrachlorodibenzofuran [2,3,7,8-]	1	1	0.000000212 (J)	0.000000212 (J)	n/a	0.000000212	Maximum detected concentration

Table H-2.2-5 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Tetrachloroethene	1	15	0.00101 (U)	0.0212 (UJ)	n/a	0.00626	Maximum detected concentration
Toluene	1	15	0.000533 (J)	0.0212 (U)	n/a	0.000533	Maximum detected concentration
Xylene[1,2-]	1	15	0.000481 (J)	0.0212 (U)	n/a	0.000481	Maximum detected concentration
Xylene[1,3-]+Xylene[1,4-]	1	15	0.000566 (J)	0.0424 (U)	n/a	0.000566	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	10	22	-0.0156 (U)	5.17	Nonparametric	0.837	95% KM (t)
Cesium-137	9	23	-0.044 (U)	1.99	Nonparametric	0.827	95% KM (t)
Plutonium-238	10	27	-0.00832 (U)	0.586	Nonparametric	0.123	95% KM (t)
Plutonium-239/240	23	27	0.00282 (U)	69.3	Nonparametric	18.82	95% KM (Chebyshev)
Strontium-90	2	22	-0.121 (U)	0.49	n/a	0.49	Maximum detected concentration
Tritium	7	23	-0.0162 (U)	1.492 (J)	Nonparametric	0.254	95% KM (t)
Uranium-234	25	25	0.785	18.8	Nonparametric	5.56	95% KM (Chebyshev)
Uranium-235/236	15	25	0.0241 (U)	0.793	Nonparametric	0.179	95% KM (% Bootstrap)
Uranium-238	25	25	0.656	2.33	Nonparametric	1.182	95% KM (BCA)

* n/a = Not applicable.

Table H-2.2-6
Exposure Point Concentrations for Consolidated Unit 21-006(c)-99 for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	23	2	0.331 (U)	1.7	n/a*	1.7	Maximum detected concentration
Barium	29	29	3.27	133	Gamma	46.08	95% Approximate Gamma
Chromium	29	29	0.766	17	Gamma	8.151	95% Approximate Gamma
Copper	31	31	0.605 (J)	163 (J)	Nonparametric	60.65	99% Chebyshev (Mean, Sd)
Cyanide (total)	29	2	0.106 (J)	8.42 (U)	n/a	0.205	Maximum detected concentration
Lead	29	29	4.15	34.4	Gamma	13.54	95% Approximate Gamma
Mercury	29	24	0.0016 (J)	0.2	Nonparametric	0.0527	95% KM (Chebyshev)
Nickel	29	29	0.47	10.8	Gamma	4.186	95% Approximate Gamma
Nitrate	31	16	0.679 (J-)	66.1	Nonparametric	40.28	99% KM (Chebyshev)
Perchlorate	29	3	0.00131 (J)	0.068 (U)	n/a	0.0345	Maximum detected concentration
Selenium	29	16	0.67 (J)	3.55	Nonparametric	1.658	95% KM (t)
Zinc	29	29	13.8	1390	Nonparametric	283	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Anthracene	29	1	0.00966 (J)	1.13 (U)	n/a	0.00966	Maximum detected concentration
Benzo(a)anthracene	29	1	0.0337 (U)	1.13 (U)	n/a	0.98	Maximum detected concentration
Benzo(a)pyrene	29	2	0.0116 (J)	1.13 (U)	n/a	0.948	Maximum detected concentration
Benzo(b)fluoranthene	29	4	0.0156 (J)	1.81	n/a	1.81	Maximum detected concentration
Benzo(g,h,i)perylene	29	1	0.0337 (UJ)	2.81 (J)	n/a	2.81	Maximum detected concentration
Benzo(k)fluoranthene	29	2	0.0114 (J)	1.13 (U)	n/a	0.635	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	29	2	0.079 (J)	8.73	n/a	8.73	Maximum detected concentration
Chrysene	29	3	0.0184 (J)	1.5	n/a	1.5	Maximum detected concentration
Fluoranthene	29	8	0.0176 (J)	2.92	Nonparametric	0.347	95% KM (t)

Table H-2.2-6 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.0000219	0.0000219	n/a	2.19E-05	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.00000517	0.00000517	n/a	5.17E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	1	1	0.000000289 (J)	0.000000289 (J)	n/a	2.89E-07	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	1	1	0.0000003 (J)	0.0000003 (J)	n/a	3E-07	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	1	0.000000857 (J)	0.000000857 (J)	n/a	8.57E-07	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	0.000000893 (J)	0.000000893 (J)	n/a	8.93E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	0.000000251 (J)	0.000000251 (J)	n/a	2.51E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	0.000000246 (J)	0.000000246 (J)	n/a	2.46E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	0.000000268 (J)	0.000000268 (J)	n/a	2.68E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	29	1	0.0337 (UJ)	2.25 (J)	n/a	2.25	Maximum detected concentration
Methylene chloride	23	1	0.00223 (J)	0.106 (UJ)	n/a	0.00223	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.000241	0.000241	n/a	2.41E-04	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.0000159	0.0000159	n/a	1.59E-05	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	1	1	0.0000000964 (J)	0.0000000964 (J)	n/a	9.64E-08	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	0.00000019 (J)	0.00000019 (J)	n/a	1.9E-07	Maximum detected concentration
Phenanthrene	29	4	0.0146 (J)	1.38	n/a	1.38	Maximum detected concentration

Table H-2.2-6 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Pyrene	29	8	0.0154 (J)	2.26	Nonparametric	0.276	95% KM (t)
Tetrachlorodibenzofuran [2,3,7,8-]	1	1	0.000000212 (J)	0.000000212 (J)	n/a	2.12E-07	Maximum detected concentration
Tetrachloroethene	23	1	0.00101 (U)	0.0212 (UJ)	n/a	0.00626	Maximum detected concentration
Toluene	23	1	0.000533 (J)	0.0212 (U)	n/a	0.00053	Maximum detected concentration
Xylene[1,2-]	23	1	0.000481 (J)	0.0212 (U)	n/a	0.00048	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	23	1	0.000566 (J)	0.0424 (U)	n/a	0.00057	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	32	15	-0.0156 (U)	5.17	Nonparametric	0.724	95% KM (t)
Cesium-137	32	11	-0.044 (U)	1.99	Nonparametric	0.74	95% KM (t)
Plutonium-238	38	16	-0.00832 (U)	0.586	Nonparametric	0.107	95% KM (t)
Plutonium-239/240	38	33	0.00282 (U)	69.3	Nonparametric	15.5	95% KM (Chebyshev)
Strontium-90	31	3	-0.121 (U)	0.49	n/a	0.49	Maximum detected concentration
Tritium	33	14	-0.0162273 (U)	1.49154 (J)	Nonparametric	0.279	95% KM (t)
Uranium-234	36	36	0.785	18.8	Nonparametric	4.576	95% Chebyshev (Mean, Sd)
Uranium-235/236	36	22	0.0241 (U)	0.793	Nonparametric	0.167	95% KM (BCA)
Uranium-238	36	36	0.648	2.33	Normal	1.106	95% Modified-t

* n/a = Not applicable.

Table H-2.2-7
Exposure Point Concentrations for SWMU 21-009 for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum	Maximum	Distribution Type	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	8	8	12100	20700	Normal	17393	95% Student's-t
Barium	8	8	60.5 (J+)	196 (J+)	Normal	162	95% Student's-t
Chromium	8	8	8.75	16.7	Normal	13.68	95% Student's-t
Cyanide (total)	8	4	0.133 (J-)	0.709 (J-)	n/a*	0.709	Maximum detected concentration
Lead	8	8	9.78	38.7	Normal	22.92	95% Modified-t
Nitrate	10	8	0.66 (U)	8.44	Nonparametric	6.455	95% KM [t]
Perchlorate	8	1	0.000659 (J)	0.00224 (U)	n/a	0.000659	Maximum detected concentration
Selenium	8	8	7.96	12.2	Normal	11.44	95% Student's-t
Zinc	8	8	30.6	113	Normal	67.2	95% Modified-t
Organic Chemicals (mg/kg)							
Benzo(a)pyrene	8	1	0.036 (U)	0.372 (UJ)	n/a	0.0686	Maximum detected concentration
Benzo(b)fluoranthene	8	1	0.036 (U)	0.372 (UJ)	n/a	0.16	Maximum detected concentration
Benzo(k)fluoranthene	8	1	0.036 (U)	0.372 (UJ)	n/a	0.0573	Maximum detected concentration
Fluoranthene	8	3	0.0312 (J)	0.372 (U)	n/a	0.103	Maximum detected concentration
Pyrene	8	4	0.0149 (J)	0.372 (U)	n/a	0.162	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	9	4	-0.0152 (U)	0.108	n/a	0.108	Maximum detected concentration
Tritium	8	8	0.024135	0.056946	Normal	0.0445	95% Student's-t
Plutonium-239/240	10	8	0.0133 (U)	1.15	Nonparametric	0.479	95% KM [BCA]

* n/a = Not applicable.

Table H-2.2-8
Exposure Point Concentrations for SWMU 21-009 for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic chemicals (mg/kg)							
Aluminum	16	16	4640	20700	Normal	17222	95% Student's-t
Barium	16	16	49.3 (J+)	250 (J+)	Normal	153	95% Student's-t
Chromium	16	16	8.75	24.7	Gamma	14.37	95% Approximate Gamma
Cyanide (total)	6	16	0.105 (J-)	0.709 (J-)	Nonparametric	0.315	95% KM (t)
Lead	16	16	4.92	38.7	Normal	16.74	95% Modified-t
Nitrate	16	18	0.66 (U)	19.3 (J-)	Nonparametric	6.789	95% KM (BCA)
Perchlorate	2	16	0.000579 (J)	0.00229 (U)	n/a*	0.000659	Maximum detected concentration
Selenium	16	16	2.11	12.2	Normal	10.63	95% Student's-t
Zinc	16	16	14.3	113	Gamma	49.36	95% Approximate Gamma
Organic chemicals (mg/kg)							
Anthracene	1	16	0.0149 (J)	0.372 (U)	n/a	0.0149	Maximum detected concentration
Benzo(a)pyrene	1	16	0.0352 (U)	0.372 (UJ)	n/a	0.0686	Maximum detected concentration
Benzo(b)fluoranthene	1	16	0.0352 (U)	0.372 (UJ)	n/a	0.16	Maximum detected concentration
Benzo(k)fluoranthene	1	16	0.0352 (U)	0.372 (UJ)	n/a	0.0573	Maximum detected concentration
Chloroform	1	8	0.00102 (U)	0.00175 (U)	n/a	0.00119	Maximum detected concentration
Dichloroethene[1,1-]	2	8	0.000614 (J)	0.00175 (U)	n/a	0.000891	Maximum detected concentration

Table H-2.2-8 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Fluoranthene	3	16	0.0312 (J)	0.372 (U)	n/a	0.103	Maximum detected concentration
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	0.000011	0.000011	n/a	0.000011	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	1.55E-06 (J)	1.55E-06 (J)	n/a	0.00000155	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	1	1	3.47E-07 (J)	3.47E-07 (J)	n/a	0.000000347	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1	1	6.74E-07 (J)	6.74E-07 (J)	n/a	0.000000674	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1	1	5.52E-07 (J)	5.52E-07 (J)	n/a	0.000000552	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	1.07E-07 (J)	1.07E-07 (J)	n/a	0.000000107	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	1.45E-07 (J)	1.45E-07 (J)	n/a	0.000000145	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000087	0.000087	n/a	0.000087	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	3.66E-06 (J)	3.66E-06 (J)	n/a	0.00000366	Maximum detected concentration
Pentachlorodibenzodioxin[1,2,3,7,8-]	1	1	1.77E-07 (J)	1.77E-07 (J)	n/a	0.000000177	Maximum detected concentration
Pyrene	5	16	0.0145 (J)	0.372 (U)	Nonparametric	0.051	95% KM (t) UCL
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	1.47E-07 (J)	1.47E-07 (J)	n/a	0.000000147	Maximum detected concentration
Tetrachloroethene	1	8	0.000683 (J)	0.00175 (U)	n/a	0.000683	Maximum detected concentration

Table H-2.2-8 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Radionuclides (pCi/g)							
Americium-241	6	17	-0.0152 (U)	0.31	Nonparametric	0.231	99% KM (Chebyshev)
Plutonium-239/240	14	18	-0.00142 (U)	1.15	Nonparametric	0.305	95% KM (Percentile Bootstrap)
Tritium	15	16	-0.00412 (U)	0.0607	Nonparametric	0.0435	95% KM (t)

* n/a = Not applicable.

Table H-2.2-9
Exposure Point Concentrations for SWMU 21-009 for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	16	16	4640	20700	Normal	17222	95% Student's-t
Barium	16	16	49.3 (J+)	250 (J+)	Normal	153	95% Student's-t
Chromium	16	16	8.75	24.7	Gamma	14.37	95% Approximate Gamma
Cyanide (total)	16	6	0.105 (J-)	0.709 (J-)	Nonparametric	0.315	95% KM [t]
Lead	16	16	4.92	38.7	Normal	16.74	95% Modified-t
Nitrate	21	16	0.66 (U)	19.3 (J-)	Nonparametric	6.179	95% KM [BCA]
Perchlorate	16	2	0.000579 (J)	0.00229 (U)	n/a*	0.000659	Maximum detected concentration
Selenium	16	16	2.11	12.2	Normal	10.63	95% Student's-t
Zinc	16	16	14.3	113	Gamma	49.36	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Anthracene	16	1	0.0149 (J)	0.372 (U)	n/a	0.0149	Maximum detected concentration
Benzo(a)pyrene	16	1	0.0352 (U)	0.372 (UJ)	n/a	0.0686	Maximum detected concentration
Benzo(b)fluoranthene	16	1	0.0352 (U)	0.372 (UJ)	n/a	0.16	Maximum detected concentration
Benzo(k)fluoranthene	16	1	0.0352 (U)	0.372 (UJ)	n/a	0.0573	Maximum detected concentration
Chloroform	8	1	0.00102 (U)	0.00175 (U)	n/a	0.00119	Maximum detected concentration
Dichloroethene[1,1-]	8	2	0.000614 (J)	0.00175 (U)	n/a	0.000891	Maximum detected concentration
Fluoranthene	16	3	0.0312 (J)	0.372 (U)	n/a	0.103	Maximum detected concentration
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	0.000011	0.000011	n/a	1.1E-05	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	1.55E-06 (J)	1.55E-06 (J)	n/a	1.55E-06	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	1	1	3.47E-07 (J)	3.47E-07 (J)	n/a	3.47E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1	1	6.74E-07 (J)	6.74E-07 (J)	n/a	6.74E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1	1	5.52E-07 (J)	5.52E-07 (J)	n/a	5.52E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	1.07E-07 (J)	1.07E-07 (J)	n/a	1.07E-07	Maximum detected concentration

Table H-2.2-9 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	1.45E-07 (J)	1.45E-07 (J)	n/a	1.45E-07 (J)	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000087	0.000087	n/a	0.000087	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	3.66E-06 (J)	3.66E-06 (J)	n/a	3.66E-06 (J)	Maximum detected concentration
Pentachlorodibenzodioxin[1,2,3,7,8-]	1	1	1.77E-07 (J)	1.77E-07 (J)	n/a	1.77E-07 (J)	Maximum detected concentration
Pyrene	16	5	0.0145	0.0145 (J)	Nonparametric	0.0145	95% KM [t]
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	1.47E-07 (J)	1.47E-07 (J)	n/a	1.47E-07 (J)	Maximum detected concentration
Tetrachloroethene	8	1	0.000683	0.000683 (J)	n/a	0.000683	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	19	6	0.0381	-0.0152 (U)	Nonparametric	0.0381	99% KM [Chebyshev]
Plutonium-239/240	19	14	0.0216	-0.00142 (U)	Nonparametric	0.0216	95% KM [Percentile Bootstrap]
Tritium	16	15	0.0152	-0.00411764 (U)	Nonparametric	0.0152	95% KM [t]

* n/a = Not applicable.

Table H-2.2-10
Exposure Point Concentrations for SWMU 21-012(b) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	22	22	6410	30800 (J+)	Normal	12258	95% Modified-t
Antimony	9	5	0.128 (J-)	0.47 (UJ)	Nonparametric	0.239	95% KM (t)
Arsenic	22	22	1.62 (J)	4.46	Gamma	2.696	95% Approximate Gamma
Barium	22	22	47.4	135 (J+)	Normal	88.79	95% Student's-t
Beryllium	22	22	0.309	1.74	Normal	0.719	95% Modified-t
Cadmium	22	16	0.112 (J)	0.712	Nonparametric	0.302	95% KM (Percentile Bootstrap)
Calcium	22	22	923	10800 (J)	Gamma	4391	95% Approximate Gamma
Chromium	22	22	5.01	17.8	Gamma	9.324	95% Approximate Gamma
Cobalt	22	22	0.846	4.02	Normal	2.334	95% Student’s-t
Copper	23	23	8.77	218	Lognormal	115.6	95% H
Cyanide (total)	22	11	0.0855 (J)	1.56	Nonparametric	0.344	95% KM (Percentile Bootstrap)
Iron	22	22	5270 (J-)	22500	Gamma	10861	95% Approximate Gamma
Lead	23	23	8.35	69.5	Gamma	25.59	95% Approximate Gamma
Lithium	11	11	5.9	27	Gamma	14.85	95% Approximate Gamma
Mercury	22	22	0.0224	4.03	Nonparametric	2.453	99% Chebyshev (Mean, Sd)
Molybdenum	11	11	0.587	2.15	Gamma	1.299	95% Approximate Gamma
Nickel	12	12	3.16 (J-)	12 (J-)	Gamma	6.224	95% Approximate Gamma
Nitrate	22	18	0.803 (J)	12.9	Nonparametric	5.005	95% KM (Chebyshev)
Perchlorate	22	16	0.000669 (J)	0.00397 (J-)	Nonparametric	0.00183	95% KM (BCA)
Selenium	22	9	0.661 (U)	1.71 (U)	Nonparametric	0.956	95% KM (t)
Strontium	23	23	9.55	101	Gamma	34.68	95% Approximate Gamma
Uranium	22	22	0.596	8.01	Gamma	2.29	95% Approximate Gamma
Vanadium	22	22	6.49	30	Normal	14.21	95% Modified-t

Table H-2.2-10 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Zinc	24	24	31.7	314	Gamma	135.3	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Benzo(a)anthracene	22	1	0.024 (J)	0.0409 (U)	n/a*	0.024	Maximum detected concentration
Benzo(b)fluoranthene	22	1	0.0161 (J)	0.0409 (U)	n/a	0.0161	Maximum detected concentration
Chrysene	22	1	0.0306 (J)	0.0409 (U)	n/a	0.0306	Maximum detected concentration
Fluoranthene	22	6	0.0137 (J)	0.0522	Nonparametric	0.0209	95% KM (Percentile Bootstrap)
Phenanthrene	22	2	0.016 (J)	0.0409 (U)	n/a	0.0264	Maximum detected concentration
Pyrene	22	8	0.0134 (J)	0.0596	Nonparametric	0.022	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	22	18	0.0191 (U)	0.521	Nonparametric	0.175	95% KM (BCA)
Cesium-134	9	1	0.0411 (U)	0.128	n/a	0.128	Maximum detected concentration
Cesium-137	22	22	0.0992	2.2	Nonparametric	0.758	95% Chebyshev (Mean, Sd)
Plutonium-238	22	3	0 (U)	0.0971	n/a	0.0971	Maximum detected concentration
Plutonium-239/240	22	22	0.163 (J)	2	Gamma	0.945	95% Approximate Gamma
Tritium	22	21	0.026112	0.07181	Nonparametric	0.0534	95% KM (t)
Uranium-234	22	22	0.883	3.39	Normal	1.677	95% Modified-t
Uranium-235/236	22	21	0.0573 (U)	0.137	Nonparametric	0.096	95% KM (BCA)
Uranium-238	22	22	0.961	2.68	Normal	1.541	95% Modified-t

* n/a = Not applicable.

Table H-2.2-11
Exposure Point Concentrations for SWMU 21-012(b) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	75	75	695 (J-)	30800 (J+)	Gamma	10263	95% Approximate Gamma
Antimony	12	49	0.121 (J-)	0.507 (U)	Nonparametric	0.193	95% KM (t)
Arsenic	75	75	1.24 (J)	6.56	Normal	2.823	95% Student's-t
Barium	75	75	9.4	222	Normal	77.73	95% Student's-t
Beryllium	75	75	0.179	2.01	Gamma	0.654	95% Approximate Gamma
Cadmium	30	75	0.112 (J)	1.4 (J)	Nonparametric	0.296	95% KM (t)
Calcium	73	73	214	14700 (J)	Nonparametric	3571	95% KM (BCA)
Chromium	76	76	1.04	90	Nonparametric	13.29	95% KM (BCA)
Cobalt	74	75	0.236 (J)	5.06	Nonparametric	1.954	95% KM (Percentile Bootstrap)
Copper	77	77	1.22	1320	Nonparametric	135.7	95% KM (Chebyshev)
Cyanide (total)	13	74	0.0855 (J)	1.56	Nonparametric	0.199	95% KM (% Bootstrap)
Iron	75	75	3580 (J)	36700 (J-)	Normal	10365	95% Modified-t
Lead	76	76	1.54	108	Nonparametric	17.8	95% KM (BCA)
Lithium	53	53	2.5 (J+)	27.6 (J+)	Nonparametric	11.62	95% KM (BCA)
Mercury	74	75	0.0041 (J)	9.68	Nonparametric	1.377	97.5% KM (Chebyshev)
Molybdenum	52	53	0.288 (U)	3.81	Nonparametric	1.159	95% KM (BCA)
Nickel	55	55	1.3 (J+)	12 (J-)	Nonparametric	5.397	95% KM (BCA)
Nitrate	57	75	0.509 (J)	19.5 (J-)	Nonparametric	2.771	95% KM (BCA)
Perchlorate	31	75	0.000537 (J-)	0.00397 (J-)	Nonparametric	0.00126	95% KM (t)
Selenium	24	75	0.651 (J)	7.49 (U)	Nonparametric	0.974	95% KM (t)
Strontium	76	76	1.24	101	Nonparametric	26.77	95% KM (BCA)
Uranium	75	75	0.39	8.01	Nonparametric	2.153	95% Chebyshev (Mean, Sd)
Vanadium	75	75	1.84	30	Nonparametric	14.93	95% Chebyshev (Mean, Sd)

Table H-2.2-11 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Zinc	78	78	13.1	615	Nonparametric	96.56	95% KM (BCA)
Organic Chemicals (mg/kg)							
Acetone	7	53	0.0036 (J)	0.0639	Nonparametric	0.00813	95% KM (t)
Aroclor-1260	1	14	0.0015 (J)	0.0417 (U)	n/a*	0.0015	Maximum detected concentration
Benzo(a)anthracene	1	75	0.024 (J)	0.0425 (U)	n/a	0.024	Maximum detected concentration
Benzo(b)fluoranthene	1	75	0.0161 (J)	0.0425 (U)	n/a	0.0161	Maximum detected concentration
Benzoic Acid	1	68	0.629 (J)	0.85 (U)	n/a	0.629	Maximum detected concentration
Chloroform	3	53	0.000219 (J)	0.0075 (U)	n/a	0.000365	Maximum detected concentration
Chrysene	1	75	0.0306 (J)	0.0425 (U)	n/a	0.0306	Maximum detected concentration
Fluoranthene	9	75	0.0129 (J)	0.0522	Nonparametric	0.0169	95% KM (t)
Isopropyltoluene[4-]	3	53	0.000503 (J)	0.0075 (U)	n/a	0.00153	Maximum detected concentration
Methylene chloride	2	53	0.00315 (J)	0.0075 (U)	n/a	0.00476	Maximum detected concentration
Phenanthrene	2	75	0.016 (J)	0.0425 (U)	n/a	0.0264	Maximum detected concentration
Pyrene	12	75	0.0134 (J)	0.0596	Nonparametric	0.0201	95% KM (% Bootstrap)
Toluene	30	55	0.00021 (U)	0.0325	Nonparametric	0.00484	95% KM (BCA)
Trichloroethene	1	53	0.000322 (J)	0.0075 (U)	n/a	0.000322	Maximum detected concentration
Trimethylbenzene[1,2,4-]	2	53	0.000262 (J)	0.0075 (U)	n/a	0.000281	Maximum detected concentration
Xylene[1,3-]+Xylene[1,4-]	3	48	0.000374 (J)	0.00255 (U)	n/a	0.000553	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	30	75	-0.016 (U)	6.41	Nonparametric	0.689	97.5% KM (Chebyshev)
Cesium-134	1	31	-0.00623 (U)	0.141 (U)	n/a	0.128	Maximum detected concentration
Cesium-137	33	75	-0.0977 (U)	2.2	Nonparametric	0.39	97.5% KM (Chebyshev)
Plutonium-238	6	75	-0.00887 (U)	0.301	Nonparametric	0.107	95% KM (Percentile Bootstrap)
Plutonium-239/240	52	75	-0.00178 (U)	2	Nonparametric	0.439	95% KM (Percentile Bootstrap)

Table H-2.2-11 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Tritium	71	75	0.0162 (U)	0.198	Nonparametric	0.0751	95% KM (BCA)
Uranium-234	75	75	0.703	3.39	Normal	1.401	95% Modified-t
Uranium-235/236	62	75	-0.0266 (U)	0.182	Nonparametric	0.0831	95% KM (BCA)
Uranium-238	75	75	0.789	3.08	Normal	1.344	95% Modified-t

* n/a = Not applicable.

Table H-2.2-12
Exposure Point Concentrations for SWMU 21-012(b) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	84	84	399 (J+)	30800 (J+)	Nonparametric	11338	95% Chebyshev (Mean, Sd)
Antimony	58	12	0.121 (J-)	0.507 (U)	Nonparametric	0.193	95% KM (t)
Arsenic	84	84	1.24 (J)	6.58	Gamma	2.866	95% Approximate Gamma
Barium	84	84	7.83	222	Normal	76.41	95% Student's-t
Beryllium	84	84	0.179	2.01	Gamma	0.638	95% Approximate Gamma
Cadmium	84	30	0.112 (J)	1.4 (J)	Nonparametric	0.293	95% KM (Percentile Bootstrap)
Calcium	82	82	214	39300 (J)	Nonparametric	6813	95% Chebyshev (Mean, Sd)
Chromium	85	85	0.518 (J)	90	Nonparametric	16.95	95% Chebyshev (Mean, Sd)
Cobalt	84	82	0.236 (J)	5.06	Nonparametric	1.857	95% KM (t)
Copper	87	87	0.887 (J)	1320	Lognormal	75.17	95% H
Cyanide (total)	83	14	0.0855 (J)	1.56	Nonparametric	0.194	95% KM (Percentile Bootstrap)
Iron	84	84	3580 (J)	36700 (J-)	Normal	10016	95% Modified-t
Lead	86	86	1.54	108	Lognormal	15.96	95% H
Lithium	61	61	2.5 (J+)	27.6 (J+)	Gamma	11.32	95% Approximate Gamma
Mercury	84	81	0.0028 (U)	9.68	Nonparametric	1.239	97.5% KM (Chebyshev)
Molybdenum	61	60	0.288 (U)	3.81	Nonparametric	1.219	95% KM (BCA)
Nickel	64	64	1.3 (J+)	12 (J-)	Gamma	5.418	95% Approximate Gamma
Nitrate	85	66	0.509 (J)	34.2 (J-)	Nonparametric	3.503	95% KM (BCA)
Perchlorate	84	34	0.000537 (J-)	0.00397 (J-)	Nonparametric	0.00125	95% KM (t)
Selenium	84	26	0.645 (J)	7.49 (U)	Nonparametric	0.954	95% KM (t)
Strontium	85	85	1.24	101	Gamma	27.77	95% Approximate Gamma
Uranium	84	84	0.39	8.01	Nonparametric	2.042	95% Chebyshev (Mean, Sd)

Table H-2.2-12 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Vanadium	84	84	1.84	30	Nonparametric	14.54	95% Chebyshev (Mean, Sd)
Zinc	87	87	12.4	615	Nonparametric	112.1	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acetone	62	10	0.00319 (J)	0.0639	Nonparametric	0.00729	95% KM (t)
Aroclor-1260	19	1	0.0015(J)	0.0015(J)	n/a*	0.0015	Maximum detected concentration
Benzo(a)anthracene	84	1	0.024 (J)	0.0425 (U)	n/a	0.024	Maximum detected concentration
Benzo(b)fluoranthene	84	1	0.0161 (J)	0.0425 (U)	n/a	0.0161	Maximum detected concentration
Benzoic acid	76	1	0.629 (J)	0.85 (U)	n/a	0.629	Maximum detected concentration
Chloroform	62	4	0.000219 (J)	0.0075 (U)	n/a	0.00037	Maximum detected concentration
Chrysene	84	1	0.0306 (J)	0.0425 (U)	n/a	0.0306	Maximum detected concentration
Dichlorobenzene[1,4-]	146	1	0.00042 (J)	0.425 (U)	n/a	0.00042	Maximum detected concentration
Fluoranthene	84	9	0.0129 (J)	0.0522	Nonparametric	0.0168	95% KM (Percentile Bootstrap)
Isopropyltoluene[4-]	62	3	0.000503 (J)	0.0075 (U)	n/a	0.00153	Maximum detected concentration
Methylene chloride	62	2	0.00315 (J)	0.0075 (U)	n/a	0.00476	Maximum detected concentration
Phenanthrene	84	2	0.016 (J)	0.0425 (U)	n/a	0.0264	Maximum detected concentration
Pyrene	84	12	0.0134 (J)	0.0596	Nonparametric	0.02	95% KM (Percentile Bootstrap)
Toluene	64	34	0.00021 (U)	0.0325	Nonparametric	0.0043	95% KM (BCA)
Trichloroethene	62	1	0.000322 (J)	0.0075 (U)	n/a	0.00032	Maximum detected concentration
Trimethylbenzene[1,2,4-]	62	2	0.000262 (J)	0.0075 (U)	n/a	0.00028	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	57	3	0.000374 (J)	0.00255 (U)	n/a	0.00055	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	84	31	-0.016 (U)	6.41	Nonparametric	0.675	97.5% KM (Chebyshev)
Cesium-134	34	1	-0.00623 (U)	0.141 (U)	n/a	0.128	Maximum detected concentration
Cesium-137	84	34	-0.0977 (U)	2.2	Nonparametric	0.36	97.5% KM (Chebyshev)
Plutonium-238	86	8	-0.00887 (U)	0.301	Nonparametric	0.0373	95% KM (t)
Plutonium-239/240	86	56	-0.00913 (UJ)	2	Nonparametric	0.388	95% KM (Percentile Bootstrap)

Table H-2.2-12 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Tritium	84	80	0.0162222 (U)	0.223902	Nonparametric	0.0802	95% KM (BCA)
Uranium-234	84	84	0.703	3.39	Normal	1.364	95% Modified-t
Uranium-235/236	84	68	-0.0266 (U)	0.182	Nonparametric	0.0945	97.5% KM (Chebyshev)
Uranium-238	84	84	0.789	3.08	Normal	1.312	95% Modified-t

* n/a = Not applicable.

Table H-2.2-13
Exposure Point Concentrations for SWMU 21-013(c) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	25	25	488(J+)	29300	Normal	15903	95% Student's-t
Arsenic	25	25	1.59	7.36	Normal	3.881	95% Student's-t
Barium	25	25	5.95	211	Normal	119.6	95% Student's-t
Cadmium	25	14	0.112(J)	2.59(U)	Nonparametric	0.223	95% KM (t)
Chromium	25	25	3.37	14.1	Normal	10.43	95% Student's-t
Lead	25	24	1(U)	26.2	Nonparametric	16.81	95% KM (Chebyshev)
Mercury	25	24	0.0069(J)	2.49	Nonparametric	0.741	97.5% KM (Chebyshev)
Nickel	25	25	1.03	10.7	Nonparametric	8.511	95% Chebyshev (Mean, Sd)
Nitrate	25	19	0.781(J-)	5.7	Nonparametric	2.493	95% KM (Percentile Bootstrap)
Perchlorate	25	7	0.00053(U)	0.00227(U)	Nonparametric	0.00114	95% KM (Percentile Bootstrap)
Selenium	27	12	0.028(U)	6.14	Nonparametric	2.611	95% KM (t)
Thallium	25	21	0.0851(J)	0.253	Nonparametric	0.193	95% KM (t)
Uranium	25	25	0.572	5.56(J+)	Normal	1.553	95% Modified-t
Vanadium	25	25	1.15	35.1	Normal	22.4	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	27	4	0.0145(J)	0.38(U)	Nonparametric	0.0194	95% KM (t)
Anthracene	27	7	0.0105(J)	0.38(U)	Nonparametric	0.026	95% KM (t)
Aroclor-1254	25	5	0.0016(J)	0.0695(U)	Nonparametric	0.00444	95% KM (Percentile Bootstrap)
Aroclor-1260	25	11	0.00132(J)	0.0695(U)	Nonparametric	0.00236	95% KM (t)
Benzo(a)anthracene	27	1	0.034(U)	0.38(U)	n/a*	0.08	Maximum detected concentration
Benzo(a)pyrene	27	11	0.0172(J)	0.38(U)	Nonparametric	0.0446	95% KM (t)
Benzo(b)fluoranthene	27	15	0.0125(J)	0.236(J)	Nonparametric	0.0828	95% KM (t)
Benzo(k)fluoranthene	27	3	0.034(U)	0.18(J)	n/a	0.18	Maximum detected concentration
Benzo(g,h,i)perylene	27	8	0.0114 (J)	0.38(UJ)	Nonparametric	0.0464	95% KM (Percentile Bootstrap)
Benzoic acid	25	6	0.432 (J)	0.758(U)	Nonparametric	0.464	95% KM (t)

Table H-2.2-13 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	27	2	0.12 (J)	0.38(U)	n/a	0.355	Maximum detected concentration
Chloroform	2	1	0.000287 (J)	0.00105(U)	n/a	0.000287	Maximum detected concentration
Chrysene	27	11	0.0172 (J)	0.38(U)	Nonparametric	0.059	95% KM (Percentile Bootstrap)
Fluoranthene	27	18	0.0149 (J)	0.38(U)	Nonparametric	0.0995	95% KM (Percentile Bootstrap)
Fluorene	27	3	0.0105 (J)	0.38(U)	n/a	0.0214	Maximum detected concentration
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	1.32E-05	1.32E-05	n/a	0.0000132	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	0.0000024 (J)	0.0000024 (J)	n/a	0.0000024	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1	1	0.000000537 (J)	0.000000537 (J)	n/a	0.000000537	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1	1	0.000000487 (J)	0.000000487 (J)	n/a	0.000000487	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1	1	0.000000393 (J)	0.000000393 (J)	n/a	0.000000393	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	0.000000214 (J)	0.000000214 (J)	n/a	0.000000214	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	0.000000225 (J)	0.000000225 (J)	n/a	0.000000225	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	27	7	0.017 (J)	0.38(UJ)	Nonparametric	0.0436	95% KM (Percentile Bootstrap)
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000112	0.000112	n/a	0.000112	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	0.00000521 (J)	0.00000521 (J)	n/a	0.00000521	Maximum detected concentration
Pentachlorodibenzofuran[2,3,4,7,8-]	1	1	0.000000269 (J)	0.000000269 (J)	n/a	0.000000269	Maximum detected concentration
Phenanthrene	27	16	0.0117 (J)	0.38(U)	Nonparametric	0.0637	95% KM (% Bootstrap)
Pyrene	27	19	0.011 (J)	0.384	Nonparametric	0.102	95% KM (Percentile Bootstrap)
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	0.000000256 (J)	0.000000256 (J)	n/a	0.000000256	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	30	10	-0.0208(U)	0.0857	Nonparametric	0.0437	95% KM (Percentile Bootstrap)
Cesium-137	24	19	0.00518(U)	1.2	Nonparametric	0.386	95% KM (BCA)
Plutonium-239/240	26	22	-0.0184(U)	0.728	Nonparametric	0.191	95% KM (BCA)
Strontium-90	25	1	-0.0636(U)	0.157(U)	n/a	0.108	Maximum detected concentration
Tritium	25	25	0.016144	0.401572	Gamma	0.151	95% Approximate Gamma
Uranium-235/236	25	19	0.0063(U)	0.113	Nonparametric	0.0668	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-14
Exposure Point Concentrations for SWMU 21-013(c) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	46	46	485 (J+)	34800 (J+)	Normal	14425	95% Student's-t
Arsenic	46	46	1.1 (J)	7.36	Gamma	3.802	95% Approximate Gamma
Barium	46	46	5.95	214	Normal	108.7	95% Student's-t
Cadmium	19	46	0.112 (J)	2.73 (U)	Nonparametric	0.214	95% KM (t)
Chromium	46	46	2.39	23.8	Gamma	10.42	95% Approximate Gamma
Lead	44	46	1 (U)	26.5	Nonparametric	14.13	95% KM (Chebyshev)
Mercury	45	46	0.006 (J)	2.49	Nonparametric	0.319	95% KM (Chebyshev)
Nickel	46	46	1.03	12.4	Normal	6.66	95% Student's-t
Nitrate	28	46	0.776 (J)	5.7	Nonparametric	1.889	95% KM (BCA)
Perchlorate	17	46	0.00053 (U)	0.00726	Nonparametric	0.00171	95% KM (t)
Selenium	20	48	0.028 (U)	6.14	Nonparametric	2.089	95% KM (t)
Thallium	35	46	0.0851 (J)	0.319	Nonparametric	0.19	95% KM (t)
Uranium	46	46	0.572	5.56 (J+)	Normal	1.275	95% Modified-t
Vanadium	46	46	1.15	35.1	Nonparametric	23.07	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	4	48	0.0145 (J)	0.38 (U)	n/a*	0.0366	Maximum detected concentration
Anthracene	8	48	0.00703 (J)	0.38 (U)	Nonparametric	0.024	95% KM (t)
Aroclor-1254	5	46	0.0016 (J)	0.0695 (U)	Nonparametric	0.00416	95% KM (Percentile Bootstrap) UCL
Aroclor-1260	11	46	0.00132 (J)	0.0695 (U)	Nonparametric	0.00227	95% KM (t)
Benzo(a)anthracene	1	48	0.034 (U)	0.38 (U)	n/a	0.08	Maximum detected concentration
Benzo(a)pyrene	12	48	0.0172 (J)	0.38 (U)	Nonparametric	0.0346	95% KM (t)
Benzo(b)fluoranthene	17	48	0.0111 (J)	0.236 (J)	Nonparametric	0.0564	95% KM (t)
Benzo(g,h,i)perylene	8	48	0.0114 (J)	0.38 (UJ)	Nonparametric	0.0414	95% KM (Percentile Bootstrap)

Table H-2.2-14 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(k)fluoranthene	3	48	0.034 (U)	0.18 (J)	n/a	0.18	Maximum detected concentration
Benzoic Acid	8	46	0.432 (J)	0.79 (U)	Nonparametric	0.458	95% KM (t)
Bis(2-ethylhexyl)phthalate	2	48	0.12 (J)	0.38 (U)	n/a	0.355	Maximum detected concentration
Chloroform	1	23	0.000287 (J)	0.00119 (U)	n/a	0.000287	Maximum detected concentration
Chrysene	12	48	0.0172 (J)	0.38 (U)	Nonparametric	0.0462	95% KM (Percentile Bootstrap)
Fluoranthene	21	48	0.0117 (J)	0.38 (U)	Nonparametric	0.0651	95% KM (t)
Fluorene	3	48	0.0105 (J)	0.38 (U)	n/a	0.0214	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	2	2	0.0000012 (J)	0.0000132	n/a	0.0000132	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	2	2	2.55E-07 (J)	0.0000024 (J)	n/a	0.0000024	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	2	0.00000015 (U)	5.37E-07 (J)	n/a	5.37E-07	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	2	0.000000146 (U)	4.87E-07 (J)	n/a	4.87E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	2	2	7.54E-08 (J)	3.93E-07 (J)	n/a	3.93E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	2	0.0000000713 (U)	2.14E-07 (J)	n/a	2.14E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	2	0.000000077 (U)	2.25E-07 (J)	n/a	2.25E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	7	48	0.017 (J)	0.38 (UJ)	Nonparametric	0.0382	95% KM (Percentile Bootstrap)
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	2	2	0.0000108	0.000112	n/a	0.000112	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	2	0.000000899 (U)	5.21E-06 (J)	n/a	5.21E-06	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	2	0.0000000803 (U)	2.69E-07 (J)	n/a	2.69E-07	Maximum detected concentration
Phenanthrene	17	48	0.0117 (J)	0.38 (U)	Nonparametric	0.0453	95% KM (% Bootstrap)

Table H-2.2-14 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Pyrene	22	48	0.011 (J)	0.384	Nonparametric	0.0679	95% KM (t)
Tetrachlorodibenzofuran [2,3,7,8-]	1	2	0.000000107 (U)	2.56E-07 (J)	n/a	2.56E-07	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	11	51	-0.0208 (U)	0.0857	Nonparametric	0.0418	95% KM (Percentile Bootstrap)
Cesium-137	20	44	-0.0433 (U)	1.2	Nonparametric	0.254	95% KM (t)
Plutonium-239/240	24	47	-0.0193 (U)	0.728	Nonparametric	0.128	95% KM (t)
Strontium-90	1	46	-0.0636 (U)	0.157 (U)	n/a	0.108	Maximum detected concentration
Tritium	46	46	0.0161	0.402	Gamma	0.116	95% Approximate Gamma
Uranium-235/236	37	46	0.0063 (U)	0.113	Nonparametric	0.0651	95% KM (BCA)

* n/a = Not applicable.

Table H-2.2-15
Exposure Point Concentrations for SWMU 21-013(c) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	46	46	485 (J+)	34800 (J+)	Normal	14425	95% Student's-t
Arsenic	46	46	1.1 (J)	7.36	Gamma	3.802	95% Approximate Gamma
Barium	47	47	5.95	214	Normal	107.3	95% Student's-t
Cadmium	46	19	0.112 (J)	2.73 (U)	Nonparametric	0.215	95% KM (Percentile Bootstrap)
Chromium	46	46	2.39	23.8	Gamma	10.42	95% Approximate Gamma
Lead	46	44	1 (U)	26.5	Nonparametric	14.13	95% KM (Chebyshev)
Mercury	46	45	0.006 (J)	2.49	Nonparametric	0.319	95% KM (Chebyshev)
Nickel	46	46	1.03	12.4	Normal	6.66	95% Student's-t
Nitrate	46	28	0.776 (J)	5.7	Nonparametric	1.904	95% KM (BCA)
Perchlorate	48	18	0.00053 (U)	0.00726	Nonparametric	0.00171	95% KM (t)
Selenium	49	20	0.028 (U)	6.14	Nonparametric	2.054	95% KM (t)
Thallium	46	35	0.0851 (J)	0.319	Nonparametric	0.19	95% KM (t)
Uranium	46	46	0.572	5.56 (J+)	Normal	1.275	95% Modified-t
Vanadium	46	46	1.15	35.1	Nonparametric	23.07	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	48	4	0.0145 (J)	0.38 (U)	n/a*	0.0366	Maximum detected concentration.
Anthracene	48	8	0.00703 (J)	0.38 (U)	Nonparametric	0.024	95% KM (t)
Aroclor-1254	46	5	0.0016 (J)	0.0695 (U)	Nonparametric	0.00412	95% KM (Percentile Bootstrap)
Aroclor-1260	46	11	0.00132 (J)	0.0695 (U)	Nonparametric	0.00227	95% KM (t)
Benzo(a)anthracene	48	1	0.034 (U)	0.38 (U)	n/a	0.08	Maximum detected concentration.
Benzo(a)pyrene	48	12	0.0172 (J)	0.38 (U)	Nonparametric	0.0346	95% KM (t)
Benzo(b)fluoranthene	48	17	0.0111 (J)	0.236 (J)	Nonparametric	0.0564	95% KM (t)
Benzo(g,h,i)perylene	48	8	0.0114 (J)	0.38 (UJ)	Nonparametric	0.0419	95% KM (Percentile Bootstrap)
Benzo(k)fluoranthene	48	3	0.034 (U)	0.18 (J)	n/a	0.18	Maximum detected concentration.
Benzoic acid	46	8	0.432 (J)	0.79 (U)	Nonparametric	0.458	95% KM (t)

Table H-2.2-15 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	48	2	0.12 (J)	0.38 (U)	n/a	0.355	Maximum detected concentration.
Chloroform	23	1	0.000287 (J)	0.00119 (U)	n/a	0.000287	Maximum detected concentration.
Chrysene	48	12	0.0172 (J)	0.38 (U)	Nonparametric	0.0464	95% KM (Percentile Bootstrap)
Fluoranthene	48	21	0.0117 (J)	0.38 (U)	Nonparametric	0.0651	95% KM (t)
Fluorene	48	3	0.0105 (J)	0.38 (U)	n/a	0.0214	Maximum detected concentration.
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	2	2	0.0000012 (J)	0.0000132	n/a	1.32E-05	Maximum detected concentration.
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	2	2	0.000000255 (J)	0.0000024 (J)	n/a	2.40E-06	Maximum detected concentration.
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	2	1	0.00000015 (U)	0.000000537 (J)	n/a	5.37E-07	Maximum detected concentration.
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	2	1	0.000000146 (U)	0.000000487 (J)	n/a	4.87E-07	Maximum detected concentration.
Hexachlorodibenzofuran[1,2,3,4,7,8-]	2	2	0.0000000754 (J)	0.000000393 (J)	n/a	3.93E-07	Maximum detected concentration.
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2	1	0.0000000713 (U)	0.000000214 (J)	n/a	2.14E-07	Maximum detected concentration.
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2	1	0.000000077 (U)	0.000000225 (J)	n/a	2.25E-07	Maximum detected concentration.
Indeno(1,2,3-cd)pyrene	48	7	0.017 (J)	0.38 (UJ)	Nonparametric	0.0382	95% KM (Percentile Bootstrap)
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	2	2	0.0000108	0.000112	n/a	0.000112	Maximum detected concentration.
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	2	1	0.000000899 (U)	0.00000521 (J)	n/a	5.21E-06	Maximum detected concentration.
Pentachlorodibenzofuran[2,3,4,7,8-]	2	1	0.0000000803 (U)	0.000000269 (J)	n/a	2.69E-07	Maximum detected concentration.
Phenanthrene	48	17	0.0117 (J)	0.38 (U)	Nonparametric	0.0448	95% KM (Percentile Bootstrap)
Pyrene	48	22	0.011 (J)	0.384	Nonparametric	0.0679	95% KM (t)
Tetrachlorodibenzofuran[2,3,7,8-]	2	1	0.000000107 (U)	0.000000256 (J)	n/a	2.56E-07	Maximum detected concentration.
Radionuclides (pCi/g)							
Americium-241	52	11	-0.0208 (U)	0.0857	Nonparametric	0.042	95% KM (Percentile Bootstrap)
Cesium-137	44	20	-0.0433 (U)	1.2	Nonparametric	0.254	95% KM (t)
Plutonium-239/240	48	24	-0.0193 (U)	0.728	Nonparametric	0.126	95% KM (t)
Strontium-90	46	1	-0.0636 (U)	0.157 (U)	n/a	0.108	Maximum detected concentration.
Tritium	46	46	0.0161439	0.401572	Gamma	0.116	95% Approximate Gamma
Uranium-235/236	46	37	0.0063 (U)	0.113	Nonparametric	0.0646	95% KM (BCA)

* n/a = Not applicable.

Table H-2.2-16
Exposure Point Concentrations for SWMU 21-022(f) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Barium	10	10	10.4	63.1	Normal	42.46	95% Student's-t
Cobalt	10	10	0.383 (J)	5.69	Lognormal	3.911	95% H-UCL
Copper	10	10	1.18	10.6	Gamma	6.369	95% Approximate Gamma
Lead	10	10	4.43 (J)	34.4	Nonparametric	28.47	95% Chebyshev (Mean, Sd)
Manganese	10	10	226 (J+)	1580	Nonparametric	1121	95% Chebyshev (Mean, Sd)
Nitrate	10	3	1.05 (J-)	1.17 (UJ)	n/a*	1.95	Maximum detected concentration
Selenium	10	7	0.815 (J)	1.73 (U)	Nonparametric	1.221	95% KM (t)
Silver	10	8	0.0926 (J)	2.71	Nonparametric	1.564	95% KM (Chebyshev)
Zinc	10	10	54.5 (J-)	3840	n/a	3840	Maximum detected concentration
Organic Chemicals (mg/kg)							
Acetone	10	1	0.00333 (U)	0.202 (J)	n/a	0.202	Maximum detected concentration
Benzo(a)anthracene	10	2	0.0381 (U)	0.0738	n/a	0.0738	Maximum detected concentration
Benzo(a)pyrene	10	2	0.0381 (U)	0.0634	n/a	0.0634	Maximum detected concentration
Benzo(b)fluoranthene	10	2	0.0381 (U)	0.122	n/a	0.122	Maximum detected concentration
Benzo(g,h,i)perylene	10	1	0.0264 (J)	0.0393 (U)	n/a	0.0264	Maximum detected concentration
Benzo(k)fluoranthene	10	1	0.012 (J)	0.0393 (U)	n/a	0.012	Maximum detected concentration
Chrysene	10	2	0.0381 (U)	0.0741	n/a	0.0741	Maximum detected concentration
Fluoranthene	10	2	0.0381 (U)	0.0807	n/a	0.0807	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	10	1	0.0275 (J)	0.0393 (U)	n/a	0.0275	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.00000187	0.00000187	n/a	1.87E-06	Maximum detected concentration
Phenanthrene	10	2	0.0121 (J)	0.0393 (U)	n/a	0.0174	Maximum detected concentration
Pyrene	10	2	0.0381 (U)	0.0735	n/a	0.0735	Maximum detected concentration

Table H-2.2-16 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Tritium	10	10	0.0894277	4.15195	Gamma	2.099	95% Approximate Gamma
Uranium-234	10	10	0.856	1.51	Normal	1.234	95% Student's-t
Uranium-235/236	10	9	0.0527 (U)	0.0983	Nonparametric	0.0776	95% KM (t)

* n/a = Not applicable.

Table H-2.2-17
Exposure Point Concentrations for SWMU 21-022(h) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	12	12	851	15500	Gamma	6899	95% Approximate Gamma
Antimony	12	10	0.056 (J-)	0.52 (UJ)	Nonparametric	0.218	95% KM (BCA)
Barium	12	12	7.4	127	Normal	67.76	95% Student's-t
Cadmium	12	12	0.048 (J)	6	Gamma	2.371	95% Approximate Gamma
Chromium	12	12	0.49 (J)	356	Nonparametric	326.5	99% Chebyshev (Mean, Sd)
Copper	7	7	1.1 (J-)	249	n/a*	249	Maximum detected concentration
Cyanide (total)	12	6	0.12 (J-)	0.54 (U)	Nonparametric	0.277	95% KM (t)
Lead	12	12	6.5	3940	Nonparametric	3602	99% Chebyshev (Mean, Sd)
Mercury	12	10	0.0278 (J)	1.92 (J)	n/a	1.92	Maximum detected concentration
Molybdenum	14	14	0.18 (J)	21.3	Gamma	14.19	95% Approximate Gamma
Nickel	12	12	0.5 (J)	14.9 (J-)	Gamma	8.17	95% Approximate Gamma
Nitrate	14	14	0.88 (J)	72	Nonparametric	33.04	95% Chebyshev (MVUE)
Perchlorate	13	2	0.00221 (U)	0.015	n/a	0.015	Maximum detected concentration
Selenium	12	6	0.17 (J)	8.11 (U)	Nonparametric	0.483	95% KM (t)
Silver	12	12	0.032 (J)	47.3	Nonparametric	43.24	99% Chebyshev (Mean, Sd)
Zinc	7	7	15 (J-)	1200	n/a	1200	Maximum detected concentration
Organic Chemicals (mg/kg)							
Acenaphthene	12	4	0.14 (J)	2	n/a	2	Maximum detected concentration
Anthracene	12	4	0.21 (J)	2.3	n/a	2.3	Maximum detected concentration
Benzo(a)anthracene	12	4	0.34 (U)	5.5 (J)	n/a	5.5	Maximum detected concentration
Benzo(a)pyrene	12	4	0.21 (J)	5.9 (J)	n/a	5.9	Maximum detected concentration
Benzo(b)fluoranthene	12	7	0.074 (J)	7.3 (J)	Nonparametric	2.636	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	12	4	0.34 (U)	6.4 (J)	n/a	6.4	Maximum detected concentration

Table H-2.2-17 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(k)fluoranthene	12	4	0.34 (U)	2.7 (J)	n/a	2.7	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	12	5	0.14 (J)	7.9 (J)	Nonparametric	3.109	95% KM (Percentile Bootstrap)
Butylbenzylphthalate	12	2	0.15 (J)	3.67 (U)	n/a	0.51	Maximum detected concentration
Carbazole	11	3	0.18 (J)	1.5	n/a	1.5	Maximum detected concentration
Chrysene	12	6	0.081 (J)	6.1 (J)	Nonparametric	2.376	95% KM (Percentile Bootstrap)
Di-n-butylphthalate	12	2	0.26 (J)	3.67 (U)	n/a	0.35	Maximum detected concentration
Dibenz(a,h)anthracene	12	2	0.12 (J)	1.2 (U)	n/a	0.43	Maximum detected concentration
Dibenzofuran	12	2	0.34 (U)	3.67 (U)	n/a	1.1	Maximum detected concentration
Fluoranthene	12	8	0.11 (J)	8.4	Nonparametric	3.576	95% KM (BCA)
Fluorene	12	4	0.11 (J)	1.6	n/a	1.6	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	12	3	0.34 (U)	5 (J)	n/a	5	Maximum detected concentration
Methylnaphthalene[2-]	12	3	0.107 (J)	0.74 (U)	n/a	0.51	Maximum detected concentration
Naphthalene	12	3	0.275 (J)	1.7	n/a	1.7	Maximum detected concentration
Phenanthrene	12	5	0.25 (J)	9.8	Nonparametric	5.767	95% KM (Percentile Bootstrap)
Pyrene	12	8	0.1 (J)	19	Nonparametric	6.178	95% KM (BCA)
Radionuclides (pCi/g)							
Americium-241	12	8	0.0033 (U)	4.64	Nonparametric	2.15	95% KM (BCA)
Cesium-137	12	12	0.149	1.16	Gamma	0.658	95% Approximate Gamma
Plutonium-238	12	8	-0.0009 (U)	42.2	Nonparametric	12.9	95% KM (Percentile Bootstrap)
Plutonium-239/240	12	12	0.068 (J)	78.1 (J)	Gamma	41.81	95% Adjusted Gamma
Strontium-90	12	2	-0.0622 (U)	0.377	n/a	0.377	Maximum detected concentration
Tritium	12	1	-0.008 (U)	0.117465 (U)	n/a	0.0344	Maximum detected concentration
Uranium-235/236	12	8	0.031 (U)	0.114	Nonparametric	0.0928	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-18
Exposure Point Concentrations for SWMU 21-022(h) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	26	26	400	15500	Nonparametric	6868	95% KM (Chebyshev)
Antimony	14	26	0.056 (J-)	0.62 (UJ)	Nonparametric	0.184	95% KM (t)
Barium	29	29	2.1	136	Nonparametric	78.15	95% KM (Chebyshev)
Cadmium	24	26	0.0061 (J)	6	Nonparametric	2.951	99% KM (Chebyshev)
Calcium	26	26	593	36600 (J-)	Nonparametric	14228	97.5% KM (Chebyshev)
Chromium	26	26	0.49 (J)	356	Nonparametric	104.6	97.5% KM (Chebyshev)
Copper	16	16	0.41 (J-)	249	Nonparametric	181.1	99% KM (Chebyshev)
Cyanide (Total)	8	26	0.11 (J-)	0.6 (UJ)	Nonparametric	0.231	95% KM (t)
Lead	26	26	2.3	3940	Nonparametric	1675	99% KM (Chebyshev)
Mercury	20	26	0.0121 (J)	1.92 (J)	Nonparametric	0.775	97.5% KM (Chebyshev)
Molybdenum	28	28	0.15 (J)	21.3	Nonparametric	9.791	95% KM (Chebyshev)
Nickel	26	26	0.5 (J)	14.9 (J-)	Nonparametric	7.178	95% KM (Chebyshev)
Nitrate	21	28	0.21 (J)	72	Nonparametric	30.69	97.5% KM (Chebyshev)
Perchlorate	3	27	0.00208	0.015	n/a*	0.015	Maximum detected concentration
Selenium	13	26	0.14 (J)	8.11 (U)	Nonparametric	0.407	95% KM (t)
Silver	24	26	0.022 (J)	47.3	Nonparametric	20.11	99% KM (Chebyshev)
Zinc	16	16	6.7 (J-)	1200	Nonparametric	561	97.5% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	6	26	0.0202 (J)	2	Nonparametric	0.434	95% KM (Percentile Bootstrap)
Anthracene	6	26	0.0287 (J)	2.3	Nonparametric	0.621	95% KM (Percentile Bootstrap)
Aroclor-1254	1	1	0.0478	0.0478	n/a	0.0478	Maximum detected concentration
Aroclor-1260	1	1	0.0211 (J)	0.0211 (J)	n/a	0.0211	Maximum detected concentration
Benzo(a)anthracene	8	26	0.0152 (J)	5.5 (J)	Nonparametric	0.955	95% KM (t)
Benzo(a)pyrene	6	26	0.0137 (U)	5.9 (J)	Nonparametric	0.929	95% KM (t)
Benzo(b)fluoranthene	11	26	0.0161 (J)	7.3 (J)	Nonparametric	1.262	95% KM (t)

Table H-2.2-18 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(g,h,i)perylene	6	26	0.0349 (UJ)	6.4 (J)	Nonparametric	2	95% KM (Percentile Bootstrap)
Benzo(k)fluoranthene	5	26	0.0349 (U)	2.7 (J)	Nonparametric	1.498	95% KM (Percentile Bootstrap)
Bis(2-ethylhexyl)phthalate	11	26	0.0963 (J)	7.9 (J)	Nonparametric	1.248	95% KM (t)
Butylbenzylphthalate	2	26	0.15 (J)	3.67 (U)	n/a	0.51	Maximum detected concentration
Carbazole	3	22	0.18 (J)	1.5	n/a	1.5	Maximum detected concentration
Chrysene	10	26	0.0124 (J)	6.1 (J)	Nonparametric	1.058	95% KM (t)
Dibenzo(a,h)anthracene	2	26	0.0349 (U)	1.2 (U)	n/a	0.43	Maximum detected concentration
Dibenzofuran	2	26	0.34 (U)	3.67 (U)	n/a	1.1	Maximum detected concentration
Di-n-butylphthalate	2	26	0.26 (J)	3.67 (U)	n/a	0.35	Maximum detected concentration
Fluoranthene	14	26	0.0253 (J)	8.4	Nonparametric	5.552	99% KM (Chebyshev)
Fluorene	6	26	0.0161 (J)	1.6	Nonparametric	0.365	95% KM (Percentile Bootstrap)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.0000181	0.0000181	n/a	0.0000181	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.00000285	0.00000285	n/a	0.00000285	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	1	1	0.000000246 (J)	0.000000246 (J)	n/a	0.000000246	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	1	1	0.000000214 (J)	0.000000214 (J)	n/a	0.000000214	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	1	0.000000922 (J)	0.000000922 (J)	n/a	0.000000922	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	0.000000488 (J)	0.000000488 (J)	n/a	0.000000488	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	0.00000041 (J)	0.00000041 (J)	n/a	0.00000041	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	0.000000252 (J)	0.000000252 (J)	n/a	0.000000252	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,7,8,9-]	1	1	0.000000105 (J)	0.000000105 (J)	n/a	0.000000105	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	0.000000265 (J)	0.000000265 (J)	n/a	0.000000265	Maximum detected concentration

Table H-2.2-18 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Indeno(1,2,3-cd)pyrene	4	26	0.0349 (UJ)	5 (J)	n/a	5	Maximum detected concentration
Isopropyltoluene[4-]	1	14	0.00105 (U)	0.0061 (U)	n/a	0.0019	Maximum detected concentration
Methylene Chloride	1	14	0.0033 (J)	0.0061 (U)	n/a	0.0033	Maximum detected concentration
Methylnaphthalene[2-]	3	26	0.0349 (U)	0.81 (U)	n/a	0.51	Maximum detected concentration
Naphthalene	4	26	0.0168 (J)	1.7	n/a	1.7	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.000132	0.000132	n/a	0.000132	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.00000663	0.00000663	n/a	0.00000663	Maximum detected concentration
Pentachlorodibenzodioxin [1,2,3,7,8-]	1	1	0.000000136 (J)	0.000000136 (J)	n/a	0.000000136	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	1	1	0.000000108 (J)	0.000000108 (J)	n/a	0.000000108	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	0.000000335 (J)	0.000000335 (J)	n/a	0.000000335	Maximum detected concentration
Phenanthrene	9	26	0.0185 (J)	9.8	Nonparametric	1.78	95% KM (t)
Pyrene	12	26	0.0284 (J)	19	Nonparametric	9.943	99% KM (Chebyshev)
Tetrachlorodibenzofuran [2,3,7,8-]	1	1	0.000000353 (J)	0.000000353 (J)	n/a	0.000000353	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	14	26	0.0032 (U)	4.64	Nonparametric	1.092	95% KM (BCA)
Cesium-137	13	26	-0.07 (U)	1.16	Nonparametric	0.393	95% KM (t)
Plutonium-238	16	26	-0.0038 (U)	42.2	Nonparametric	20.9	99% KM (Chebyshev)
Plutonium-239/240	22	26	0.0011 (U)	78.1 (J)	Nonparametric	19.71	95% KM (Chebyshev)
Strontium-90	3	26	-0.0808 (U)	0.377	n/a	0.377	Maximum detected concentration
Tritium	1	26	-0.018 (U)	0.117 (U)	n/a	0.0344	Maximum detected concentration
Uranium-235/236	13	26	0.01 (U)	0.128	Nonparametric	0.0806	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-19
Exposure Point Concentrations for SWMU 21-022(h) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	28	28	400	15500	Nonparametric	1.024	95% KM (BCA)
Antimony	28	14	0.056 (J-)	0.62 (UJ)	Nonparametric	0.179	95% KM (t)
Barium	32	32	2.1	136	Gamma	64.11	95% Approximate Gamma
Cadmium	28	24	0.0061 (J)	6	Nonparametric	2.76	99% KM (Chebyshev)
Chromium	28	28	0.49 (J)	356	Lognormal	28.18	95% H
Copper	18	18	0.41 (J-)	249	Nonparametric	162.2	99% Chebyshev (Mean, Sd)
Cyanide (total)	28	8	0.11 (J-)	0.6 (UJ)	Nonparametric	0.227	95% KM (t)
Lead	28	28	2.3	3940	Nonparametric	1556	99% Chebyshev (Mean, Sd)
Mercury	28	22	0.0121 (J)	1.92 (J)	Nonparametric	0.726	97.5% KM (Chebyshev)
Molybdenum	30	30	0.15 (J)	21.3	Nonparametric	9.257	95% Chebyshev (Mean, Sd)
Nickel	28	28	0.5 (J)	14.9 (J-)	Gamma	5.513	95% Approximate Gamma
Nitrate	30	23	0.21 (U)	72	Nonparametric	28.81	97.5% KM (Chebyshev)
Perchlorate	29	3	0.00208 (U)	0.015	n/a*	0.015	Maximum detected concentration
Selenium	28	14	0.14 (J)	8.11 (U)	Nonparametric	0.45	95% KM (t)
Silver	28	26	0.022 (J)	47.3	Nonparametric	18.99	99% KM (Chebyshev)
Zinc	18	18	6.7 (J-)	1200	Nonparametric	745.9	99% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	28	7	0.0202 (J)	2	Nonparametric	0.322	95% KM (t)
Anthracene	28	7	0.0287 (J)	2.3	Nonparametric	0.444	95% KM (Percentile Bootstrap)
Aroclor-1254	1	1	0.0478	0.0478	n/a	0.0478	Maximum detected concentration
Aroclor-1260	1	1	0.0211 (J)	0.0211 (J)	n/a	0.0211	Maximum detected concentration
Benzo(a)anthracene	28	10	0.0152 (J)	5.5 (J)	Nonparametric	0.905	95% KM (t)
Benzo(a)pyrene	28	6	0.0137 (U)	5.9 (J)	Nonparametric	0.864	95% KM (t)

Table H-2.2-19 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(b)fluoranthene	28	13	0.0161 (J)	7.3 (J)	Nonparametric	1.176	95% KM (t)
Benzo(g,h,i)perylene	28	7	0.0349 (UJ)	6.4 (J)	Nonparametric	0.954	95% KM (t)
Benzo(k)fluoranthene	28	6	0.0349 (U)	2.7 (J)	Nonparametric	0.774	95% KM (Percentile Bootstrap)
Bis(2-ethylhexyl)phthalate	28	12	0.0963 (J)	7.9 (J)	Nonparametric	1.176	95% KM (t)
Butylbenzylphthalate	28	2	0.15 (J)	3.67 (U)	n/a	0.51	Maximum detected concentration
Carbazole	22	3	0.18 (J)	1.5	n/a	1.5	Maximum detected concentration
Chrysene	28	12	0.0124 (J)	6.1 (J)	Nonparametric	0.999	95% KM (t)
Di-n-butylphthalate	28	2	0.26 (J)	3.67 (U)	n/a	0.35	Maximum detected concentration
Dibenz(a,h)anthracene	28	2	0.0349 (U)	1.2 (U)	n/a	0.43	Maximum detected concentration
Dibenzofuran	28	2	0.34 (U)	3.67 (U)	n/a	1.1	Maximum detected concentration
Fluoranthene	28	16	0.0253 (J)	8.4	Nonparametric	5.183	99% KM (Chebyshev)
Fluorene	28	7	0.0161 (J)	1.6	Nonparametric	0.266	95% KM (t)
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	0.0000181	0.0000181	n/a	1.81E-05	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	0.00000285	0.00000285	n/a	2.85E-06	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	1	1	0.000000246 (J)	0.000000246 (J)	n/a	2.46E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	1	1	0.000000214 (J)	0.000000214 (J)	n/a	2.14E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1	1	0.000000922 (J)	0.000000922 (J)	n/a	9.22E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1	1	0.000000488 (J)	0.000000488 (J)	n/a	4.88E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1	1	0.00000041 (J)	0.00000041 (J)	n/a	4.10E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	0.000000252 (J)	0.000000252 (J)	n/a	2.52E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,7,8,9-]	1	1	0.000000105 (J)	0.000000105 (J)	n/a	1.05E-07	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	0.000000265 (J)	0.000000265 (J)	n/a	2.65E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	28	5	0.0349 (UJ)	5 (J)	Nonparametric	2.086	95% KM (Percentile Bootstrap)
Isopropyltoluene[4-]	16	1	0.00105 (U)	0.0061 (U)	n/a	0.0019	Maximum detected concentration
Methylene chloride	16	2	0.00263 (J)	0.0061 (U)	n/a	0.0033	Maximum detected concentration
Methylnaphthalene[2-]	28	4	0.0296 (J)	0.81 (U)	n/a	0.51	Maximum detected concentration

Table H-2.2-19 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Naphthalene	39	5	0.0051 (U)	1.7	Nonparametric	0.394	95% KM (Percentile Bootstrap)
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000132	0.000132	n/a	1.32E-04	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	0.00000663	0.00000663	n/a	6.63E-06	Maximum detected concentration
Pentachlorodibenzodioxin[1,2,3,7,8-]	1	1	0.000000136 (J)	0.000000136 (J)	n/a	1.36E-07	Maximum detected concentration
Pentachlorodibenzofuran[1,2,3,7,8-]	1	1	0.000000108 (J)	0.000000108 (J)	n/a	1.08E-07	Maximum detected concentration
Pentachlorodibenzofuran[2,3,4,7,8-]	1	1	0.000000335 (J)	0.000000335 (J)	n/a	3.35E-07	Maximum detected concentration
Phenanthrene	28	11	0.0185 (J)	9.8	Nonparametric	1.662	95% KM (t)
Pyrene	28	14	0.0284 (J)	19	Nonparametric	2.823	95% KM (t)
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	0.000000353 (J)	0.000000353 (J)	n/a	3.53E-07	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	28	15	0.0032 (U)	4.64	Nonparametric	1.024	95% KM (BCA)
Cesium-137	28	13	-0.07 (U)	1.16	Nonparametric	0.376	95% KM (t)
Plutonium-238	28	17	-0.0038 (U)	42.2	Nonparametric	19.48	99% KM (Chebyshev)
Plutonium-239/240	28	24	0.0011 (U)	78.1 (J)	Nonparametric	34.63	99% KM (Chebyshev)
Strontium-90	28	3	-0.0808 (U)	0.377	n/a	0.377	Maximum detected concentration
Tritium	28	2	-0.018 (U)	0.117465 (U)	n/a	0.0545	Maximum detected concentration
Uranium-235/236	28	15	0.01 (U)	0.128	Nonparametric	0.0799	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-20
Exposure Point Concentrations for Consolidated Unit 21-023(a)-99 for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Antimony	6	20	0.128 (J-)	0.948 (J-)	Nonparametric	0.311	95% KM (t)
Arsenic	35	36	0.654 (J)	7.78	Nonparametric	3.65	95% KM (BCA)
Barium	36	36	5.12 (J)	334	Gamma	89.95	95% Approximate Gamma
Calcium	36	36	182	42700 (J+)	Lognormal	9480	95% H-
Chromium	36	36	1.63	48.8	Nonparametric	11.54	95% Chebyshev (Mean, Sd)
Cobalt	36	36	0.218 (J)	6.56	Gamma	2.274	95% Approximate Gamma
Copper	36	36	0.811 (J)	19	Gamma	5.204	95% Approximate Gamma
Lead	36	36	3.33	1270	Nonparametric	394.8	99% Chebyshev (Mean, Sd)
Manganese	36	36	73.1	714	Normal	238.6	95% Modified-t
Mercury	34	36	0.0025 (J)	2.16	Nonparametric	0.491	97.5% KM (Chebyshev)
Nitrate	22	36	1.05 (U)	11.6 (J-)	Nonparametric	2.691	95% KM (BCA)
Perchlorate	7	36	0.000639 (J)	0.00649	Nonparametric	0.0017	95% KM (t)
Selenium	28	36	0.582 (J)	22.5	Nonparametric	5.802	95% KM (BCA)
Vanadium	36	36	0.977	28.3	Gamma	11.39	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	3	36	0.0171 (J)	1.38	n/a*	1.38b	Maximum detected concentration
Acetone	1	36	0.00333 (U)	0.0114 (J)	n/a	0.0114	Maximum detected concentration
Anthracene	7	36	0.00952 (J)	2.36	Nonparametric	0.777	99% KM (Chebyshev)
Aroclor-1254	1	1	0.0069 (J)	0.0069 (J)	n/a	0.0069	Maximum detected concentration
Benzo(a)anthracene	4	36	0.0347	15.4	n/a	15.4	Maximum detected concentration
Benzo(a)pyrene	9	36	0.0124 (J)	12.2	Nonparametric	3.943	99% KM (Chebyshev)
Benzo(b)fluoranthene	12	36	0.0141 (J)	14.5	Nonparametric	4.663	99% KM (Chebyshev)

Table H-2.2-20 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(g,h,i)perylene	3	36	0.0176 (J)	3.94	n/a	3.94	Maximum detected concentration
Benzo(k)fluoranthene	3	36	0.0128 (J)	0.0324 (U)	n/a	0.0324	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	36	0.0942 (J)	2.12 (J)	n/a	2.12	Maximum detected concentration
Chrysene	11	36	0.0122 (J)	14.9	Nonparametric	4.754	99% KM (Chebyshev)
Di-n-butylphthalate	7	36	0.0395 (J)	3.46 (U)	Nonparametric	0.094	95% KM (% Bootstrap)
Ethylbenzene	1	36	0.000565 (J)	0.00121 (U)	n/a	0.000565	Maximum detected concentration
Fluoranthene	13	36	0.0183 (J)	20.2	Nonparametric	6.386	99% KM (Chebyshev)
Fluorene	3	36	0.0122 (J)	0.42	n/a	0.42	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.0000096	0.0000096	n/a	0.0000096	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.0000555 (J)	0.0000555 (J)	n/a	0.0000555	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	1	6.05E-07 (J)	6.05E-07 (J)	n/a	0.000000605	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	1.93E-07 (J)	1.93E-07 (J)	n/a	0.000000193	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	3.13E-07 (J)	3.13E-07 (J)	n/a	0.000000313	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	1.92E-07 (J)	1.92E-07 (J)	n/a	0.000000192	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	3	36	0.0189 (J)	4.06	n/a	4.06	Maximum detected concentration
Isopropyltoluene[4-]	2	36	0.000297 (J)	0.00121 (U)	n/a	0.000399	Maximum detected concentration
Methylnaphthalene[2-]	2	36	0.0213 (J)	0.396	n/a	0.396	Maximum detected concentration
Naphthalene	2	36	0.0344 (U)	1.17	n/a	1.17	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.0000969 (J)	0.0000969 (J)	n/a	0.0000969	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.000018 (J)	0.000018 (J)	n/a	0.000018	Maximum detected concentration

Table H-2.2-20 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	1.33E-07 (J)	1.33E-07 (J)	n/a	0.000000133	Maximum detected concentration
Phenanthrene	11	36	0.011 (U)	6.49	Nonparametric	1.379	97.5% KM (Chebyshev)
Pyrene	13	36	0.0138 (J)	18.3	Nonparametric	5.823	99% KM (Chebyshev)
Tetrachlorodibenzofuran [2,3,7,8-]	1	1	9.51E-08 (J)	9.51E-08 (J)	n/a	9.51E-08	Maximum detected concentration
Tetrachloroethene	8	36	0.000243 (J)	0.00616	Nonparametric	0.00165	95% KM (Percentile Bootstrap)
Toluene	2	36	0.00035 (J)	0.00121 (U)	n/a	0.000401	Maximum detected concentration
Xylene[1,2-]	1	36	0.00101 (J)	0.00121 (U)	n/a	0.00101	Maximum detected concentration
Xylene[1,3-]+Xylene[1,4-]	1	36	0.00203 (J)	0.00243 (U)	n/a	0.00203	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	14	36	-0.00605 (U)	1.75	Nonparametric	0.6	99% KM (Chebyshev)
Cesium-137	1	35	-0.0534 (U)	0.133	n/a	0.133	Maximum detected concentration
Plutonium-238	7	36	-0.00666 (U)	0.253	Nonparametric	0.0718	95% KM (Percentile Bootstrap)
Plutonium-239/240	32	36	-0.00111 (U)	2.88	Nonparametric	1.496	99% KM (Chebyshev)
Strontium-90	2	36	-0.147 (U)	1.95	n/a	1.95	Maximum detected concentration
Tritium	33	36	0.00882 (U)	4.624	Nonparametric	1.164	97.5% KM (Chebyshev)
Uranium-234	36	36	0.723	7.95	Normal	1.647	95% Modified-t
Uranium-235/236	14	36	0.0168 (U)	0.457	Nonparametric	0.102	95% KM (% Bootstrap)

* n/a = Not applicable.

Table H-2.2-21
Exposure Point Concentrations for Consolidated Unit 21-023(a)-99 for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	37	6	0.128 (J-)	0.948 (J-)	Nonparametric	0.27	95% KM (t)
Arsenic	56	55	0.654 (J)	7.78	Nonparametric	3.21	95% KM [BCA]
Barium	56	56	5.12 (J)	334	Lognormal	71.67	95% H
Calcium	56	56	182	42700 (J+)	Lognormal	6511	95% H
Chromium	56	56	1.63	48.8	Lognormal	6.073	95% H
Cobalt	56	53	0.218 (J)	6.56	Nonparametric	2.38	95% KM (Chebyshev)
Copper	56	56	0.811 (J)	19	Gamma	4.184	Approximate Gamma
Lead	56	56	2.94	1270	Nonparametric	222.2	97.5% Chebyshev (Mean, Sd)
Manganese	56	56	73.1	714	Gamma	222.8	95% Approximate Gamma
Mercury	56	52	0.0025 (J)	2.16	Nonparametric	0.255	95% KM (Chebyshev)
Nitrate	56	25	1.03 (U)	11.6 (J-)	Nonparametric	2.129	95% KM (Percentile Bootstrap)
Perchlorate	56	10	0.000534 (J)	0.00649	Nonparametric	0.00142	95% KM (Percentile Bootstrap)
Selenium	56	34	0.582 (J)	22.5	Nonparametric	4.261	95% KM (Percentile Bootstrap)
Vanadium	56	56	0.977	28.3	Gamma	10.45	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	57	4	0.0171 (J)	1.38	n/a*	1.38	Maximum detected concentration
Acetone	56	1	0.00312 (U)	0.0626 (UJ)	n/a	0.0114	Maximum detected concentration
Anthracene	57	8	0.00952 (J)	2.36	Nonparametric	0.251	95% KM (Chebyshev)
Benzo(a)anthracene	57	5	0.0344 (U)	15.4	Nonparametric	0.844	95% KM [t]
Benzo(a)pyrene	57	11	0.0124 (J)	12.2	Nonparametric	2.492	99% KM (Chebyshev)
Benzo(b)fluoranthene	57	16	0.0141 (J)	14.5	Nonparametric	1.478	95% KM (Chebyshev)
Benzo(g,h,i)perylene	57	5	0.016 (J)	3.94	Nonparametric	0.225	95% KM [t]
Benzo(k)fluoranthene	57	4	0.0128 (J)	0.39 (UJ)	n/a	0.0324	Maximum detected concentration

Table H-2.2-21 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	57	2	0.0942 (J)	2.12 (J)	n/a	2.12	Maximum detected concentration
Chrysene	57	14	0.0122 (J)	14.9	Nonparametric	3.001	99% KM (Chebyshev)
Di-n-butylphthalate	57	9	0.0395 (J)	3.46 (U)	Nonparametric	0.0854	95% KM (Percentile Bootstrap)
Ethylbenzene	56	1	0.000565 (J)	0.0125 (U)	n/a	0.000565	Maximum detected concentration
Fluoranthene	57	19	0.0141 (J)	20.2	Nonparametric	2.006	95% KM (Chebyshev)
Fluorene	57	4	0.0122 (J)	0.42	n/a	0.42	Maximum detected concentration
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	0.0000096	0.0000096	n/a	9.60E-06	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	0.0000555 (J)	0.0000555 (J)	n/a	5.55E-05	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1	1	0.000000605 (J)	0.000000605 (J)	n/a	6.05E-07	Maximum detected concentration
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1	1	0.000000193 (J)	0.000000193 (J)	n/a	1.93E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1	1	0.000000313	0.000000313	n/a	3.13E-07	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1	1	0.000000192 (J)	0.000000192 (J)	n/a	1.92E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	57	5	0.0128 (J)	4.06	Nonparametric	0.228	95% KM [t]
Isopropyltoluene[4-]	56	2	0.000297 (J)	0.0125 (U)	n/a	0.000399	Maximum detected concentration
Methylnaphthalene[2-]	57	2	0.0213 (J)	0.396	n/a	0.396	Maximum detected concentration
Naphthalene	57	2	0.0342 (U)	1.17	n/a	1.17	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.0000969 (J)	0.0000969 (J)	n/a	9.69E-05	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	0.000018 (J)	0.000018 (J)	n/a	1.80E-05	Maximum detected concentration
Pentachlorodibenzofuran[2,3,4,7,8-]	1	1	0.000000133 (J)	0.000000133 (J)	n/a	1.33E-07	Maximum detected concentration
Phenanthrene	57	14	0.011 (U)	6.49	Nonparametric	0.659	95% KM (Chebyshev)
Pyrene	57	18	0.0134 (J)	18.3	Nonparametric	1.837	95% KM (Chebyshev)
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	9.51E-08 (J)	9.51E-08 (J)	n/a	9.51E-08	Maximum detected concentration
Tetrachloroethene	56	9	0.000243 (J)	0.0125 (U)	Nonparametric	0.00138	95% KM (Percentile Bootstrap)
Toluene	56	2	0.00035 (J)	0.0125 (U)	n/a	0.000401	Maximum detected concentration
Xylene[1,2-]	56	1	0.00101 (J)	0.0125 (U)	n/a	0.00101	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	56	1	0.00203 (J)	0.025 (U)	n/a	0.00203	Maximum detected concentration

Table H-2.2-21 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Americium-241	56	18	-0.00605 (U)	2.3	Nonparametric	0.635	99% KM (Chebyshev)
Cesium-137	55	1	-0.0682 (U)	0.133	n/a	0.133	Maximum detected concentration
Plutonium-238	58	10	-0.00666 (U)	0.289	Nonparametric	0.0544	95% KM [t]
Plutonium-239/240	58	51	-0.00111 (U)	3.77	Nonparametric	1.393	99% KM (Chebyshev)
Strontium-90	56	2	-0.147 (U)	1.95	n/a	1.95	Maximum detected concentration
Tritium	56	47	-0.00317497 (U)	4.62353	Nonparametric	1.099	99% KM (Chebyshev)
Uranium-234	56	56	0.601	7.95	Normal	1.468	95% Modified-t
Uranium-235/236	56	26	0.0092 (U)	0.457	Nonparametric	0.0936	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-22
Exposure Point Concentrations for SWMU 21-024(a) for Industrial Scenario

COPC	Number of Analyses	Number Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	14	14	786 (J+)	22400	Normal	10206	95% Student's-t
Barium	14	14	4.72	141	Normal	87.31	95% Student's-t
Chromium	14	14	0.601	14.4	Normal	7.753	95% Student's-t
Cobalt	14	12	0.425 (J)	5.23	Nonparametric	2.681	95% KM (t)
Copper	14	14	0.739 (J)	93.9	Gamma	49.42	95% Approximate Gamma
Lead	14	14	2.68	40.3	Normal	21.93	95% Student's-t
Mercury	14	14	0.0044 (J)	0.47	Gamma	0.225	95% Approximate Gamma
Nickel	14	14	0.52	9.73	Normal	4.78	95% Student's-t
Nitrate	14	12	0.699 (J)	6.31	Nonparametric	2.331	95% KM (BCA)
Perchlorate	14	3	0.000616 (J-)	0.0031 (UJ)	n/a*	0.000959	Maximum detected concentration
Uranium	14	14	0.775	4.05	Gamma	2.093	95% Approximate Gamma
Vanadium	14	14	1.29	26.3	Normal	13.8	95% Student's-t
Zinc	14	14	7.73	96.2	Normal	54.52	95% Student's-t
Organic Chemicals (mg/kg)							
Anthracene	14	2	0.00721 (J)	0.0394 (U)	n/a	0.00916	Maximum detected concentration
Benzo(a)anthracene	14	1	0.0146 (J)	0.0394 (U)	n/a	0.0146	Maximum detected concentration
Benzo(b)fluoranthene	14	2	0.0159 (J)	0.0394 (U)	n/a	0.0164	Maximum detected concentration
Benzoic acid	14	2	0.567 (J)	0.788 (U)	n/a	0.621	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	14	1	0.116 (J)	0.197 (U)	n/a	0.116	Maximum detected concentration
Chloroaniline[4-]	14	1	0.0804 (J)	0.394 (U)	n/a	0.0804	Maximum detected concentration
Chrysene	14	1	0.0148 (J)	0.0394 (U)	n/a	0.0148	Maximum detected concentration
Fluoranthene	14	6	0.0121 (J)	0.0394 (U)	Nonparametric	0.0222	95% KM (t)
Phenanthrene	14	1	0.0115 (J)	0.0394 (U)	n/a	0.0115	Maximum detected concentration
Pyrene	14	6	0.0131 (J)	0.0489	Nonparametric	0.024	95% KM (t)

Table H-2.2-22 (continued)

COPC	Number of Analyses	Number Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Americium-241	14	5	-0.00342 (U)	0.173	Nonparametric	0.106	95% KM (Percentile Bootstrap)
Cesium-137	13	11	0.0443 (U)	1.46	Nonparametric	0.608	95% KM (BCA)
Plutonium-238	14	1	-0.00158 (U)	0.0268	n/a	0.0268	Maximum detected concentration
Plutonium-239/240	14	13	0.0169 (U)	2.32	Nonparametric	1.38	95% KM (Chebyshev)
Strontium-90	14	5	-0.029 (U)	0.348	Nonparametric	0.18	95% KM (Percentile Bootstrap)
Tritium	14	11	0.00640336 (U)	0.0784458 (J-)	Nonparametric	0.033	95% KM (Percentile Bootstrap)
Uranium-234	14	14	0.892	2.61	Normal	1.572	95% Modified-t
Uranium-235/236	14	13	0.0293 (U)	0.0914	Nonparametric	0.0701	95% KM (t)
Uranium-238	14	14	0.814	2.31	Gamma	1.457	95% Approximate Gamma

* n/a = Not applicable.

Table H-2.2-23
Exposure Point Concentrations for SWMU 21-024(a) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	35	35	360	24000	Gamma	8543	95% Approximate Gamma
Barium	35	35	3.51	166	Gamma	71.23	95% Approximate Gamma
Chromium	36	36	0.601	32.4	Gamma	9.542	95% Approximate Gamma
Cobalt	29	34	0.425 (J)	5.23	Nonparametric	2.11	95% KM (BCA)
Copper	35	35	0.48 (J)	93.9	Nonparametric	32.22	95% KM (Chebyshev)
Lead	34	34	1.25	43.5 (J-)	Gamma	18.52	95% Approximate Gamma
Mercury	33	34	0.0025 (J)	0.798	Nonparametric	0.26	95% KM (Chebyshev)
Nickel	34	34	0.335 (J)	10.5	Gamma	4.246	95% Approximate Gamma
Nitrate	26	34	0.511 (J)	6.31	Nonparametric	1.506	95% KM (Percentile Bootstrap)
Perchlorate	6	34	0.000616 (J-)	0.0031 (UJ)	Nonparametric	0.00123	95% KM (t)
Selenium	6	34	0.699 (J)	2.23 (U)	Nonparametric	1.164	95% KM (Percentile Bootstrap)
Uranium	34	34	0.582	4.05	Normal	1.447	95% Modified-t
Vanadium	34	34	1.29	26.3	Normal	11.44	95% Student's-t
Zinc	34	34	6.6	123	Gamma	48.96	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acetone	1	17	0.00505 (U)	0.26	n/a*	0.26	Maximum detected concentration
Anthracene	2	34	0.00721 (J)	0.0397 (U)	n/a	0.00916	Maximum detected concentration
Benzo(a)anthracene	1	34	0.0146 (J)	0.0397 (U)	n/a	0.0146	Maximum detected concentration
Benzo(b)fluoranthene	2	34	0.0159 (J)	0.0397 (U)	n/a	0.0164	Maximum detected concentration
Benzoic Acid	2	34	0.567 (J)	0.793 (U)	n/a	0.621	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	1	34	0.116 (J)	0.198 (U)	n/a	0.116	Maximum detected concentration
Chloroaniline[4-]	2	34	0.0804 (J)	0.462	n/a	0.462	Maximum detected concentration
Chloroform	1	17	0.000204 (U)	0.00112 (U)	n/a	0.000248	Maximum detected concentration

Table H-2.2-23 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Chrysene	1	34	0.0148 (J)	0.0397 (U)	n/a	0.0148	Maximum detected concentration
Fluoranthene	7	34	0.0121 (J)	0.0397 (U)	Nonparametric	0.0213	95% KM (Percentile Bootstrap)
Isopropyltoluene[4-]	1	17	0.000488 (J)	0.00119 (U)	n/a	0.000488	Maximum detected concentration
Methylene Chloride	1	17	0.00505 (U)	0.00562 (U)	n/a	0.0055	Maximum detected concentration
Phenanthrene	1	34	0.0115 (J)	0.0397 (U)	n/a	0.0115	Maximum detected concentration
Pyrene	7	34	0.0131 (J)	0.0489	Nonparametric	0.0207	95% KM (% Bootstrap)
Toluene	14	18	0.000452 (J)	0.00712	Nonparametric	0.00255	95% KM (BCA)
Trichloroethene	3	18	0.000315 (U)	0.005 (U)	n/a	0.00286	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	5	34	-0.0105 (U)	0.173	Nonparametric	0.0999	95% KM (Percentile Bootstrap)
Cesium-137	16	34	-0.0456 (U)	1.46	Nonparametric	0.292	95% KM (t)
Plutonium-238	1	35	-0.00995 (U)	0.0268	n/a	0.0268	Maximum detected concentration
Plutonium-239/240	28	35	0.00513 (U)	2.32	Nonparametric	0.772	95% KM (Chebyshev)
Strontium-90	5	34	-0.029 (U)	0.348	Nonparametric	0.164	95% KM (Percentile Bootstrap)
Tritium	28	34	0.00014777 (U)	0.0969	Nonparametric	0.0349	95% KM (BCA)
Uranium-234	34	34	0.755	2.61	Normal	1.278	95% Modified-t
Uranium-235/236	32	34	0.0293 (U)	0.0974	Nonparametric	0.0671	95% KM (t)
Uranium-238	34	34	0.773	2.31	Gamma	1.218	95% Approximate Gamma

* n/a = Not applicable.

Table H-2.2-24
Exposure Point Concentrations for SWMU 21-024(a) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	41	41	360	24000	Gamma	7768	95% Approximate Gamma
Barium	41	41	3.51	166	Gamma	65.02	95% Approximate Gamma
Chromium	42	42	0.601	32.4	Gamma	9.6	95% Approximate Gamma
Cobalt	40	35	0.347	5.23	Nonparametric	2.015	95% KM (BCA)
Copper	41	41	0.48 (J)	93.9	Lognormal	24.81	95% H
Lead	40	40	1.25	43.5 (J-)	Gamma	16.8	95% Approximate Gamma
Mercury	40	38	0.0025 (J)	0.95	Nonparametric	0.283	95% KM (Chebyshev)
Nickel	40	40	0.335 (J)	10.5	Gamma	4.164	95% Approximate Gamma
Nitrate	40	30	0.492 (J)	6.67	Nonparametric	1.899	95% KM (BCA)
Perchlorate	40	7	0.000616 (J-)	0.0031 (UJ)	Nonparametric	0.00118	95% KM (t)
Selenium	40	6	0.642 (U)	16 (U)	Nonparametric	1.155	95% KM (Percentile Bootstrap)
Uranium	40	40	0.582	13.3	Nonparametric	2.914	95% Chebyshev (Mean, Sd)
Vanadium	40	40	1.29	26.3	Gamma	11.78	95% Approximate Gamma
Zinc	40	40	6.6	123	Gamma	46.14	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acetone	23	2	0.00505 (U)	0.26	n/a*	0.26	Maximum detected concentration
Anthracene	40	2	0.00721 (J)	0.0413 (U)	n/a	0.00916	Maximum detected concentration
Benzo(a)anthracene	40	1	0.0146 (J)	0.0413 (U)	n/a	0.0146	Maximum detected concentration
Benzo(b)fluoranthene	40	2	0.0159 (J)	0.0413 (U)	n/a	0.0164	Maximum detected concentration
Benzoic acid	40	2	0.567 (J)	0.827 (UJ)	n/a	0.621	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	40	1	0.116 (J)	0.207 (U)	n/a	0.116	Maximum detected concentration
Chloroaniline[4-]	40	2	0.0804 (J)	0.462	n/a	0.462	Maximum detected concentration
Chloroform	23	3	0.000204 (U)	0.00122 (U)	n/a	0.00025	Maximum detected concentration
Chrysene	40	1	0.0148 (J)	0.0413 (U)	n/a	0.0148	Maximum detected concentration
Dichlorobenzene[1,4-]	63	1	0.000442 (J)	0.413 (U)	n/a	0.00044	Maximum detected concentration

Table H-2.2-24 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Fluoranthene	40	7	0.0121 (J)	0.0413 (U)	Nonparametric	0.0213	95% KM (Percentile Bootstrap)
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1	1	0.00000147 (J)	0.00000147 (J)	n/a	1.47E-06	Maximum detected concentration
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1	1	0.000000514 (J)	0.000000514 (J)	n/a	5.14E-07	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1	1	5.17E-08 (J)	5.17E-08 (J)	n/a	5.17E-08	Maximum detected concentration
Isopropyltoluene[4-]	23	1	0.000488 (J)	0.00124 (U)	n/a	0.00049	Maximum detected concentration
Methylene chloride	23	1	0.00505 (U)	0.0062 (U)	n/a	0.0055	Maximum detected concentration
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1	1	0.000013 (J)	0.000013 (J)	n/a	1.3E-05	Maximum detected concentration
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1	1	0.00000111 (J)	0.00000111 (J)	n/a	1.11E-06	Maximum detected concentration
Phenanthrene	40	1	0.0115 (J)	0.0413 (U)	n/a	0.0115	Maximum detected concentration
Pyrene	40	7	0.0131 (J)	0.0489	Nonparametric	0.0203	95% KM (t)
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	7.73E-08 (J)	7.73E-08 (J)	n/a	7.73E-08	Maximum detected concentration
Toluene	24	18	0.000362 (J)	0.00712	Nonparametric	0.00214	95% KM (BCA)
Trichloroethene	24	3	0.000315 (U)	0.005 (U)	n/a	0.00286	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	23	1	0.000333 (J)	0.00243 (U)	n/a	0.00033	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	40	6	-0.0188 (U)	0.173	Nonparametric	0.104	99% KM (Chebyshev)
Cesium-137	40	17	-0.0456 (U)	1.46	Nonparametric	0.263	95% KM (t)
Plutonium-238	42	1	-0.00995 (U)	0.0268	n/a	0.0268	Maximum detected concentration
Plutonium-239/240	42	32	0.00134 (U)	2.32	Nonparametric	0.66	95% KM (Chebyshev)
Strontium-90	40	5	-0.112 (U)	0.348	Nonparametric	0.166	95% KM (Percentile Bootstrap)
Tritium	40	31	0.000147769 (U)	0.0968795	Nonparametric	0.0333	95% KM (Percentile Bootstrap)
Uranium-234	40	40	0.702	4.11	Normal	1.374	95% Modified-t
Uranium-235/236	40	38	0.0293 (U)	0.246	Nonparametric	0.0893	95% KM (Chebyshev)
Uranium-238	40	40	0.72	4.26	Normal	1.35	95% Modified-t

* n/a = Not applicable.

Table H-2.2-25
Exposure Point Concentrations for SWMU 21-024(b) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Arsenic	9	9	1.11 (J)	3.41	Normal	2.402	95% Student's-t
Barium	9	9	16.9	90.7 (J+)	Normal	65.07	95% Student's-t
Chromium	9	9	1.6	9.37	Normal	6.268	95% Student's-t
Cobalt	9	9	0.689	2.94	Normal	2.258	95% Student's-t
Copper	9	9	1.95	11	Normal	6.769	95% Student's-t
Cyanide (total)	9	3	0.0958 (U)	0.945	n/a*	0.945	Maximum detected concentration
Lead	9	9	4.62	16.6	Normal	14.53	95% Student's-t
Mercury	9	9	0.0052 (J)	0.138 (J+)	Gamma	0.0722	95% Approximate Gamma
Nickel	9	9	1.3	5.96 (J+)	Normal	4.245	95% Student's-t
Nitrate	10	9	1.39	43.5	Nonparametric	34.48	97.5% KM (Chebyshev)
Perchlorate	9	3	0.000807 (J-)	0.00631	n/a	0.00631	Maximum detected concentration
Selenium	9	5	0.671 (J)	1.51 (U)	Nonparametric	1.195	95% KM (t)
Silver	9	8	0.0488 (J)	0.198 (U)	Nonparametric	0.0868	95% KM (t)
Zinc	9	9	25.8	96.7	Normal	60.99	95% Student's-t
Organic Chemicals (mg/kg)							
Benzo(b)fluoranthene	9	2	0.0129 (J)	0.0358 (UJ)	n/a	0.0203	Maximum detected concentration
Chrysene	9	2	0.0117 (J)	0.0358 (UJ)	n/a	0.0146	Maximum detected concentration
Fluoranthene	9	5	0.0145 (J)	0.0358 (U)	Nonparametric	0.0268	95% KM (t)
Phenanthrene	9	2	0.0126 (J)	0.0358 (U)	n/a	0.016	Maximum detected concentration
Pyrene	9	5	0.016 (J)	0.0358 (UJ)	Nonparametric	0.0234	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	9	7	0.00816 (U)	3.4	Nonparametric	1.896	95% KM (t)

Table H-2.2-25 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Cesium-137	8	8	0.136	1.13	Normal	0.772	95% Student's-t
Plutonium-238	9	4	0.00302 (U)	0.642	n/a	0.642	Maximum detected concentration
Plutonium-239/240	9	9	0.231	76.3 (J)	n/a	76.3	Maximum detected concentration
Tritium	9	3	0.000376387 (U)	0.0183676 (U)	n/a	0.0129	Maximum detected concentration
Uranium-234	9	9	1.01	2.8	Normal	2.055	95% Student’s-t
Uranium-235/236	9	9	0.0656	0.199	Normal	0.146	95% Student’s-t
Uranium-238	9	9	0.985	2.87	Gamma	1.919	95% Approximate Gamma

* n/a = Not applicable.

Table H-2.2-26
Exposure Point Concentrations for SWMU 21-024(b) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Arsenic	19	21	0.952 (J)	5.01	Nonparametric	2.713	95% KM (BCA)
Barium	21	21	2.11	179 (J+)	Nonparametric	93.42	95% KM (Chebyshev)
Chromium	21	21	1.41	52.4	Nonparametric	18.14	95% KM (Chebyshev)
Cobalt	20	21	0.271 (J)	4.5	Nonparametric	2.097	95% KM (t)
Copper	21	21	0.806 (J)	70.3 (J)	Nonparametric	21.71	95% KM (Chebyshev)
Cyanide (Total)	7	21	0.0958 (U)	0.949	Nonparametric	0.373	95% KM (t)
Lead	21	21	2.11	40.8	Nonparametric	19.16	95% KM (Chebyshev)
Mercury	15	21	0.0052 (J)	4.42	Nonparametric	2.345	99% KM (Chebyshev)
Nickel	21	21	0.352 (J)	16.3 (J+)	Nonparametric	7.331	95% KM (Chebyshev)
Nitrate	18	22	1.01 (U)	67.2	Nonparametric	33.32	97.5% KM (Chebyshev)
Perchlorate	11	21	0.000746 (J)	0.018 (J+)	Nonparametric	0.00601	95% KM (t)
Selenium	10	21	0.671 (J)	1.55 (U)	Nonparametric	1.039	95% KM (t)
Silver	16	21	0.0428 (J)	22.8	Nonparametric	7.978	97.5% KM (Chebyshev)
Strontium	3	3	15.7	24.1	n/a*	24.1	Maximum detected concentration
Zinc	21	21	18.9	126	Nonparametric	59.02	95% KM (BCA)
Organic Chemicals (mg/kg)							
Anthracene	2	21	0.0218 (J)	0.0576 (J)	n/a	0.0576	Maximum detected concentration
Aroclor-1254	1	1	0.0909	0.0909	n/a	0.0909	Maximum detected concentration
Aroclor-1260	1	1	0.0519	0.0519	n/a	0.0519	Maximum detected concentration
Benzo(a)anthracene	1	21	0.0335 (U)	0.138 (U)	n/a	0.114	Maximum detected concentration
Benzo(a)pyrene	3	21	0.0109 (U)	0.153	n/a	0.153	Maximum detected concentration
Benzo(b)fluoranthene	5	21	0.0129 (J)	0.18	Nonparametric	0.0536	95% KM (t)

Table H-2.2-26 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(g,h,i)perylene	3	21	0.0125 (J)	0.102 (J)	n/a	0.102	Maximum detected concentration
Benzo(k)fluoranthene	1	21	0.0335 (U)	0.138 (U)	n/a	0.0739	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	21	0.0764 (J)	0.69 (UJ)	n/a	0.456	Maximum detected concentration
Chrysene	5	21	0.0117 (J)	0.139	Nonparametric	0.0442	95% KM (t)
Di-n-butylphthalate	1	21	0.335 (U)	0.497 (J)	n/a	0.497	Maximum detected concentration
Fluoranthene	8	21	0.0145 (J)	0.296	Nonparametric	0.0876	95% KM (BCA)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	8.21E-06	8.21E-06	n/a	8.21E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	2.07E-06 (J)	2.07E-06 (J)	n/a	2.07E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	1	5.92E-07 (J)	5.92E-07 (J)	n/a	5.92E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	6E-07 (J)	6E-07 (J)	n/a	6E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	3.24E-07 (J)	3.24E-07 (J)	n/a	3.24E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	2.29E-07 (J)	2.29E-07 (J)	n/a	2.29E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	2	21	0.0271 (J)	0.0484 (J)	n/a	0.0484	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	7.48E-05	7.48E-05	n/a	7.48E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	3.49E-06 (J)	3.49E-06 (J)	n/a	3.49E-06	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	3.8E-07 (J)	3.8E-07 (J)	n/a	3.8E-07	Maximum detected concentration
Phenanthrene	4	21	0.0126 (J)	0.249	n/a	0.249	Maximum detected concentration
Pyrene	8	21	0.016 (J)	0.315	Nonparametric	0.0745	95% KM (BCA)
Tetrachlorodibenzofuran [2,3,7,8-]	1	1	5.22E-07 (J)	5.22E-07 (J)	n/a	5.22E-07	Maximum detected concentration

Table H-2.2-26 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Toluene	4	12	0.00079 (J)	0.00135	n/a	0.00135	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	13	21	-0.00573 (U)	73	Nonparametric	39.13	99% KM (Chebyshev)
Cesium-137	8	18	-0.0764 (U)	1.13	Nonparametric	0.448	95% KM (Percentile Bootstrap)
Plutonium-238	9	21	-0.00591 (U)	2	Nonparametric	0.426	95% KM (t)
Plutonium-239/240	19	21	0.00709 (U)	131 (J)	Nonparametric	60.28	95% KM (Chebyshev)
Tritium	10	21	0.00037639 (U)	0.0797	Nonparametric	0.0208	95% KM (t)
Uranium-234	21	21	0.855	2.8	Nonparametric	1.686	95% KM (BCA)
Uranium-235/236	19	21	0.0149 (U)	0.199	Nonparametric	0.114	95% KM (t)
Uranium-238	21	21	0.784	2.87	Nonparametric	1.744	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-27
Exposure Point Concentrations for SWMU 21-024(b) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Arsenic	32	30	0.684 (J)	14.5	Nonparametric	4.702	99% KM (Chebyshev)
Barium	32	32	2.11	216	Gamma	84.44	95% Approximate Gamma
Chromium	32	32	1.41	52.4	Gamma	13.31	95% Approximate Gamma
Cobalt	32	31	0.271 (J)	4.5	Nonparametric	2.708	95% KM (Chebyshev)
Copper	32	32	0.806 (J)	121	Lognormal	22.67	95% H
Cyanide (total)	32	11	0.0958 (U)	0.949	Nonparametric	0.316	95% KM (t)
Lead	32	32	2.11	120	Lognormal	24	95% H
Mercury	32	25	0.0052 (J)	4.42	Nonparametric	2.048	99% KM (Chebyshev)
Nickel	32	32	0.352 (J)	16.3 (J+)	Gamma	5.511	95% Approximate Gamma
Nitrate	33	29	1.01 (U)	67.2	Nonparametric	26.33	97.5% KM (Chebyshev)
Perchlorate	32	16	0.000746 (J)	0.0434 (J+)	Nonparametric	0.00865	95% KM (t)
Selenium	32	13	0.57 (J)	1.67 (U)	Nonparametric	0.998	95% KM (Percentile Bootstrap)
Silver	32	25	0.0428 (J)	22.8	Nonparametric	8.614	99% KM (Chebyshev)
Strontium	13	13	1.05	32.2	Normal	21.38	95% Student's-t
Zinc	32	32	18.9	856	Nonparametric	221.5	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthylene	32	1	0.0129 (J)	0.138 (U)	n/a*	0.0129	Maximum detected concentration
Anthracene	32	4	0.013 (J)	0.0576 (J)	n/a	0.0576	Maximum detected concentration
Aroclor-1254	1	1	0.0909	0.0909	n/a	0.0909	Maximum detected concentration
Aroclor-1260	1	1	0.0519	0.0519	n/a	0.0519	Maximum detected concentration
Benzo(a)anthracene	32	2	0.0334 (U)	0.419	n/a	0.419	Maximum detected concentration
Benzo(a)pyrene	32	7	0.0109 (U)	0.508	Nonparametric	0.0815	95% KM (t)
Benzo(b)fluoranthene	32	10	0.0118 (J)	0.828	Nonparametric	0.109	95% KM (t)

Table H-2.2-27 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(g,h,i)perylene	32	6	0.0125 (J)	0.338	Nonparametric	0.0515	95% KM (t)
Benzo(k)fluoranthene	32	2	0.0167 (J)	0.138 (U)	n/a	0.0739	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	32	5	0.0764 (J)	0.69 (UJ)	Nonparametric	0.147	95% KM (Percentile Bootstrap)
Chrysene	32	9	0.0117 (J)	0.495	Nonparametric	0.0761	95% KM (t)
Di-n-butylphthalate	32	4	0.0411 (J)	0.497 (J)	n/a	0.497	Maximum detected concentration
Dichlorobenzene[1,4-]	32	1	0.000288 (U)	1.38 (U)	n/a	0.237	Maximum detected concentration
Fluoranthene	32	15	0.0114 (J)	0.429	Nonparametric	0.0878	95% KM (BCA)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.00000821	0.00000821	n/a	8.21E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.00000207 (J)	0.00000207 (J)	n/a	2.07E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	1	1	0.000000592 (J)	0.000000592 (J)	n/a	5.92E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	0.0000006 (J)	0.0000006 (J)	n/a	6.0E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	0.000000324 (J)	0.000000324 (J)	n/a	3.24E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	0.000000229 (J)	0.000000229 (J)	n/a	2.29E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	32	4	0.0271	0.276	n/a	0.276	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.0000748	0.0000748	n/a	7.48E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.00000349 (J)	0.00000349 (J)	n/a	3.49E-06	Maximum detected concentration
Pentachlorodibenzofuran[2,3,4,7,8-]	1	1	0.00000038 (J)	0.00000038 (J)	n/a	3.80E-07	Maximum detected concentration
Phenanthrene	32	6	0.0126 (J)	0.249	Nonparametric	0.04	95% KM (t)
Pyrene	32	13	0.0131 (J)	0.518	Nonparametric	0.0864	95% KM (BCA)
Tetrachlorodibenzofuran[2,3,7,8-]	1	1	0.000000522 (J)	0.000000522 (J)	n/a	5.22E-07	Maximum detected concentration
Toluene	23	7	0.000304 (J)	0.00135	Nonparametric	0.000845	95% KM (Percentile Bootstrap)

Table H-2.2-27 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Americium-241	32	22	-0.0112 (U)	73	Nonparametric	30.43	99% KM (Chebyshev)
Cesium-137	27	8	-0.0764 (U)	1.13	Nonparametric	0.37	95% KM (Percentile Bootstrap)
Plutonium-238	32	15	-0.00591 (U)	4.95	Nonparametric	0.793	95% KM (t)
Plutonium-239/240	32	30	0.00709 (U)	797 (J)	Nonparametric	178.9	95% KM (Chebyshev)
Tritium	32	18	0.000376387 (U)	0.915 (U)	Nonparametric	0.0253	95% KM (Percentile Bootstrap)
Uranium-234	32	32	0.749	8.42	Nonparametric	3.081	95% Chebyshev (Mean, Sd)
Uranium-235/236	32	30	0.0149 (U)	0.318	Nonparametric	0.162	95% KM (Chebyshev)
Uranium-238	32	32	0.761	3.44	Normal	1.517	95% Modified-t

* n/a = Not applicable.

Table H-2.2-28
Exposure Point Concentrations for SWMU 21-024(d) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Arsenic	9	9	0.67 (J)	4.65	Normal	3.312	95% Student's-t
Barium	9	9	19.3	120	Gamma	100.4	95% Approximate Gamma
Chromium	10	10	2.27	43.2	Gamma	25.61	95% Approximate Gamma
Cobalt	9	9	0.457 (J)	4.13	Gamma	3.136	95% Approximate Gamma
Copper	10	10	1.87	161	Gamma	97.49	95% Approximate Gamma
Cyanide (total)	10	7	0.153 (J)	2.28	Nonparametric	1.273	95% KM (BCA)
Lead	10	10	8.13	75.9	Gamma	44.76	95% Approximate Gamma
Manganese	9	9	105 (J+)	323	Normal	239.4	95% Student's-t
Mercury	10	10	0.0103 (J)	0.826 (J+)	Gamma	0.511	95% Approximate Gamma
Nickel	6	6	1.25	6.43	Gamma	4.901	95% Approximate Gamma
Nitrate	10	9	1.2	121	Nonparametric	74.76	95% KM (Chebyshev)
Perchlorate	9	3	0.0011 (J-)	0.00591 (J-)	n/a*	0.00591	Maximum detected concentration
Selenium	9	1	0.77 (J)	1.66 (U)	n/a	0.77	Maximum detected concentration
Silver	10	10	0.0661 (J)	20.1	Normal	9.683	95% Student's-t
Uranium	10	10	0.878	14.8	Gamma	7.362	95% Approximate Gamma
Zinc	10	10	15.5	145	Gamma	97.9	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	9	1	0.0333 (U)	0.0758	n/a	0.0758	Maximum detected concentration
Acenaphthylene	9	1	0.0162 (J)	0.0374 (U)	n/a	0.0162	Maximum detected concentration
Aroclor-1242	3	1	0.00374 (U)	0.178	n/a	0.178	Maximum detected concentration
Aroclor-1254	3	3	0.0285	0.422	n/a	0.422	Maximum detected concentration
Aroclor-1260	3	3	0.0117	0.186	n/a	0.186	Maximum detected concentration
Benzo(a)anthracene	9	1	0.0333 (U)	0.1 (J)	n/a	0.1	Maximum detected concentration

Table H-2.2-28 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(b)fluoranthene	9	1	0.0333 (U)	0.42 (J)	n/a	0.42	Maximum detected concentration
Benzoic acid	9	1	0.445 (J)	0.773 (UJ)	n/a	0.445	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	9	2	0.167 (U)	0.43 (J)	n/a	0.43	Maximum detected concentration
Chrysene	9	1	0.0333 (U)	0.198 (J)	n/a	0.198	Maximum detected concentration
Di-n-butylphthalate	9	2	0.184 (J)	0.395	n/a	0.395	Maximum detected concentration
Fluoranthene	9	2	0.0103 (J)	0.0407	n/a	0.0407	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	3	3	3.41E-05	0.000677	n/a	0.000677	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	3	3	1.03E-05	0.000175	n/a	0.000175	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	3	3	4.37-07 (J)	0.00000731	n/a	7.31E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	3	3	0.0000013 (J)	3.33E-05	n/a	0.0000333	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	3	3	0.00000192 (J)	3.88E-05	n/a	0.0000388	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	3	3	0.00000136 (J)	3.32E-05	n/a	0.0000332	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,4,7,8-]	3	3	0.000000547 (J)	1.14E-05	n/a	0.0000114	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,6,7,8-]	3	3	0.000000501 (J)	4.82E-06	n/a	4.82E-06	Maximum detected concentration
Hexachlorodibenzofuran[1,2,3,7,8,9-]	3	2	0.000000224 (U)	2.67E-06	n/a	2.67E-06	Maximum detected concentration
Hexachlorodibenzofuran[2,3,4,6,7,8-]	3	3	0.000000743 (J)	6.98E-06	n/a	6.98E-06	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	3	3	0.000221	0.00439	n/a	0.00439	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	3	3	1.44E-05	0.000414	n/a	0.000414	Maximum detected concentration
Pentachlorodibenzodioxin[1,2,3,7,8-]	3	3	0.00000065 (J)	1.54E-05	n/a	0.0000154	Maximum detected concentration
Pentachlorodibenzofuran[1,2,3,7,8-]	3	3	0.000000186 (J)	2.65E-06	n/a	2.65E-06	Maximum detected concentration

Table H-2.2-28 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Pentachlorodibenzofuran[2,3,4,7,8-]	3	3	0.000000784 (J)	6.36E-06	n/a	6.36E-06	Maximum detected concentration
Pyrene	9	1	0.0333 (UJ)	0.0756 (J)	n/a	0.0756	Maximum detected concentration
Tetrachlorodibenzodioxin[2,3,7,8-]	3	2	0.0000000952 (U)	2.23E-06	n/a	2.23E-06	Maximum detected concentration
Tetrachlorodibenzofuran[2,3,7,8-]	3	3	8.12E-07	6.11E-06	n/a	6.11E-06	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	10	8	0.0153 (U)	2.21	Nonparametric	1.65	95% KM (Chebyshev)
Cesium-137	9	9	0.115	0.687	Normal	0.485	95% Student's-t
Plutonium-238	10	6	-0.00157 (U)	0.593	Nonparametric	0.223	95% KM (t)
Plutonium-239/240	10	10	0.196	32.7	Normal	15.72	95% Student's-t
Strontium-90	9	2	-0.0793 (U)	0.293	n/a	0.293	Maximum detected concentration
Tritium	10	4	-0.0191867 (U)	0.138667	n/a	0.139	Maximum detected concentration
Uranium-234	10	10	1.01	9.03	Nonparametric	6.458	95% Chebyshev (Mean, Sd)
Uranium-235/236	10	9	0.0478	0.63	Nonparametric	0.479	95% KM (Chebyshev)
Uranium-238	10	10	0.965	6.58	Nonparametric	4.578	95% Chebyshev (Mean, Sd)

* n/a = Not applicable.

Table H-2.2-29
Exposure Point Concentrations for SWMU 21-024(d) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Arsenic	48	49	0.67 (J)	11.8	Nonparametric	3.526	95% KM (BCA)
Barium	49	49	6.59	141	Nonparametric	77.82	95% KM (Chebyshev)
Chromium	49	50	1.85 (U)	233	Nonparametric	34.22	95% KM (Chebyshev)
Cobalt	41	49	0.35 (J)	10.1	Nonparametric	2.866	95% KM (Chebyshev)
Copper	50	50	0.812 (J)	575	Nonparametric	114	97.5% KM (Chebyshev)
Cyanide (total)	24	46	0.0814 (J)	2.28	Nonparametric	0.456	95% KM (% Bootstrap)
Lead	51	51	3.11	102	Nonparametric	35.93	95% KM (Chebyshev)
Manganese	49	49	68.7 (J+)	1360	Nonparametric	322.6	95% KM (Chebyshev)
Mercury	48	50	0.0035 (J)	1.5	Nonparametric	0.404	97.5% KM (Chebyshev)
Nickel	42	42	0.982	70.4 (J-)	Nonparametric	13.14	95% KM (Chebyshev)
Nitrate	30	50	0.2 (J)	121	Nonparametric	26.88	97.5% KM (Chebyshev)
Perchlorate	6	49	0.00068 (J)	0.00591 (J-)	Nonparametric	0.00237	95% KM (Percentile Bootstrap)
Selenium	11	49	0.2 (J)	9.7	Nonparametric	1.796	95% KM (BCA)
Silver	36	50	0.034 (J)	20.1	Nonparametric	8.982	99% KM (Chebyshev)
Uranium	20	20	0.614	14.8	Nonparametric	6.537	95% KM (Chebyshev)
Zinc	50	50	9.09	258 (J+)	Nonparametric	80.24	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	2	49	0.0181 (J-)	0.39 (U)	n/a*	0.0758	Maximum detected concentration
Acenaphthylene	1	49	0.0162 (J)	0.39 (U)	n/a	0.0162	Maximum detected concentration
Anthracene	3	49	0.00749 (U)	0.39 (U)	n/a	0.166	Maximum detected concentration
Aroclor-1242	3	7	0.0037	0.256	n/a	0.256	Maximum detected concentration

Table H-2.2-29 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Aroclor-1254	6	7	0.00383 (U)	0.457	Nonparametric	0.332	95% KM (t)
Aroclor-1260	5	7	0.0024 (J)	0.188	Nonparametric	0.13	95% KM (t)
Benzo(a)anthracene	5	49	0.0333 (U)	0.456	Nonparametric	0.137	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	5	49	0.014 (U)	0.486 (J)	Nonparametric	0.27	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	7	49	0.0141 (U)	0.93 (J)	Nonparametric	0.111	95% KM (t)
Benzo(g,h,i)perylene	7	49	0.0146 (J)	0.39 (U)	Nonparametric	0.0387	95% KM (t)
Benzo(k)fluoranthene	2	49	0.0216 (U)	0.39 (U)	n/a	0.3	Maximum detected concentration
Benzoic Acid	2	49	0.445 (J)	1.9 (U)	n/a	0.453	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	7	49	0.0956 (J)	0.43 (J)	Nonparametric	0.197	95% KM (Percentile Bootstrap)
Butylbenzylphthalate	3	49	0.0827 (J)	0.421 (U)	n/a	0.248	Maximum detected concentration
Chrysene	6	49	0.0189 (U)	0.63 (J)	Nonparametric	0.214	95% KM (Percentile Bootstrap)
Dibenzo(a,h)anthracene	1	49	0.0333 (UJ)	0.39 (U)	n/a	0.04	Maximum detected concentration
Dichlorobenzene[1,4-]	1	49	0.097 (J-)	0.421 (U)	n/a	0.097	Maximum detected concentration
Di-n-butylphthalate	9	49	0.0568 (J)	0.421 (U)	Nonparametric	0.213	95% KM (Percentile Bootstrap)
Fluoranthene	10	49	0.0103 (J)	1.17 (J)	Nonparametric	0.119	95% KM (t)
Fluorene	1	49	0.0151 (U)	0.39 (U)	n/a	0.0206	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	6	6	2.93E-06	0.000677	Nonparametric	0.000466	95% KM (t)
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	6	6	8.33E-07 (J)	0.000175	Nonparametric	0.000129	95% KM (t)
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	4	6	0.0000000495 (U)	7.31E-06	n/a	7.31E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	5	6	0.000000134 (U)	3.33E-05	Nonparametric	2.1595E-5	95% KM (t)
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	6	6	1.95E-07 (J)	3.88E-05	Nonparametric	2.58E-05	95% KM (t)

Table H-2.2-29 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	5	6	0.000000224 (U)	3.32E-05	Nonparametric	2.2509E-5	95% KM (t)
Hexachlorodibenzofuran [1,2,3,4,7,8-]	4	6	0.0000000323 (U)	1.14E-05	n/a	1.14E-05	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	4	6	0.0000000313 (U)	4.82E-06	n/a	4.82E-06	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,7,8,9-]	3	6	0.0000000423 (U)	2.67E-06	n/a	2.67E-06	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	4	6	0.0000000331 (U)	6.98E-06	n/a	6.98E-06	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	7	49	0.0123 (J)	0.39 (U)	Nonparametric	0.042	95% KM (Percentile Bootstrap)
Isopropyltoluene[4-]	1	40	0.000495 (J)	0.0059 (U)	n/a	0.000495	Maximum detected concentration
Methylene Chloride	4	40	0.00507 (U)	0.019	n/a	0.019	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	6	6	1.78E-05	0.00439	Nonparametric	0.00289	95% KM (t)
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	5	6	0.00000133 (U)	0.000414	Nonparametric	2.8757E-4	95% KM (t)
Pentachlorodibenzodioxin [1,2,3,7,8-]	4	6	0.0000000771 (U)	1.54E-05	n/a	1.54E-05	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	4	6	0.0000000519 (U)	2.65E-06	n/a	2.65E-06	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	4	6	0.0000000506 (U)	6.36E-06	n/a	6.36E-06	Maximum detected concentration
Phenanthrene	5	49	0.0222 (U)	0.86 (J)	Nonparametric	0.18	95% KM (t)
Pyrene	9	49	0.0128 (U)	1.3 (J)	Nonparametric	0.117	95% KM (t)
Tetrachlorodibenzodioxin [2,3,7,8-]	3	6	0.0000000935 (U)	2.23E-06	n/a	2.23E-06	Maximum detected concentration
Tetrachlorodibenzofuran [2,3,7,8-]	5	6	0.0000000625 (U)	6.11E-06	Nonparametric	4.8299E-6	95% KM (t)

Table H-2.2-29 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Toluene	9	42	0.0003 (J)	0.00897	Nonparametric	0.00249	95% KM (Percentile Bootstrap)
Trichloroethene	7	42	0.00101 (U)	0.006 (U)	Nonparametric	0.00228	95% KM (Percentile Bootstrap)
Radionuclides (pCi/g)							
Americium-241	19	50	-0.0307 (U)	2.31 (J)	Nonparametric	0.388	95% KM (t)
Cesium-137	19	48	-0.0771 (U)	0.687	Nonparametric	0.364	99% KM (Chebyshev)
Europium-152	1	49	-0.164 (U)	0.393	n/a	0.393	Maximum detected concentration
Plutonium-238	13	50	-0.00857 (U)	0.593	Nonparametric	0.0723	95% KM (t)
Plutonium-239/240	35	50	-5.66E-10 (U)	33.8 (J)	Nonparametric	5.852	95% KM (Percentile Bootstrap)
Strontium-90	6	50	-0.128 (U)	0.854	Nonparametric	0.375	99% KM (Chebyshev)
Tritium	15	50	-0.034 (U)	0.18 (U)	Nonparametric	0.0356	95% KM (Percentile Bootstrap)
Uranium-234	50	50	0.549	9.03	Nonparametric	2.553	95% KM (Chebyshev)
Uranium-235/236	34	50	0.02 (U)	0.63	Nonparametric	0.129	95% KM (BCA)
Uranium-238	50	50	0.465	6.58	Nonparametric	1.949	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-30
Exposure Point Concentrations for SWMU 21-024(d) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Arsenic	49	48	0.67 (J)	11.8	Nonparametric	3.556	95% KM (BCA)
Barium	49	49	6.59	141	Gamma	64.17	95% Approximate Gamma
Chromium	50	49	1.85 (U)	233	Nonparametric	34.22	95% KM (Chebyshev)
Cobalt	49	41	0.35 (J)	10.1	Nonparametric	2.866	95% KM (Chebyshev)
Copper	50	50	0.812 (J)	575	Nonparametric	114	97.5% Chebyshev (Mean, Sd)
Cyanide (total)	46	24	0.0814 (J)	2.28	Nonparametric	0.455	95% KM (t)
Lead	52	52	3.11	102	Nonparametric	36.34	95% Chebyshev (Mean, Sd)
Manganese	49	49	68.7 (J+)	1360	Normal	252.9	95% Modified-t
Mercury	50	48	0.0035 (J)	1.5	Nonparametric	0.404	97.5% KM (Chebyshev)
Nickel	42	42	0.982	70.4 (J-)	Nonparametric	13.14	95% Chebyshev (Mean, Sd)
Nitrate	50	30	0.2 (J)	121	Nonparametric	26.88	97.5% KM (Chebyshev)
Perchlorate	49	6	0.00068 (J)	0.00591 (J-)	Nonparametric	0.0022	95% KM (Percentile Bootstrap)
Selenium	49	11	0.2 (J)	9.7	Nonparametric	1.807	95% KM (BCA)
Silver	50	36	0.034 (J)	20.1	Nonparametric	8.982	99% KM (Chebyshev)
Uranium	20	20	0.614	14.8	Gamma	4.57	95% Approximate Gamma
Zinc	50	50	9.09	258 (J+)	Nonparametric	80.24	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	50	2	0.0181 (J-)	0.39 (U)	n/a*	0.0758	Maximum detected concentration
Acenaphthylene	50	1	0.0162 (J)	0.39 (U)	n/a	0.0162	Maximum detected concentration
Anthracene	50	4	0.00749 (U)	0.39 (U)	n/a	0.166	Maximum detected concentration
Aroclor-1242	7	3	0.0037	0.256	n/a	0.256	Maximum detected concentration
Aroclor-1254	7	6	0.00383 (U)	0.457	Nonparametric	0.332	95% KM (t)
Aroclor-1260	7	5	0.0024 (J)	0.188	Nonparametric	0.13	95% KM (t)
Benzo(a)anthracene	50	6	0.0333 (U)	0.456	Nonparametric	0.149	95% KM (Percentile Bootstrap)

Table H-2.2-30

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(a)pyrene	50	6	0.014 (U)	0.486 (J)	Nonparametric	0.159	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	50	8	0.0141 (U)	0.93 (J)	Nonparametric	0.176	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	50	8	0.0146 (J)	0.39 (U)	Nonparametric	0.0519	95% KM (Percentile Bootstrap)
Benzo(k)fluoranthene	50	3	0.0216 (U)	0.39 (U)	n/a	0.33	Maximum detected concentration
Benzoic acid	49	2	0.445 (J)	1.9 (U)	n/a	0.453	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	50	7	0.0956 (J)	0.43 (J)	Nonparametric	0.194	95% KM (Percentile Bootstrap)
Butylbenzylphthalate	50	3	0.0827 (J)	0.421 (U)	n/a	0.248	Maximum detected concentration
Carbazole	1	1	0.1 (J)	0.1 (J)	n/a	0.1	Maximum detected concentration
Chrysene	50	7	0.0189 (U)	0.63 (J)	Nonparametric	0.219	95% KM (Percentile Bootstrap)
Dibenz(a,h)anthracene	50	2	0.0333 (UJ)	0.39 (U)	n/a	0.085	Maximum detected concentration
Dichlorobenzene[1,4-]	50	1	0.000241 (J)	0.421 (U)	n/a	0.097	Maximum detected concentration
Di-n-butylphthalate	50	9	0.0568 (J)	0.421 (U)	Nonparametric	0.214	95% KM (Percentile Bootstrap)
Fluoranthene	50	11	0.0103 (J)	1.17 (J)	Nonparametric	0.149	95% KM (t)
Fluorene	50	1	0.0151 (U)	0.39 (U)	n/a	0.0206	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	6	6	0.00000293	0.000677	Normal	0.0004661	95% Student's-t
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	6	6	0.000000833 (J)	0.000175	Normal	0.0001295	95% Student's-t
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	6	4	0.0000000495 (U)	0.00000731	n/a	7.31E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	6	5	0.000000134 (U)	0.0000333	Nonparametric	2.16E-05	95% KM (t)
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	6	6	0.000000195 (J)	0.0000388	Normal	2.583E-05	95% Student's-t
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	6	5	0.000000224 (U)	0.0000332	Nonparametric	2.251E-05	95% KM (t)
Hexachlorodibenzofuran [1,2,3,4,7,8-]	6	4	0.0000000323 (U)	0.0000114	n/a	0.0000114	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	6	4	0.0000000313 (U)	0.00000482	n/a	4.82E-06	Maximum detected concentration

Table H-2.2-30

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Hexachlorodibenzofuran [1,2,3,7,8,9-]	6	3	0.0000000423 (U)	0.00000267	n/a	2.67E-06	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	6	4	0.0000000331 (U)	0.00000698	n/a	6.98E-06	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	50	8	0.0123 (J)	0.39 (U)	Nonparametric	0.0484	95% KM (Percentile Bootstrap)
Isopropyltoluene[4-]	40	1	0.000495 (J)	0.0059 (U)	n/a	0.000495	Maximum detected concentration
Methylene chloride	40	4	0.00507 (U)	0.019	n/a	0.019	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	6	6	0.0000178	0.00439	Normal	0.00289	95% Student's-t
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	6	5	0.00000133 (U)	0.000414	Nonparametric	0.0002876	95% KM (t)
Pentachlorodibenzodioxin [1,2,3,7,8-]	6	4	0.0000000771 (U)	0.0000154	n/a	0.0000154	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	6	4	0.0000000519 (U)	0.00000265	n/a	2.65E-06	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	6	4	0.0000000506 (U)	0.00000636	n/a	6.36E-06	Maximum detected concentration
Phenanthrene	50	6	0.0222 (U)	0.86 (J)	Nonparametric	0.215	95% KM (Percentile Bootstrap)
Pyrene	50	10	0.0128 (U)	1.3 (J)	Nonparametric	0.142	95% KM (t)
Tetrachlorodibenzodioxin [2,3,7,8-]	6	3	0.0000000935 (U)	0.00000223	n/a	2.23E-06	Maximum detected concentration
Tetrachlorodibenzofuran [2,3,7,8-]	6	5	0.0000000625 (U)	0.00000611	Nonparametric	4.83E-06	95% KM (t)
Toluene	42	9	0.0003 (J)	0.00897	Nonparametric	0.00243	95% KM (Percentile Bootstrap)
Trichloroethene	42	7	0.00101 (U)	0.006 (U)	Nonparametric	0.0023	95% KM (Percentile Bootstrap)
Radionuclides (pCi/g)							
Americium-241	50	19	-0.0307 (U)	2.31 (J)	Nonparametric	0.388	95% KM (t)
Cesium-137	48	19	-0.0771 (U)	0.687	Nonparametric	0.364	99% KM (Chebyshev)
Europium-152	49	1	-0.164 (U)	0.393	n/a	0.393	Maximum detected concentration
Plutonium-238	51	13	-0.00857 (U)	0.593	Nonparametric	0.0714	95% KM (t)
Plutonium-239/240	51	36	-0.000000000566 (U)	33.8 (J)	Nonparametric	5.892	95% KM (Percentile Bootstrap)

Table H-2.2-30

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Strontium-90	50	6	-0.128 (U)	0.854	Nonparametric	0.375	99% KM (Chebyshev)
Tritium	50	15	-0.0339874 (U)	0.18 (U)	Nonparametric	0.036	95% KM (Percentile Bootstrap)
Uranium-234	50	50	0.549	9.03	Nonparametric	2.553	95% Chebyshev (Mean, Sd)
Uranium-235/236	50	34	0.02 (U)	0.63	Nonparametric	0.128	95% KM (BCA)
Uranium-238	50	50	0.465	6.58	Normal	1.6	95% Modified-t

* n/a = Not applicable.

Table H-2.2-31
Exposure Point Concentrations for SWMU 21-024(e) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	18	8	0.111 (U)	3.23	Nonparametric	0.674	95% KM (BCA)
Barium	18	18	25.3	171	Normal	98.64	95% Student's-t
Cadmium	18	16	0.131 (J)	2.32	Nonparametric	0.921	95% KM (Chebyshev)
Chromium	18	18	3.18	21.4	Gamma	9.287	95% Approximate Gamma
Copper	18	18	2.54	26.5	Gamma	10.03	95% Approximate Gamma
Cyanide (total)	18	7	0.115 (J)	0.29	Nonparametric	0.218	95% KM (Percentile Bootstrap)
Lead	18	18	8.82	72.1	Nonparametric	35.07	95% Chebyshev (Mean, Sd)
Mercury	18	18	0.0103	0.595	Nonparametric	0.207	95% Chebyshev (Mean, Sd)
Molybdenum	9	8	0.462 (U)	1.23	Nonparametric	0.811	95% KM (BCA)
Nitrate	18	15	0.927 (J)	13.3	Nonparametric	6.334	95% KM (Chebyshev)
Perchlorate	18	7	0.000539 (J-)	0.00284 (J+)	Nonparametric	0.00124	95% KM [t]
Selenium	18	2	0.843 (J)	1.75 (U)	n/a*	1.29	Maximum detected concentration
Silver	18	17	0.0468 (J)	1.1	Nonparametric	0.384	95% KM (Chebyshev)
Uranium	18	18	0.885 (J)+	22.5	Nonparametric	8.677	95% Chebyshev (Mean, Sd)
Zinc	18	18	16.7	124	Gamma	63.52	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	18	2	0.0188 (J)	0.0843	n/a	0.0843	Maximum detected concentration
Acetone	8	1	0.00437 (J)	0.00563 (U)	n/a	0.00437	Maximum detected concentration
Anthracene	18	3	0.00711 (J)	0.158	n/a	0.158	Maximum detected concentration
Benzo(a)anthracene	18	3	0.0131 (J)	0.32	n/a	0.32	Maximum detected concentration
Benzo(a)pyrene	18	2	0.0345 (U)	0.273 (J)	n/a	0.273	Maximum detected concentration
Benzo(b)fluoranthene	18	3	0.0345 (U)	0.582 (J)	n/a	0.582	Maximum detected concentration
Benzo(k)fluoranthene	18	1	0.0345 (U)	0.0786	n/a	0.0786	Maximum detected concentration

Table H-2.2-31 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Chrysene	18	4	0.0196 (J)	0.293	n/a	0.293	Maximum detected concentration
Di-n-butylphthalate	18	3	0.0404 (J)	0.391 (U)	n/a	0.0622	Maximum detected concentration
Fluoranthene	18	10	0.0122 (J)	0.634	Nonparametric	0.3	97.5% KM (Chebyshev)
Fluorene	18	2	0.0306 (J)	0.127	n/a	0.127	Maximum detected concentration
Methylnaphthalene[2-]	18	2	0.0113 (J)	0.052	n/a	0.052	Maximum detected concentration
Naphthalene	18	2	0.0209 (J)	0.104	n/a	0.104	Maximum detected concentration
Phenanthrene	18	4	0.0114 (J)	0.682	n/a	0.682	Maximum detected concentration
Pyrene	18	10	0.0119 (J)	0.715	Nonparametric	0.322	97.5% KM (Chebyshev)
Toluene	8	8	0.00141	0.0249	Gamma	0.0154	95% Approximate Gamma
Trichloroethene	8	5	0.00062 (J)	0.0164	Nonparametric	0.00748	95% KM [t]
Radionuclides (pCi/g)							
Americium-241	18	11	-0.0144 (U)	1.86	Nonparametric	1.182	99% KM (Chebyshev)
Cesium-137	15	14	0.0682 (U)	1.11	Nonparametric	0.63	95% KM [t]
Plutonium-238	18	2	-0.00381 (U)	0.329	n/a	0.329	Maximum detected concentration
Plutonium-239/240	18	18	0.0474	56.6	Nonparametric	35.34	99% Chebyshev (Mean, Sd)
Strontium-90	18	3	-0.297 (U)	0.907	n/a	0.907	Maximum detected concentration
Tritium	18	6	-0.00465133 (U)	0.0365771	Nonparametric	0.0199	95% KM (Percentile Bootstrap)
Uranium-234	18	18	0.904	12.3	Nonparametric	4.777	95% Chebyshev (Mean, Sd)
Uranium-235/236	18	14	0.0368 (U)	0.589	Nonparametric	0.177	95% KM (BCA)
Uranium-238	18	18	0.923	8.96	Normal	2.724	95% Modified-t

* n/a = Not applicable.

Table H-2.2-32
Exposure Point Concentrations for SWMU 21-024(e) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Antimony	8	31	0.111 (U)	3.23	Nonparametric	0.501	95% KM (BCA)
Barium	40	40	9.74	235 (J+)	Nonparametric	99.25	95% KM (Chebyshev)
Cadmium	21	40	0.154 (J)	15	Nonparametric	2.746	95% KM (Chebyshev)
Chromium	40	40	1.37	21.4	Nonparametric	9.02	95% KM (BCA)
Copper	40	40	1.3	130	Nonparametric	25.01	95% KM (Chebyshev)
Cyanide (total)	10	40	0.112 (J)	30.3	Nonparametric	4.35	95% KM (Chebyshev)
Lead	40	40	1.86	161	Nonparametric	38.84	95% KM (Chebyshev)
Mercury	40	40	0.008 (J)	2.95	Nonparametric	0.507	95% KM (Chebyshev)
Molybdenum	32	34	0.245	2.24	Nonparametric	0.871	95% KM (BCA)
Nitrate	26	40	0.9 (UJ)	23.8	Nonparametric	3.708	95% KM (BCA)
Perchlorate	6	40	0.000609 (J)	0.00284 (J+)	Nonparametric	0.00126	95% KM (t)
Selenium	10	40	0.685 (J)	1.75 (U)	Nonparametric	1.166	95% KM (t)
Silver	34	40	0.0488 (J)	1.52	Nonparametric	0.413	95% KM (Chebyshev)
Uranium	40	40	0.583	62	Nonparametric	10.98	95% KM (Chebyshev)
Zinc	40	40	15.9	124	Nonparametric	60.93	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	2	40	0.0142 (J)	0.0391 (U)	n/a*	0.0188	Maximum detected concentration
Acenaphthylene	1	40	0.0261 (J)	0.0391 (U)	n/a	0.0261	Maximum detected concentration
Acetone	3	33	0.00284 (J)	0.00904 (J)	n/a	0.00904	Maximum detected concentration

Table H-2.2-32 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Anthracene	4	40	0.00711 (J)	0.0741	n/a	0.0741	Maximum detected concentration
Benzo(a)anthracene	3	40	0.0131 (J)	0.242 (J)	n/a	0.242	Maximum detected concentration
Benzo(a)pyrene	2	40	0.0341 (U)	0.197 (J)	n/a	0.197	Maximum detected concentration
Benzo(b)fluoranthene	3	40	0.0341 (U)	0.315 (J)	n/a	0.315	Maximum detected concentration
Benzo(g,h,i)perylene	3	40	0.0341 (U)	0.125	n/a	0.125	Maximum detected concentration
Benzo(k)fluoranthene	1	40	0.0341 (U)	0.0786	n/a	0.0786	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	3	40	0.0801 (J)	0.383	n/a	0.383	Maximum detected concentration
Chloroaniline[4-]	2	40	0.263 (J)	0.407 (J)	n/a	0.407	Maximum detected concentration
Chrysene	3	40	0.0196 (J)	0.239 (J)	n/a	0.239	Maximum detected concentration
Di-n-butylphthalate	13	40	0.0404 (J)	0.391 (U)	Nonparametric	0.137	95% KM (% Bootstrap)
Ethylbenzene	1	33	0.000663 (J)	0.00117 (U)	n/a	0.000663	Maximum detected concentration
Fluoranthene	13	40	0.0122 (J)	0.512	Nonparametric	0.0644	95% KM (BCA)
Fluorene	2	40	0.0192 (J)	0.0391 (U)	n/a	0.0306	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	1	40	0.0341(U)	0.168 (J)	n/a	0.168	Maximum detected concentration
Isopropyltoluene[4-]	5	33	0.000419 (J)	0.0508 (J)	Nonparametric	0.0127	97.5% KM (Chebyshev)
Methylene Chloride	1	33	0.00251 (J+)	0.00583 (U)	n/a	0.00251	Maximum detected concentration
Methylnaphthalene[2-]	1	40	0.0113 (J)	0.0391 (U)	n/a	0.0113	Maximum detected concentration
Naphthalene	1	40	0.0209 (J)	0.0391 (U)	n/a	0.0209	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	4.78E-06 (J)	4.78E-06 (J)	n/a	4.78E-06	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	4.11E-07 (J)	4.11E-07 (J)	n/a	4.11E-07	Maximum detected concentration
Phenanthrene	6	40	0.0108 (J)	0.257	Nonparametric	0.0438	95% KM (BCA)
Pyrene	14	40	0.0114 (J)	0.555 (J)	Nonparametric	0.0665	95% KM (BCA)
Toluene	25	35	0.000426 (J)	0.0249	Nonparametric	0.00788	95% KM (Chebyshev)
Trichloroethene	5	33	0.00062 (J)	0.0164	Nonparametric	0.00515	95% KM (Percentile Bootstrap)

Table H-2.2-32 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Trimethylbenzene[1,2,4-]	1	33	0.000271 (U)	0.00117 (U)	n/a	0.00034	Maximum detected concentration
Xylene[1,2-]	1	33	0.00102 (U)	0.00157	n/a	0.00157	Maximum detected concentration
Xylene[1,3-]+Xylene[1,4-]	1	33	0.00205 (U)	0.00411	n/a	0.00411	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	17	40	-0.0144 (U)	1.86	Nonparametric	0.579	99% KM (Chebyshev)
Cesium-137	17	37	-0.0827 (U)	1.11	Nonparametric	0.639	99% KM (Chebyshev)
Plutonium-238	4	40	-0.0108 (U)	0.329	n/a	0.329	Maximum detected concentration
Plutonium-239/240	35	40	-0.00155 (U)	56.6	Nonparametric	16.49	99% KM (Chebyshev)
Strontium-90	3	40	-0.297 (U)	0.907	n/a	0.907	Maximum detected concentration
Tritium	16	40	-0.00857 (U)	0.108	Nonparametric	0.0199	95% KM (t)
Uranium-234	40	40	0.695	12.3	Nonparametric	3.237	95% KM (Chebyshev)
Uranium-235/236	34	40	0.03	0.589	Nonparametric	0.17	95% KM (Chebyshev)
Uranium-238	40	40	0.72	8.96	Nonparametric	2.597	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-33
Exposure Point Concentrations for SWMU 21-024(e) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	43	9	0.111 (U)	3.23	Nonparametric	0.39	95% KM (BCA)
Barium	59	59	9.74	235 (J+)	Gamma	73.8	95% Approximate Gamma
Cadmium	59	24	0.131 (J)	15	Nonparametric	1.269	95% KM (BCA)
Chromium	59	59	1.37	21.4	Normal	8.602	95% Student's-t
Copper	59	59	1.3	130	Nonparametric	18.46	95% Chebyshev (Mean, Sd)
Cyanide (total)	59	13	0.0932 (U)	30.3	Nonparametric	1.709	95% KM (BCA)
Lead	59	59	1.86	161	Lognormal	22.25	95% H
Mercury	59	59	0.0066 (J)	2.95	Nonparametric	0.453	97.5% Chebyshev (Mean, Sd)
Molybdenum	47	45	0.245	2.24	Nonparametric	1.101	95% KM (Chebyshev)
Nitrate	59	42	0.9 (UJ)	23.8	Nonparametric	3.426	95% KM (BCA)
Perchlorate	59	14	0.000539 (J-)	0.00284 (J+)	Nonparametric	0.00115	95% KM (t)
Selenium	59	18	0.607 J	1.75 (U)	Nonparametric	1.066	95% KM (t)
Silver	59	51	0.0452 (J)	1.52	Nonparametric	0.305	95% KM (Chebyshev)
Uranium	59	59	0.583	62	Nonparametric	7.792	95% Chebyshev (Mean, Sd)
Zinc	59	59	15.9	124	Nonparametric	55.3	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	59	4	0.0142 (J)	0.0843	n/a*	0.0843	Maximum detected concentration
Acenaphthylene	59	1	0.0261 (J)	0.0391 (U)	n/a	0.0261	Maximum detected concentration
Acetone	49	4	0.00284 (J)	0.00904 (J)	n/a	0.00904	Maximum detected concentration
Anthracene	59	8	0.00711 (J)	0.158	Nonparametric	0.0251	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	59	7	0.0131 (J)	0.498	Nonparametric	0.128	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	59	4	0.0341 (U)	0.406	n/a	0.406	Maximum detected concentration
Benzo(b)fluoranthene	59	8	0.111 (U)	3.23	Nonparametric	0.202	95% KM (Percentile Bootstrap)

Table H-2.2-33 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(g,h,i)perylene	59	5	0.0291 (J)	0.184	Nonparametric	0.125	95% KM (Percentile Bootstrap)
Benzo(k)fluoranthene	59	2	0.0107 (J)	0.0786	n/a	0.0786	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	59	3	0.0801 (J)	0.383	n/a	0.383	Maximum detected concentration
Chloroaniline[4-]	59	2	0.263 (J)	0.407 (J)	n/a	0.407	Maximum detected concentration
Chrysene	59	11	0.0186 (J)	0.48	Nonparametric	0.0601	95% KM (t)
Dichlorobenzene[1,4-]	108	1	0.00026 (U)	0.391 (U)	n/a	0.000635	Maximum detected concentration
Di-n-butylphthalate	59	13	0.0404 (J)	0.391 (U)	Nonparametric	0.137	95% KM (Percentile Bootstrap)
Ethylbenzene	49	1	0.000663 (J)	0.00117 (U)	n/a	0.000663	Maximum detected concentration
Fluoranthene	59	21	0.0122 (J)	0.781	Nonparametric	0.0934	95% KM (BCA)
Fluorene	59	4	0.0192 (J)	0.127	n/a	0.127	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	2	1	0.00000058 (U)	0.00000489	n/a	4.89E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	2	1	0.000000205 (U)	0.00000117(J)	n/a	1.17E-06	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	2	1	0.0000000579 (U)	0.000000196 (J)	n/a	1.96E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	2	1	0.0000000715 (U)	0.000000179 (J)	n/a	1.79E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	59	1	0.0341 (U)	0.168 (J)	n/a	0.168	Maximum detected concentration
Isopropyltoluene[4-]	49	5	0.000419 (J)	0.0508 (J)	Nonparametric	0.00667	95% KM (Chebyshev)
Methylene chloride	49	1	0.00251 (J+)	0.00587 (U)	n/a	0.00251	Maximum detected concentration
Methylnaphthalene[2-]	59	2	0.0113 (J)	0.052	n/a	0.052	Maximum detected concentration
Naphthalene	59	2	0.0209 (J)	0.104	n/a	0.104	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	2	1	0.000004785 (J)	0.0000431	n/a	4.31E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	2	1	0.000000411 (J)	0.00000267 (J)	n/a	2.67E-06	Maximum detected concentration

Table H-2.2-33 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Pentachlorodibenzofuran[2,3,4,7,8-]	2	1	0.000000155 (U)	0.000000333 (J)	n/a	3.33E-07	Maximum detected concentration
Phenanthrene	59	14	0.0108 J	0.682	Nonparametric	0.0637	95% KM (BCA)
Pyrene	59	22	0.0114 (J)	0.768	Nonparametric	0.0997	95% KM (BCA)
Toluene	51	27	0.000426 (J)	0.0249	Nonparametric	0.00402	95% KM (BCA)
Trichloroethene	49	5	0.00062 (J)	0.0164	Nonparametric	0.00486	95% KM (Percentile Bootstrap)
Trimethylbenzene[1,2,4-]	49	1	0.000271 (U)	0.00117 (U)	n/a	0.00034	Maximum detected concentration
Xylene[1,2-]	49	1	0.00102 (U)	0.00157	n/a	0.00157	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	49	1	0.00204 (U)	0.00411	n/a	0.00411	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	59	20	-0.0144 (U)	1.86	Nonparametric	0.402	99% KM (Chebyshev)
Cesium-137	56	21	-0.0827 (U)	1.11	Nonparametric	0.525	99% KM (Chebyshev)
Plutonium-238	59	4	-0.0108 (U)	0.329	n/a	0.329	Maximum detected concentration
Plutonium-239/240	59	50	-0.0074 (U)	56.6	Nonparametric	11.29	99% KM (Chebyshev)
Strontium-90	59	4	-0.297 (U)	0.907	n/a	0.907	Maximum detected concentration
Tritium	59	20	-0.00856667 (U)	0.108333	Nonparametric	0.0176	95% KM (t)
Uranium-234	59	59	0.695	12.3	Nonparametric	2.56	95% Chebyshev (Mean, Sd)
Uranium-235/236	59	48	0.03	0.589	Nonparametric	0.137	95% (Chebyshev)
Uranium-238	59	59	0.645	8.96	Normal	1.717	95% Modified-t

* n/a = Not applicable.

Table H-2.2-34
Exposure Point Concentrations for SWMU 21-024(g) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	29	29	1710 (J+)	21400 (J+)	Gamma	7764	95% Approximate Gamma
Arsenic	29	29	1.11 (J)	7.01	Gamma	3.377	95% Approximate Gamma
Barium	29	29	11.5	139	Normal	74.18	95% Student's-t
Cadmium	29	5	0.142 (J)	1.14	Nonparametric	0.333	95% KM [Percentile Bootstrap]
Chromium	30	30	3.71	24	Gamma	9.608	95% Approximate Gamma
Cobalt	29	29	0.415 (J)	5.49	Normal	2.815	95% Student's-t
Copper	29	28	1.57	25.4	Nonparametric	8.77	95% KM [BCA]
Cyanide (total)	29	8	0.0754 (J)	1.25	Nonparametric	0.4	95% KM [Percentile Bootstrap]
Iron	29	29	4530	14800	Gamma	9526	95% Approximate Gamma
Lead	29	29	1.99	37.7	Normal	20.64	95% Student's-t
Mercury	29	27	0.0071 (J)	1.14	Nonparametric	0.383	97.5% KM [Chebyshev]
Nickel	29	29	1.34	7.94	Normal	5.439	95% Student's-t
Nitrate	29	17	0.604 (J)	4.6	Nonparametric	1.856	95% KM [t]
Perchlorate	29	1	0.000745 (J-)	0.00285 (UJ)	n/a*	7.45E-04	Maximum detected concentration
Selenium	29	10	0.697 (J)	17.1 (U)	Nonparametric	0.976	95% KM [t]
Uranium	29	29	0.57	6.83	Nonparametric	3.023	95% Chebyshev [mean, SD]
Zinc	29	29	19.2	221	Lognormal	65.97	95% H
Organic Chemicals (mg/kg)							
Acenaphthene	31	1	0.0347 (U)	0.79 (U)	n/a	0.0369	Maximum detected concentration
Acetone	4	2	0.00392 (J)	0.0846	n/a	0.0846	Maximum detected concentration
Anthracene	31	3	0.0116 (J)	0.79 (U)	n/a	0.0551	Maximum detected concentration
Benzo(a)anthracene	31	5	0.0196 (J)	0.79 (U)	Nonparametric	0.069	95% KM [Percentile Bootstrap]
Benzo(a)pyrene	31	3	0.0213 (J)	0.79 (UJ)	n/a	0.222	Maximum detected concentration
Benzo(b)fluoranthene	31	8	0.0141 (J)	0.79 (UJ)	Nonparametric	0.105	95% KM [Percentile Bootstrap]

Table H-2.2-34 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(g,h,i)perylene	31	2	0.0347 (U)	0.79 (UJ)	n/a	0.127	Maximum detected concentration
Benzo(k)fluoranthene	31	3	0.0191 (J)	0.79 (UJ)	n/a	0.0446	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	31	1	0.0773 (U)	0.828 (U)	n/a	0.11	Maximum detected concentration
Chrysene	31	11	0.0203 (J)	0.79 (U)	Nonparametric	0.0578	95% KM [t]
Di-n-butylphthalate	31	1	0.327 (J)	1.66 (U)	n/a	0.327	Maximum detected concentration
Fluoranthene	31	18	0.0115 (J)	0.79 (U)	Nonparametric	0.0834	95% KM [Percentile Bootstrap]
Fluorene	31	1	0.0347 (U)	0.79 (U)	n/a	0.041	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	31	1	0.0347 (U)	0.79 (UJ)	n/a	0.104	Maximum detected concentration
Isopropyltoluene[4-]	4	1	0.00038 (J)	0.00124 (U)	n/a	3.80E-04	Maximum detected concentration
Methylnaphthalene[2-]	31	1	0.029 (J)	0.79 (U)	n/a	0.029	Maximum detected concentration
Naphthalene	31	1	0.0347 (UJ)	0.79 (U)	n/a	0.0435	Maximum detected concentration
Phenanthrene	31	9	0.0117 (J)	0.79 (U)	Nonparametric	0.0637	95% KM [BCA]
Pyrene	31	15	0.0117 (U)	0.79 (U)	Nonparametric	0.102	95% KM [Percentile Bootstrap]
Toluene	4	4	0.000478 (J)	0.00101 (J)	n/a	0.00101	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	31	12	0.00283 (U)	0.181	Nonparametric	0.0601	95% KM [Percentile Bootstrap]
Cesium-137	27	19	-0.00225 (U)	1.17	Nonparametric	0.848	99% KM [Chebyshev]
Plutonium-238	31	5	-0.00323 (U)	0.0439	Nonparametric	0.0247	95% KM [Percentile Bootstrap]
Plutonium-239/240	31	29	0.00971 (U)	3.92	Nonparametric	1.814	97.5% KM [Chebyshev]
Tritium	29	8	0.00152953 (U)	0.19858	Nonparametric	0.0412	95% KM [t]
Uranium-234	29	29	0.734	3.71	Normal	1.538	95% Modified-t
Uranium-235/236	29	24	0.0265 (U)	0.23	Nonparametric	0.0939	95% KM [BCA]
Uranium-238	29	29	0.731	3.32	Normal	1.497	95% Modified-t

* n/a = Not applicable.

Table H-2.2-35
Exposure Point Concentrations for SWMU 21-024(g) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	64	64	435	21400 (J+)	Nonparametric	8007	95% KM (Chebyshev)
Arsenic	64	64	0.605 (J)	7.01	Nonparametric	3.14	95% KM (BCA)
Barium	64	64	9.42	139	Nonparametric	58.32	95% KM (t)
Cadmium	7	64	0.142 (J)	3.05 (U)	Nonparametric	0.368	95% KM (Percentile Bootstrap)
Chromium	68	68	1.83	37.5	Nonparametric	11.56	95% KM (Chebyshev)
Cobalt	64	64	0.316 (J)	5.49	Nonparametric	2.109	95% KM (Percentile Bootstrap)
Copper	62	64	0.501 (J)	25.4	Nonparametric	6.296	95% KM (BCA)
Cyanide (total)	16	63	0.0754 (J)	1.25	Nonparametric	0.247	95% KM (t)
Iron	64	64	952 (J+)	25800 (J+)	Nonparametric	9037	95% KM (BCA)
Lead	64	64	1.99	109 (J+)	Nonparametric	24.37	95% KM (Chebyshev)
Mercury	62	64	0.0038 (J)	1.14	Nonparametric	0.18	95% KM (Chebyshev)
Nickel	64	64	1.1	11.1	Nonparametric	4.968	95% KM (Percentile Bootstrap)
Nitrate	26	64	0.604 (J)	4.6	Nonparametric	1.355	95% KM (t)
Perchlorate	3	64	0.00062 (J-)	0.00285 (UJ)	n/a*	0.00138	Maximum detected concentration
Selenium	15	64	0.687 (J)	17.1 (U)	Nonparametric	0.983	95% KM (t)
Uranium	63	63	0.511	16.6	Nonparametric	3.052	95% KM (Chebyshev)
Zinc	64	64	6.77	221	Nonparametric	66.94	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	1	66	0.0346 (U)	0.79 (U)	n/a	0.0369	Maximum detected concentration
Acetone	4	39	0.00288 (U)	0.0846	n/a	0.0846	Maximum detected concentration
Anthracene	4	66	0.0116 (J)	0.79 (U)	n/a	0.105	Maximum detected concentration
Aroclor-1254	1	1	0.0025 (J)	0.0025 (J)	n/a	0.0025	Maximum detected concentration
Aroclor-1260	1	1	0.0022 (J)	0.0022 (J)	n/a	0.0022	Maximum detected concentration

Table H-2.2-35 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(a)anthracene	6	66	0.018 (U)	0.79 (U)	Nonparametric	0.0623	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	4	66	0.0213 (J)	0.79 (UJ)	n/a	0.359	Maximum detected concentration
Benzo(b)fluoranthene	12	66	0.0129 (J)	0.813	Nonparametric	0.0736	95% KM (t)
Benzo(g,h,i)perylene	3	66	0.0346 (U)	0.79 (UJ)	n/a	0.22	Maximum detected concentration
Benzo(k)fluoranthene	4	66	0.0191 (J)	0.79 (UJ)	n/a	0.0446	Maximum detected concentration
Benzoic Acid	1	66	0.224 (J)	3.9 (U)	n/a	0.224	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	66	0.0773 (U)	0.828 (U)	n/a	0.11	Maximum detected concentration
Chrysene	14	66	0.0132 (J)	0.79 (U)	Nonparametric	0.0601	95% KM (BCA)
Di-n-butylphthalate	1	66	0.327 (J)	1.66 (U)	n/a	0.3	Maximum detected concentration
Ethylbenzene	1	39	0.000265 (J)	0.00129 (U)	n/a	0.000265	Maximum detected concentration
Fluoranthene	27	66	0.0111 (J)	1.47	Nonparametric	0.0992	95% KM (BCA)
Fluorene	1	67	0.0346 (U)	0.79 (U)	n/a	0.041	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	1.3E-06 (J)	1.3E-06 (J)	n/a	1.3E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	5.46E-07 (J)	5.46E-07 (J)	n/a	5.46E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	2	66	0.0346 (U)	0.79 (UJ)	n/a	0.204	Maximum detected concentration
Isopropyltoluene[4-]	2	39	0.00038 (J)	0.00205 (J)	n/a	0.00205	Maximum detected concentration
Methylnaphthalene[2-]	1	66	0.029 (J)	0.79 (U)	n/a	0.029	Maximum detected concentration
Naphthalene	1	66	0.0346 (UJ)	0.79 (U)	n/a	0.0435	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	8.79E-06	8.79E-06	n/a	8.79E-06	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	7.14E-07 (J)	7.14E-07 (J)	n/a	7.14E-07	Maximum detected concentration
Phenanthrene	12	66	0.0117 (J)	0.79 (U)	Nonparametric	0.049	95% KM (BCA)
Pyrene	23	66	0.0117 (J)	0.964	Nonparametric	0.0906	95% KM (BCA)
Toluene	11	39	0.000408 (J)	0.00329	Nonparametric	0.00105	95% KM (t)

Table H-2.2-35 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Xylene[1,3-]+Xylene[1,4-]	1	39	0.000319 (J)	0.00258 (U)	n/a	0.000319	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	15	66	-0.0143 (U)	0.181	Nonparametric	0.0511	95% KM (Percentile Bootstrap)
Cesium-137	26	61	-0.0415 (U)	1.17	Nonparametric	0.38	97.5% KM (Chebyshev)
Plutonium-238	5	66	-0.00647 (U)	0.0439	Nonparametric	0.0327	95% KM (Percentile Bootstrap)
Plutonium-239/240	51	66	-0.00954 (U)	3.92	Nonparametric	1.024	97.5% KM (Chebyshev)
Tritium	26	64	0.00153 (U)	0.199	Nonparametric	0.0366	95% KM (% Bootstrap)
Uranium-234	64	64	0.681	4.43	Nonparametric	1.665	95% KM (Chebyshev)
Uranium-235/236	47	64	0.0217 (U)	0.256	Nonparametric	0.0904	95% KM (BCA)
Uranium-238	64	64	0.731	4.31	Nonparametric	1.647	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-36
Exposure Point Concentrations for SWMU 21-024(g) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	78	78	435	21400 (J+)	Gamma	5822	95% Approximate Gamma
Arsenic	78	76	0.605 (J)	10.8	Nonparametric	3.106	95% KM [BCA]
Barium	78	78	9.42	139	Gamma	53.89	95% Approximate Gamma
Cadmium	78	7	0.142 (J)	3.05 (U)	Nonparametric	0.364	95% KM [Percentile Bootstrap]
Chromium	82	82	1.83	37.5	Lognormal	12.46	95% H
Cobalt	78	78	0.255 (J)	5.49	Normal	1.928	95% Student's-t
Copper	78	76	0.501 (J)	25.4	Nonparametric	5.709	95% KM [BCA]
Cyanide (total)	78	16	0.0754 (J)	1.25	Nonparametric	0.225	95% KM (t)
Iron	78	78	952 (J+)	25800 (J+)	Gamma	8653	95% Approximate Gamma
Lead	79	79	1.99	109 (J+)	Gamma	17.06	95% Approximate Gamma
Mercury	78	74	0.0038 (J)	1.14	Nonparametric	0.153	95% KM [Chebyshev]
Nickel	78	78	1.1	11.1	Gamma	4.754	95% Approximate Gamma
Nitrate	78	33	0.604 (J)	4.6	Nonparametric	1.313	95% KM [t]
Perchlorate	78	4	0.00062 (J-)	0.00285 (UJ)	n/a*	0.00248	Maximum detected concentration
Selenium	78	16	0.658 (J)	17.1 (U)	Nonparametric	0.967	95% KM [t]
Uranium	76	76	0.486	16.6	Nonparametric	2.706	95% Chebyshev [Mean, SD]
Zinc	78	78	6.77	221	Nonparametric	61.32	95% Chebyshev [Mean, SD]
Organic Chemicals (mg/kg)							
Acenaphthene	81	1	0.0343 (U)	0.79 (U)	n/a	0.0369	Maximum detected concentration
Acenaphthylene	81	1	0.0265 (J)	0.79 (U)	n/a	0.0265	Maximum detected concentration
Acetone	53	6	0.00288 (U)	0.0846	Nonparametric	0.00997	95% KM [BCA]
Anthracene	81	5	0.0116 (J)	0.79 (U)	Nonparametric	0.0434	95% KM [Percentile Bootstrap]

Table H-2.2-36 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Aroclor-1254	1	1	0.0025	0.0025	n/a	0.0025	Maximum detected concentration
Aroclor-1260	1	1	0.0022	0.0022	n/a	0.0022	Maximum detected concentration
Benzo(a)anthracene	81	7	0.018 (U)	0.82	Nonparametric	0.0915	95% KM [Percentile Bootstrap]
Benzo(a)pyrene	81	5	0.0213 (J)	2.17	Nonparametric	0.105	95% KM [t]
Benzo(b)fluoranthene	81	13	0.0129 (J)	3.53 (J)	Nonparametric	0.163	95% KM [t]
Benzo(g,h,i)perylene	81	4	0.0343 (U)	2.49	n/a	2.49	Maximum detected concentration
Benzo(k)fluoranthene	81	4	0.0191 (J)	0.79 (UJ)	n/a	0.0446	Maximum detected concentration
Benzoic acid	81	1	0.224 (J)	3.9 (U)	n/a	0.224	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	81	5	0.0773 (U)	0.828 (U)	Nonparametric	0.115	95% KM [Percentile Bootstrap]
Chloroform	53	1	0.000233 (J)	0.00132 (U)	n/a	2.33E-04	Maximum detected concentration
Chrysene	81	15	0.0132 (J)	0.79 (U)	Nonparametric	0.0534	95% KM [BCA]
Di-n-butylphthalate	81	1	0.327 (J)	1.66 (U)	n/a	0.327	Maximum detected concentration
Ethylbenzene	53	1	0.000265 (J)	0.00132 (U)	n/a	2.65E-04	Maximum detected concentration
Fluoranthene	81	29	0.0111 (J)	1.47	Nonparametric	0.0891	95% KM [BCA]
Fluorene	81	1	0.0343 (U)	0.79 (U)	n/a	0.041	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.0000013 (J)	0.0000013 (J)	n/a	1.3E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.000000546 (J)	0.000000546 (J)	n/a	5.46E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	81	3	0.0343 (U)	1.7 (J)	n/a	1.7	Maximum detected concentration
Isopropyltoluene[4-]	53	2	0.00038 (J)	0.00205 (J)	n/a	0.00205	Maximum detected concentration
Methylnaphthalene[2-]	81	1	0.029 (J)	0.79 (U)	n/a	0.029	Maximum detected concentration
Naphthalene	81	1	0.0343 (U)	0.79 (U)	n/a	0.0435	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.00000879	0.00000879	n/a	8.79E-06	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.000000714 (J)	0.000000714 (J)	n/a	7.14E-07	Maximum detected concentration

Table H-2.2-36 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Phenanthrene	81	14	0.011 (J)	0.79 (U)	Nonparametric	0.0434	95% KM [BCA]
Pyrene	81	25	0.0117 (U)	0.964	Nonparametric	0.0824	95% KM [BCA]
Toluene	53	12	0.000408 (J)	0.00329	Nonparametric	0.0009457 3	95% KM [t]
Xylene[1,3-]+xylene[1,4-]	53	1	0.000319 (J)	0.00264 (U)	n/a	3.19E-04	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	80	15	-0.0265 (U)	0.181	Nonparametric	0.0514	95% KM [Percentile Bootstrap]
Cesium-137	75	26	-0.0415 (U)	1.17	Nonparametric	0.327	97.5% KM [Chebyshev]
Plutonium-238	80	5	-0.00895 (U)	0.0439	Nonparametric	0.0241	95% KM [Percentile Bootstrap]
Plutonium-239/240	80	56	-0.0125 (U)	3.92	Nonparametric	0.867	97.5% KM (Chebyshev)
Tritium	78	31	0.00152953 (U)	0.19858	Nonparametric	0.0331	95% KM [t]
Uranium-234	78	78	0.681	4.43	Normal	1.345	95% Modified-t
Uranium-235/236	78	56	0.0216 (U)	0.256	Nonparametric	0.0871	95% KM [BCA]
Uranium-238	78	78	0.725	4.31	Normal	1.342	95% Modified-t

* n/a = Not applicable.

Table H-2.2-37
Exposure Point Concentrations for SWMU 21-024(h) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	12	2	0.145 (J-)	0.639 (UJ)	n/a	0.15	Maximum detected concentration
Arsenic	12	12	1.52 (J)	4.54	Gamma	2.855	95% Approximate Gamma
Barium	12	12	28.1	116	Normal	76.5	95% Student's-t
Cadmium	12	5	0.1	0.987	Nonparametric	0.364	95% KM (t)
Chromium	12	12	2.89	15.5	Gamma	7.824	95% Approximate Gamma
Copper	12	12	4.29	31.5	Nonparametric	17.7	95% Chebyshev (Mean, Sd)
Cyanide (total)	12	5	0.12 (J)	0.815	Nonparametric	0.4	95% KM (Percentile Bootstrap)
Lead	12	12	7.72	35.7	Gamma	18.42	95% Approximate Gamma
Mercury	12	12	0.01	0.36	Gamma	0.166	95% Approximate Gamma
Molybdenum	1	1	0.72	0.72	n/a*	0.72	Maximum detected concentration
Nickel	12	12	2.04	12	Normal	5.901	95% Modified-t
Nitrate	12	8	0.32 (U)	1.84	Nonparametric	1.404	95% KM (Percentile Bootstrap)
Perchlorate	12	2	0.000613 (J)	0.0058 (U)	n/a	0.00258	Maximum detected concentration
Selenium	12	3	0.58 (U)	2.43 (U)	n/a	1.64	Maximum detected concentration
Silver	12	12	0.0437 (J)	0.351	Lognormal	0.144	95% H
Vanadium	12	12	6.49	19.5	Normal	15.24	95% Student's-t
Zinc	12	12	24.1	321	Nonparametric	162.8	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Anthracene	12	1	0.0108 (J)	0.38 (U)	n/a	0.0108	Maximum detected concentration
Benzo(b)fluoranthene	12	2	0.0343 (U)	0.38 (U)	n/a	0.157	Maximum detected concentration
Benzo(k)fluoranthene	12	1	0.026 (U)	0.38 (U)	n/a	0.0458	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	12	2	0.0885 (J)	1.4	n/a	1.4	Maximum detected concentration

Table H-2.2-37 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Chrysene	12	2	0.0164 (J)	0.38 (U)	n/a	0.0179	Maximum detected concentration
Fluoranthene	12	7	0.0133 (J)	0.38 (U)	Nonparametric	0.0308	95% KM (t)
Phenanthrene	12	4	0.0141 (J)	0.38 (U)	n/a	0.0332	Maximum detected concentration
Pyrene	12	7	0.0164 (J)	0.38 (U)	Nonparametric	0.035	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	12	9	0.01 (U)	0.253	Nonparametric	0.156	95% KM (t)
Cesium-137	12	11	0.0486 (U)	0.976	Nonparametric	0.487	95% KM (t)
Plutonium-238	15	7	-0.00609 (U)	0.061	Nonparametric	0.0404	95% KM (Percentile Bootstrap)
Plutonium-239/240	15	15	0.133	4.09	Normal	2.355	95% Student's-t
Tritium	12	11	0.012587	0.71399	Nonparametric	0.381	95% KM (Chebyshev)
Uranium-234	12	12	0.522	2.56	Gamma	1.396	95% Approximate Gamma
Uranium-235/236	12	10	0.0362 (U)	0.16	Nonparametric	0.0926	95% KM (t)
Uranium-238	12	12	0.558	2.08	Gamma	1.229	95% Approximate Gamma

* n/a = Not applicable.

Table H-2.2-38
Exposure Point Concentrations for SWMU 21-024(h) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Antimony	8	36	0.059 (J-)	11.9 (J-)	Nonparametric	1.123	95% KM (t)
Arsenic	36	36	0.964 (J)	11.9	Nonparametric	4.119	95% KM (Chebyshev)
Barium	31	31	8.86	165	Nonparametric	72.72	95% KM (Chebyshev)
Cadmium	16	36	0.042 (J)	4.99	Nonparametric	0.627	95% KM (BCA)
Chromium	36	36	1.6	57.5 (J-)	Nonparametric	15.36	95% KM (Chebyshev)
Copper	36	36	0.895 (J)	374	Nonparametric	82.1	97.5% KM (Chebyshev)
Cyanide (Total)	11	35	0.105 (J)	2.76	Nonparametric	0.427	95% KM (t)
Lead	36	36	3.11 (J)	317	Nonparametric	62.19	95% KM (Chebyshev)
Mercury	35	35	0.0043 (J)	20	Nonparametric	6.502	99% KM (Chebyshev)
Molybdenum	2	2	0.49 (J)	0.72	n/a*	0.72	Maximum detected concentration
Nickel	36	36	1.32	12	Nonparametric	4.574	95% KM (BCA)
Nitrate	14	35	0.11 (U)	1.84	Nonparametric	1.209	95% KM (Percentile Bootstrap)
Perchlorate	12	35	0.000613 (J)	0.0058 (U)	Nonparametric	0.00171	95% KM (t)
Selenium	12	36	0.15 (J)	7.92 (U)	Nonparametric	0.984	95% KM (Percentile Bootstrap)
Silver	33	36	0.0437 (J)	16	Nonparametric	3.536	97.5% KM (Chebyshev)
Vanadium	36	36	1.46 (J)	23.9	Nonparametric	11.56	95% KM (t)
Zinc	36	36	19.1 (J-)	407 (J-)	Nonparametric	113.4	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	2	37	0.0169 (J)	0.38 (U)	n/a	0.0247	Maximum detected concentration
Acenaphthylene	1	37	0.0135 (J)	0.38 (U)	n/a	0.0135	Maximum detected concentration
Acetone	1	22	0.00495 (J)	0.00643 (UJ)	n/a	0.00495	Maximum detected concentration

Table H-2.2-38 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Anthracene	5	37	0.0108 (J)	0.38 (U)	Nonparametric	0.0286	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	5	37	0.0123 (U)	0.38 (U)	Nonparametric	0.0393	95% KM (t)
Benzo(a)pyrene	4	37	0.0342 (U)	0.38 (U)	n/a	0.176	Maximum detected concentration
Benzo(b)fluoranthene	7	37	0.0342 (U)	0.38 (U)	Nonparametric	0.157	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	2	37	0.0342 (U)	0.38 (U)	n/a	0.135	Maximum detected concentration
Benzo(k)fluoranthene	3	37	0.0232 (J)	0.38 (U)	n/a	0.0458	Maximum detected concentration
Benzoic acid	1	37	0.613 (J)	1.9 (U)	n/a	0.613	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	5	37	0.0736 (J)	1.4	Nonparametric	0.202	95% KM (t)
Chloroform	2	24	0.000225 (J)	0.0057 (U)	n/a	0.000246	Maximum detected concentration
Chrysene	8	37	0.0164 (J)	0.38 (U)	Nonparametric	0.0358	95% KM (t)
Di-n-butylphthalate	6	37	0.0392 (J)	1.32	Nonparametric	0.248	95% KM (t)
Fluoranthene	15	37	0.0113 (J)	0.38 (U)	Nonparametric	0.0503	95% KM (t)
Fluorene	1	37	0.0152 (J)	0.38 (U)	n/a	0.0152	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	1.8E-06 (J)	1.8E-06 (J)	n/a	1.8E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	6.54E-07 (J)	6.54E-07 (J)	n/a	6.54E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	6.33E-08 (J)	6.33E-08 (J)	n/a	6.33E-08	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	8.77E-08 (J)	8.77E-08 (J)	n/a	8.77E-08	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	1	37	0.0149 (U)	0.38 (U)	n/a	0.104	Maximum detected concentration
Isopropyltoluene[4-]	2	24	0.000446 (J)	0.0057 (U)	n/a	0.000586	Maximum detected concentration
Naphthalene	1	37	0.015 (J)	0.38 (U)	n/a	0.015	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	1.23E-05	1.23E-05	n/a	1.23E-05	Maximum detected concentration

Table H-2.2-38 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	9.73E-07 (J)	9.73E-07 (J)	n/a	9.73E-07	Maximum detected concentration
Phenanthrene	11	37	0.011 (J)	0.38 (U)	Nonparametric	0.0372	95% KM (t)
Pyrene	15	37	0.0139 (J)	0.38 (U)	Nonparametric	0.0533	95% KM (t)
Tetrachloroethene	1	24	0.000249 (J)	0.0057 (U)	n/a	0.000249	Maximum detected concentration
Toluene	7	24	0.000374 (J)	0.0057 (U)	Nonparametric	0.000849	95% KM (t)
Trimethylbenzene[1,2,4-]	1	24	0.00035 (J)	0.0057 (U)	n/a	0.00035	Maximum detected concentration
Trimethylbenzene[1,3,5-]	1	24	0.000252 (J)	0.0057 (U)	n/a	0.000252	Maximum detected concentration
Xylene[1,2-]	1	24	0.00024 (J)	0.0057 (U)	n/a	0.00024	Maximum detected concentration
Xylene[1,3-]+Xylene[1,4-]	2	24	0.000294 (J)	0.0057 (U)	n/a	0.000421	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	15	38	-0.00405 (U)	0.253	Nonparametric	0.0861	95% KM (Percentile Bootstrap)
Cesium-137	18	36	-0.0533 (U)	0.976	Nonparametric	0.244	95% KM (t)
Plutonium-238	8	42	-0.00609 (U)	0.061	Nonparametric	0.0364	95% KM (Percentile Bootstrap)
Plutonium-239/240	37	42	-0.00255 (U)	7.4	Nonparametric	1.636	95% KM (BCA)
Tritium	36	38	0.0126	10.4	Nonparametric	3.75	99% KM (Chebyshev)
Uranium-234	35	35	0.522	3.08	Nonparametric	1.592	95% KM (Chebyshev)
Uranium-235/236	29	35	0.0362 (U)	0.179	Nonparametric	0.087	95% KM (BCA)
Uranium-238	35	35	0.558	2.91	Nonparametric	1.481	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-39
Exposure Point Concentrations for SWMU 21-024(h) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	47	10	0.059 (J-)	11.9 (J-)	Nonparametric	0.915	95% KM (t)
Arsenic	47	47	0.964 (J)	11.9	Normal	3.212	95% Modified-t
Barium	41	41	8.86	165	Gamma	51.79	95% Approximate Gamma
Cadmium	47	18	0.042 (J)	4.99	Nonparametric	0.535	95% KM (BCA)
Chromium	47	47	1.6	57.5 (J-)	Nonparametric	14.71	95% Chebyshev (Mean, Sd)
Copper	47	47	0.895 (J)	374	Nonparametric	94.26	99% Chebyshev (Mean, Sd)
Cyanide (total)	46	14	0.105 (J)	2.76	Nonparametric	0.39	95% KM (Percentile Bootstrap)
Lead	47	47	3.11 (J)	317	Nonparametric	54.53	95% Chebyshev (Mean, Sd)
Mercury	46	46	0.0043 (J)	20	Nonparametric	5.065	99% Chebyshev (Mean, Sd)
Molybdenum	2	2	0.49 (J)	0.72	n/a*	0.72	Maximum detected concentration
Nickel	47	47	1.28	13	Gamma	4.458	95% Approximate Gamma
Nitrate	46	19	0.11 (U)	6.2 (J-)	Nonparametric	1.463	95% KM (Percentile Bootstrap)
Perchlorate	46	13	0.000613 (J)	0.0058 (U)	Nonparametric	0.00169	95% KM (t)
Selenium	47	20	0.15 (J)	7.92 (U)	Nonparametric	1.19	95% KM (t)
Silver	47	40	0.0437 (J)	16	Nonparametric	2.133	95% KM (Chebyshev)
Vanadium	47	47	1.46 (J)	23.9	Gamma	10.7	95% Approximate Gamma
Zinc	47	47	19.1 (J-)	407 (J-)	Nonparametric	98.89	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	48	2	0.0169 (J)	0.38 (U)	n/a	0.0247	Maximum detected concentration
Acenaphthylene	48	1	0.0135 (J)	0.38 (U)	n/a	0.0135	Maximum detected concentration
Acetone	33	2	0.00495 (J)	0.00643 (UJ)	n/a	0.00497	Maximum detected concentration
Anthracene	48	5	0.0108 (J)	0.38 (U)	Nonparametric	0.0282	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	48	5	0.0123 (U)	0.38 (U)	Nonparametric	0.0353	95% KM (t)

Table H-2.2-39 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(a)pyrene	48	5	0.0264 (J)	0.38 (U)	Nonparametric	0.125	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	48	8	0.034 (J)	0.38 (U)	Nonparametric	0.132	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	48	2	0.0342 (U)	0.38 (U)	n/a	0.135	Maximum detected concentration
Benzo(k)fluoranthene	48	4	0.0166 (J)	0.38 (U)	n/a	0.0458	Maximum detected concentration
Benzoic acid	48	1	0.613 (J)	1.9 (U)	n/a	0.613	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	48	5	0.0736 (J)	1.4	Nonparametric	0.179	95% KM (t)
Chloroform	35	2	0.000225 (J)	0.0057 (U)	n/a	0.000246	Maximum detected concentration
Chrysene	48	9	0.0164 (J)	0.38 (U)	Nonparametric	0.0323	95% KM (t)
Di-n-butylphthalate	48	7	0.0392 (J)	1.32	Nonparametric	0.222	95% KM (BCA)
Dichlorobenzene[1,4-]	83	1	0.000327 (U)	0.518 (U)	n/a	0.000396	Maximum detected concentration
Fluoranthene	48	16	0.0113 (J)	0.38 (U)	Nonparametric	0.0437	95% KM (t)
Fluorene	48	1	0.0152 (J)	0.38 (U)	n/a	0.0152	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.0000018 (J)	0.0000018 (J)	n/a	1.8E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.000000654 (J)	0.000000654 (J)	n/a	6.54E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	1	1	6.33E-08 (J)	6.33E-08 (J)	n/a	6.33E-08	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	8.77E-08 (J)	8.77E-08 (J)	n/a	8.77E-08	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	48	1	0.0149 (U)	0.38 (U)	n/a	0.104	Maximum detected concentration
Isopropyltoluene[4-]	35	2	0.000446 (J)	0.0057 (U)	n/a	0.000586	Maximum detected concentration
Naphthalene	50	1	0.0056 (U)	0.38 (U)	n/a	0.015	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.0000123	0.0000123	n/a	1.23E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.000000973 (J)	0.000000973 (J)	n/a	9.73E-07	Maximum detected concentration

Table H-2.2-39 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Phenanthrene	48	11	0.011 (J)	0.38 (U)	Nonparametric	0.0336	95% KM (t)
Pyrene	48	16	0.0139 (J)	0.38 (U)	Nonparametric	0.0459	95% KM (t)
Tetrachloroethene	35	1	0.000249 (J)	0.0057 (U)	n/a	0.000249	Maximum detected concentration
Toluene	35	7	0.000374 (J)	0.0057 (U)	Nonparametric	0.0007639	95% KM (t)
Trimethylbenzene[1,2,4-]	35	1	0.00035 (J)	0.0057 (U)	n/a	0.00035	Maximum detected concentration
Trimethylbenzene[1,3,5-]	35	1	0.000252 (J)	0.0057 (U)	n/a	0.000252	Maximum detected concentration
Xylene[1,2-]	35	2	0.00024 (J)	0.0057 (U)	n/a	0.000278	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	35	3	0.000294 (J)	0.0057 (U)	n/a	0.000547	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	49	15	-0.00405 (U)	0.253	Nonparametric	0.0773	95% KM (Percentile Bootstrap)
Cesium-137	47	18	-0.067 (U)	0.976	Nonparametric	0.206	95% KM (t)
Plutonium-238	55	8	-0.0159 (U)	0.061	Nonparametric	0.0367	95% KM (Percentile Bootstrap)
Plutonium-239/240	55	44	-0.00255 (U)	7.4	Nonparametric	1.353	95% KM (BCA)
Tritium	49	47	0.0125868	10.3982	Nonparametric	2.299	97.5% KM (Chebyshev)
Uranium-234	46	46	0.522	3.08	Normal	1.294	95% Modified-t
Uranium-235/236	47	38	-0.07 (U)	0.179	Nonparametric	0.0838	95% KM (BCA)
Uranium-238	46	46	0.558	2.91	Normal	1.219	95% Modified-t

* n/a = Not applicable.

Table H-2.2-40
Exposure Point Concentrations for SWMU 21-024(i) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	44	44	1300	28000	Gamma	9581	95% Approximate Gamma
Antimony	27	6	0.0584 (J-)	7.3 (U)	Nonparametric	2.04	97.5% KM (Chebyshev)
Arsenic	44	44	0.71 (J)	8.3	Gamma	4.112	95% Approximate Gamma
Barium	44	44	8.7	304	Gamma	123.7	95% Approximate Gamma
Calcium	44	44	360	6700	Gamma	2478	95% Approximate Gamma
Chromium	44	44	1	44.7	Gamma	14.64	95% Approximate Gamma
Copper	44	42	1	22.2	Nonparametric	8.629	95% KM (BCA) UCL
Lead	44	44	3.6	144	Nonparametric	50.61	95% Chebyshev (Mean, Sd)
Mercury	44	33	0.0111	14.7	Nonparametric	5.156	97.5% KM (Chebyshev)
Perchlorate	7	1	0.0532 (J)	0.308 (U)	n/a*	0.0532	Maximum detected concentration
Selenium	44	19	0.29 (J-)	1.67	Nonparametric	0.493	95% KM (% Bootstrap)
Zinc	44	44	13.1	316	Nonparametric	123.9	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	24	1	0.0339 (U)	0.38 (U)	n/a	0.044	Maximum detected concentration
Acetone	1	1	0.2 (J)	0.2 (J)	n/a	0.2	Maximum detected concentration
Anthracene	24	1	0.0339 (U)	0.38 (U)	n/a	0.045	Maximum detected concentration
Aroclor-1254	24	8	0.0035 (U)	0.906	Nonparametric	0.256	95% KM (Percentile Bootstrap)
Aroclor-1260	24	6	0.0035 (U)	0.4	Nonparametric	0.221	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	24	1	0.0339 (UJ)	0.38 (U)	n/a	0.082	Maximum detected concentration
Benzo(a)pyrene	24	1	0.0339 (UJ)	0.38 (U)	n/a	0.074	Maximum detected concentration
Benzo(b)fluoranthene	24	1	0.0339 (UJ)	0.38 (U)	n/a	0.078	Maximum detected concentration
Benzo(k)fluoranthene	24	1	0.0339 (UJ)	0.38 (U)	n/a	0.078	Maximum detected concentration
Benzoic acid	24	1	0.18 (J)	3.8 (U)	n/a	0.18	Maximum detected concentration

Table H-2.2-40 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	24	2	0.0447 (J)	0.38 (U)	n/a	0.055	Maximum detected concentration
Butanone[2-]	1	1	0.056	0.056	n/a	0.056	Maximum detected concentration
Chrysene	24	1	0.0339 (UJ)	0.38 (U)	n/a	0.089	Maximum detected concentration
Di-n-butylphthalate	24	2	0.0408 (J)	0.38 (U)	n/a	0.0432	Maximum detected concentration
Fluoranthene	24	4	0.0244 (J)	0.57	n/a	0.57	Maximum detected concentration
Phenanthrene	24	3	0.0339 (U)	0.66	n/a	0.66	Maximum detected concentration
Pyrene	24	4	0.0339 (UJ)	0.52	n/a	0.52	Maximum detected concentration
Toluene	1	1	0.0022 (J)	0.0022 (J)	n/a	0.0022	Maximum detected concentration
Trimethylbenzene[1,2,4-]	1	1	0.0024 (J)	0.0024 (J)	n/a	0.0024	Maximum detected concentration
Radionuclides (pCi/g)							
Tritium	35	30	0.02 (U)	2.4	Nonparametric	0.742	95% KM (Chebyshev)
Uranium-235/236	19	18	0.007 (U)	0.306	Nonparametric	0.185	95% KM (Chebyshev)
Americium-241	40	3	-0.29 (U)	0.4377 (U)	n/a	0.0616	Maximum detected concentration
Cesium-137	35	17	-0.044 (U)	1.03	Nonparametric	0.311	95% KM (t) UCL
Plutonium-239/240	8	7	0.017 (U)	2.94	Nonparametric	1.791	95% KM (t)
Thorium-228	35	35	1.11	1.83	Normal	1.475	95% Student's-t
Thorium-230	35	34	0.0764 (U)	1.4	Nonparametric	1.069	95% KM (BCA)
Tritium	35	30	0.02 (U)	2.4	Nonparametric	0.742	95% KM (Chebyshev)
Uranium-234	35	35	0.662	7.25	Nonparametric	2.995	95% Chebyshev (Mean, Sd)

* n/a = Not applicable.

Table H-2.2-41
Exposure Point Concentrations for SWMU 21-024(i) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	62	62	390	28000	Gamma	8501	95% Approximate Gamma
Antimony	6	36	0.0584 (J-)	7.3 (U)	Nonparametric	1.553	97.5% KM (Chebyshev)
Arsenic	62	62	0.55 (J-)	8.3	Gamma	3.62	95% Approximate Gamma
Barium	62	62	4.4	304	Gamma	107	95% Approximate Gamma
Calcium	62	62	360	74400	Nonparametric	11618	95% Chebyshev (Mean, Sd)
Chromium	62	62	1	44.7	Lognormal	12.83	95% H
Copper	60	62	1 (U)	22.2	Nonparametric	8.93	95% KM (Chebyshev)
Lead	62	62	3.5	144	Nonparametric	39.91	95% Chebyshev (Mean, Sd)
Lithium	1	1	14.8	14.8	n/a*	14.8	Maximum detected concentration
Mercury	42	61	0.0111	14.7	Nonparametric	3.817	97.5% KM (Chebyshev)
Perchlorate	1	7	0.0532 (J)	0.308 (U)	n/a	0.0532	Maximum detected concentration
Selenium	35	62	0.21 (UJ)	1.67	Nonparametric	0.507	95% KM (% Bootstrap)
Strontium	1	1	223	223	n/a	223	Maximum detected concentration
Zinc	62	62	10.3	316	Nonparametric	97.1	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	1	39	0.0339 (U)	0.66 (U)	n/a	0.044	Maximum detected concentration
Acetone	10	15	0.014 (J)	0.2 (J)	Nonparametric	0.0646	95% KM (BCA)
Anthracene	1	39	0.0339 (U)	0.66 (U)	n/a	0.045	Maximum detected concentration
Aroclor-1254	9	38	0.0035 (U)	0.906	Nonparametric	0.158	95% KM (t)
Aroclor-1260	6	38	0.0035 (U)	0.4	Nonparametric	0.204	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	1	39	0.0339 (UJ)	0.66 (U)	n/a	0.082	Maximum detected concentration
Benzo(a)pyrene	1	39	0.0339 (UJ)	0.66 (U)	n/a	0.074	Maximum detected concentration

Table H-2.2-41 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(b)fluoranthene	1	39	0.0339 (UJ)	0.66 (U)	n/a	0.078	Maximum detected concentration
Benzo(k)fluoranthene	1	39	0.0339 (UJ)	0.66 (U)	n/a	0.078	Maximum detected concentration
Benzoic acid	1	39	0.18 (J)	3.8 (U)	n/a	0.18	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	39	0.0447 (J)	0.66 (U)	n/a	0.055	Maximum detected concentration
Bromomethane	1	15	0.0034 (J)	0.014 (UJ)	n/a	0.0034	Maximum detected concentration
Butanone[2-]	8	15	0.0042 (J)	0.056	Nonparametric	0.0184	95% KM (t)
Chrysene	1	39	0.0339 (UJ)	0.66 (U)	n/a	0.089	Maximum detected concentration
DDT[4,4'-]	1	31	0.0017 (UJ)	0.02 (U)	n/a	0.0028	Maximum detected concentration
Di-n-butylphthalate	2	39	0.0408 (J)	0.66 (U)	n/a	0.0432	Maximum detected concentration
Fluoranthene	4	39	0.0244 (J)	0.66 (U)	n/a	0.57	Maximum detected concentration
Isopropylbenzene	1	15	0.0025 (J)	0.0071 (U)	n/a	0.0025	Maximum detected concentration
Phenanthrene	3	39	0.0339 (U)	0.66	n/a	0.66	Maximum detected concentration
Pyrene	4	39	0.0339 (UJ)	0.66 (U)	n/a	0.52	Maximum detected concentration
Toluene	3	15	0.0022 (J)	0.0071 (U)	n/a	0.006	Maximum detected concentration
Trichlorofluoromethane	2	15	0.0016 (J)	0.014 (U)	n/a	0.0018	Maximum detected concentration
Trimethylbenzene[1,2,4-]	2	15	0.0024 (J)	0.0071 (U)	n/a	0.003	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	3	58	-0.29 (U)	0.438 (U)	n/a	0.0616	Maximum detected concentration
Cesium-137	17	53	-0.044 (U)	1.03	Nonparametric	0.234	95% KM (t)
Plutonium-239/240	12	23	-0.007 (U)	2.94	Nonparametric	0.694	95% KM (t)
Tritium	43	53	-0.21 (U)	147	Nonparametric	47.66	99% KM (Chebyshev)
Uranium-234	53	53	0.54	7.25	Nonparametric	2.351	95% KM (Chebyshev)
Uranium-235/236	30	37	0.007 (U)	0.306	Nonparametric	0.12	95% KM (Chebyshev)
Uranium-238	53	53	0.608	3.45	Nonparametric	1.457	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-42
Exposure Point Concentrations for SWMU 21-024(i) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	79	79	256 (J+)	28000	Gamma	7493	95% Approximate Gamma
Antimony	43	6	0.0584 (J-)	7.3 (U)	Nonparametric	1	95% KM (Chebyshev)
Arsenic	79	79	0.12 (J)	8.3	Gamma	3.325	95% Approximate Gamma
Barium	79	79	3.4 (J)	304	Gamma	92.59	95% Approximate Gamma
Calcium	79	79	256 (J)	74400	Nonparametric	14702	97.5% Chebyshev (Mean, Sd)
Chromium	79	79	1	44.7	Lognormal	11.93	95% H
Copper	79	76	0.59 (U)	22.2	Nonparametric	7.711	95% KM (Chebyshev)
Lead	79	79	1.5	144	Nonparametric	33.45	95% Chebyshev (Mean, Sd)
Lithium	2	2	7.4 (J)	14.8	n/a*	14.8	Maximum detected concentration
Mercury	77	51	0.0096	14.7	Nonparametric	3.068	97.5% KM (Chebyshev)
Nitrate	7	2	0.9 (U)	2.83	n/a	2.83	Maximum detected concentration
Perchlorate	12	1	0.00211 (U)	0.308 (U)	n/a	0.0532	Maximum detected concentration
Selenium	79	51	0.21 (J)	15.6	Nonparametric	1.253	95% KM (BCA)
Strontium	2	2	223	262	n/a	262	Maximum detected concentration
Zinc	79	79	10.3	316	Nonparametric	82.15	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	56	1	0.0339 (U)	0.66 (U)	n/a	0.044	Maximum detected concentration
Acetone	31	12	0.00527 (UJ)	0.2 (J)	Nonparametric	0.0405	95% KM (% Bootstrap)
Anthracene	56	1	0.0339 (U)	0.66 (U)	n/a	0.045	Maximum detected concentration
Aroclor-1254	50	9	0.0035 (U)	0.906	Nonparametric	0.125	95% KM (t)
Aroclor-1260	50	6	0.0035 (U)	0.4	Nonparametric	0.201	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	56	1	0.0339 (UJ)	0.66 (U)	n/a	0.082	Maximum detected concentration
Benzo(a)pyrene	56	1	0.0339 (UJ)	0.66 (U)	n/a	0.074	Maximum detected concentration
Benzo(b)fluoranthene	56	1	0.0339 (UJ)	0.66 (U)	n/a	0.078	Maximum detected concentration
Benzo(k)fluoranthene	56	1	0.0339 (UJ)	0.66 (U)	n/a	0.078	Maximum detected concentration

Table H-2.2-42 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzoic acid	56	2	0.089 (J)	3.8 (U)	n/a	0.18	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	56	3	0.0447 (J)	0.66 (U)	n/a	0.11	Maximum detected concentration
Bromomethane	32	1	0.00105 (U)	0.016 (U)	n/a	0.0034	Maximum detected concentration
Butanone[2-]	31	9	0.0042 (J)	0.056	Nonparametric	0.0119	95% KM (t)
Chrysene	56	1	0.0339 (UJ)	0.66 (U)	n/a	0.089	Maximum detected concentration
DDT[4,4'-]	45	2	0.0017 (U)	0.02 (U)	n/a	0.0028	Maximum detected concentration
Di-n-butylphthalate	56	2	0.0408 (J)	0.66 (U)	n/a	0.0432	Maximum detected concentration
Fluoranthene	56	4	0.0244 (J)	0.66 (U)	n/a	0.57	Maximum detected concentration
Isopropylbenzene	31	1	0.00105 (U)	0.0082 (U)	n/a	0.0025	Maximum detected concentration
Phenanthrene	56	3	0.0339 (U)	0.66 (U)	n/a	0.66	Maximum detected concentration
Pyrene	56	4	0.0339 (UJ)	0.66 (U)	n/a	0.52	Maximum detected concentration
Toluene	31	3	0.00105 (U)	0.0082 (U)	n/a	0.006	Maximum detected concentration
Trichlorofluoromethane	31	3	0.00105 (U)	0.016 (U)	n/a	0.0018	Maximum detected concentration
Trimethylbenzene[1,2,4-]	31	2	0.00105 (U)	0.0082 (U)	n/a	0.003	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	75	4	-0.29 (U)	0.4377 (U)	n/a	0.0616	Maximum detected concentration
Cesium-137	70	17	-0.09 (U)	1.03	Nonparametric	0.197	95% KM (t)
Plutonium-239/240	40	14	-0.007 (U)	2.94	Nonparametric	0.419	95% KM (t)
Thorium-228	65	65	1.04	2.56	Normal	1.559	95% Modified-t
Thorium-230	65	64	0.0764 (U)	2.27	Nonparametric	1.168	95% KM (Chebyshev)
Tritium	70	60	-0.21 (U)	4233.18	Nonparametric	572.1	97.5% KM (Chebyshev)
Uranium-234	70	70	0.54	7.25	Nonparametric	1.999	95% Chebyshev (Mean, Sd)
Uranium-235/236	54	38	0.007 (U)	0.306	Nonparametric	0.0751	95% KM (BCA)
Uranium-238	70	70	0.608	3.45	Normal	1.148	95% Modified-t

* n/a = Not applicable.

Table H-2.2-43
Exposure Point Concentrations for SWMU 21-024(j) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Inorganic Chemicals (mg/kg)							
Arsenic	9	9	1.35 (J)	2.92	Normal	2.334	95% Student's-t
Barium	9	9	24.4	82.8 (J)	Normal	65.43	95% Student's-t
Chromium	9	9	2.02	5.44	Normal	4.571	95% Student's-t
Copper	9	9	2.83	11.6	Gamma	7.436	95% Approximate Gamma
Lead	9	9	7.43	36.5	Gamma	20.23	95% Approximate Gamma
Manganese	9	9	193 (J+)	335 (J)	Normal	292.9	95% Student's-t
Nickel	9	9	1.98 (J+)	6.17	Normal	4.777	95% Student's-t
Nitrate	9	7	1.01 (U)	2.46 (J+)	Nonparametric	1.758	95% KM (t)
Perchlorate	9	1	0.000861 (J-)	0.00206 (UJ)	n/a*	0.000861	Maximum Concentration detected
Selenium	9	6	0.606 (J)	1.56 (U)	Nonparametric	0.831	95% KM (t)
Zinc	9	9	25.4 (J+)	685 (J-)	n/a	685	Maximum Concentration detected
Organic Chemicals (mg/kg)							
Acenaphthene	9	1	0.0336 (U)	0.0479	n/a	0.0479	Maximum Concentration detected
Anthracene	9	2	0.011 (J)	0.0738	n/a	0.0738	Maximum Concentration detected
Aroclor-1254	4	2	0.00342 (U)	0.0368	n/a	0.0368	Maximum Concentration detected
Aroclor-1260	4	2	0.00342 (U)	0.0238	n/a	0.0238	Maximum Concentration detected
Benzo(a)anthracene	9	2	0.0216 (J)	0.15	n/a	0.15	Maximum Concentration detected
Benzo(a)pyrene	9	1	0.015 (U)	0.0342 (U)	n/a	0.0166	Maximum Concentration detected
Benzo(b)fluoranthene	9	4	0.0267 (J)	0.215	n/a	0.215	Maximum Concentration detected
Benzo(g,h,i)perylene	9	1	0.0336 (U)	0.109	n/a	0.109	Maximum Concentration detected
Chrysene	9	5	0.0202 (J)	0.154	Nonparametric	0.0691	95% KM (BCA)
Fluoranthene	9	7	0.0139 (J)	0.387	Nonparametric	0.328	97.5% KM (Chebyshev)
Fluorene	9	1	0.0336 (U)	0.0363	n/a	0.0363	Maximum Concentration detected
Indeno(1,2,3-cd)pyrene	9	1	0.0336 (U)	0.0867	n/a	0.0867	Maximum Concentration detected

Table H-2.2-43 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Naphthalene	9	1	0.0102 (J)	0.0347 (U)	n/a	0.0102	Maximum Concentration detected
Phenanthrene	9	6	0.0164 (J)	0.291	Nonparametric	0.246	97.5% KM (Chebyshev)
Pyrene	9	6	0.0276 (J)	0.345	Nonparametric	0.297	97.5% KM (Chebyshev)
Radionuclides (pCi/g)							
Americium-241	9	6	0.0186 (U)	0.145	Nonparametric	0.0906	95% KM (t)
Cesium-137	8	6	0.0415 (U)	1.48	Nonparametric	0.756	95% KM (Percentile Bootstrap)
Plutonium-239/240	9	9	0.0499	0.423	Gamma	0.222	95% Approximate Gamma
Tritium	9	4	-2.19 (U)	0.273 (U)	n/a	0.0333	Maximum Concentration detected
Uranium-234	9	9	0.865	7.79	Gamma	3.86	95% Approximate Gamma
Uranium-235/236	2	2	0.0759	0.0973	n/a	0.0973	Maximum Concentration detected

* n/a = Not applicable.

Table H-2.2-44
Exposure Point Concentrations for SWMU 21-024(j) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Arsenic	29	29	0.708 (J)	6.33	Gamma	3.197	95% Approximate Gamma
Barium	29	29	7.26 (J+)	166	Gamma	73.64	95% Approximate Gamma
Chromium	29	29	1.81	19.8	Gamma	7.443	95% Approximate Gamma
Copper	29	29	0.728 (J)	11.6	Gamma	5.418	95% Approximate Gamma
Lead	29	29	2.73	36.5	Gamma	14.04	95% Approximate Gamma
Manganese	29	29	85.5	818 (J)	Normal	333.1	95% Modified-t
Nickel	29	29	0.833	9.85	Normal	5.167	95% Student's-t
Nitrate	11	29	0.927	5.43	Nonparametric	1.686	95% KM (% Bootstrap)
Perchlorate	6	29	0.000567 (J)	0.0161	Nonparametric	0.00248	95% KM (t)
Selenium	21	29	0.606 (J)	11.6	Nonparametric	7.061	97.5% KM (Chebyshev)
Zinc	23	23	11.8	685 (J-)	Nonparametric	197.9	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	2	29	0.0255 (U)	0.0479	n/a*	0.0479	Maximum detected concentration
Anthracene	4	29	0.00981 (J)	0.0738	n/a	0.0738	Maximum detected concentration
Aroclor-1254	6	13	0.0016 (J)	0.326	Nonparametric	0.0796	95% KM (t)
Aroclor-1260	5	13	0.00342 (U)	0.26	Nonparametric	0.0652	95% KM (t)
Benzo(a)anthracene	3	29	0.0216 (J)	0.15	n/a	0.15	Maximum detected concentration
Benzo(a)pyrene	2	29	0.0166 (J)	0.102	n/a	0.102	Maximum detected concentration
Benzo(b)fluoranthene	6	29	0.0236 (J)	0.215	Nonparametric	0.0632	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	3	29	0.0131 (J)	0.109	n/a	0.109	Maximum detected concentration

Table H-2.2-44 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Bis(2-ethylhexyl)phthalate	1	29	0.0878 (J)	0.203 (U)	n/a	0.0878	Maximum detected concentration
Chloroform	1	22	0.000281 (J)	0.00123 (U)	n/a	0.000281	Maximum detected concentration
Chrysene	5	29	0.0129 (J)	0.154	Nonparametric	0.0658	95% KM (Percentile Bootstrap)
Fluoranthene	10	29	0.0139 (J)	0.387	Nonparametric	0.0772	95% KM (BCA)
Fluorene	2	29	0.0255 (U)	0.0407 (U)	n/a	0.0363	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	2	29	0.0255 (UJ)	0.0867	n/a	0.0867	Maximum detected concentration
Isopropyltoluene[4-]	1	22	0.000368 (J)	0.00123 (U)	n/a	0.000368	Maximum detected concentration
Methylene chloride	5	22	0.00302 (J)	0.00617 (U)	Nonparametric	0.00363	95% KM (t)
Naphthalene	2	29	0.0102 (J)	0.0407 (U)	n/a	0.0122	Maximum detected concentration
Phenanthrene	7	29	0.0164 (J)	0.291	Nonparametric	0.0587	95% KM (t)
Pyrene	9	29	0.0139 (J)	0.345	Nonparametric	0.0735	95% KM (BCA)
Toluene	2	22	0.000673 (J)	0.00177	n/a	0.00177	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	4	29	-0.00585 (U)	0.145	n/a	0.145	Maximum detected concentration
Cesium-137	5	24	-0.063 (U)	1.48	Nonparametric	0.331	95% KM (t)
Plutonium-239/240	12	29	-0.00847 (U)	0.423	Nonparametric	0.0962	95% KM (t)
Tritium	22	29	0.00187 (U)	0.768	Nonparametric	0.235	95% KM (Chebyshev)
Uranium-235/236	24	29	0.0187 (U)	1.4	Nonparametric	0.43	95% KM (Chebyshev)
Uranium-234	29	29	0.46	21.7	Nonparametric	7.72	95% Chebyshev (Mean, Sd)

* n/a = Not applicable.

Table H-2.2-45
Exposure Point Concentrations for SWMU 21-024(j) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Inorganic Chemicals (mg/kg)							
Arsenic	39	39	0.708 (J)	6.33	Gamma	3.262	95% Approximate Gamma
Barium	39	39	7.26 (J+)	166	Gamma	68.04	95% Approximate Gamma
Chromium	39	39	1.81	19.8	Gamma	6.752	95% Approximate Gamma
Copper	39	39	0.728 (J)	11.6	Gamma	5.321	95% Approximate Gamma
Lead	39	39	2.73	76.3 (J)	Lognormal	16.72	95% H
Manganese	39	39	85.5	818 (J)	Lognormal	328.2	95% H
Nickel	39	39	0.833	9.85	Normal	5.183	95% Student's-t
Nitrate	39	15	0.927 (U)	5.43 (J-)	Nonparametric	1.681	95% KM (% Bootstrap)
Perchlorate	39	7	0.000567 (J)	0.0161	Nonparametric	0.00215	95% KM (BCA)
Selenium	39	29	0.606 (J)	11.6	Nonparametric	6.909	97.5% KM (Chebyshev)
Zinc	33	33	11.8	685 (J-)	Nonparametric	157.7	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	39	2	0.0255 (U)	0.0479	n/a*	0.0479	Maximum detected concentration
Acetone	30	2	0.00357 (U)	0.0146	n/a	0.0146	Maximum detected concentration
Anthracene	39	4	0.00981 (J)	0.0738	n/a	0.0738	Maximum detected concentration
Aroclor-1254	16	9	0.0012 (J)	0.941	Nonparametric	0.562	99% KM (Chebyshev)
Aroclor-1260	16	8	0.0021 (J)	0.369 (J)	Nonparametric	0.0755	95% KM (t)
Benzo(a)anthracene	39	3	0.0216 (J)	0.15	n/a	0.15	Maximum detected concentration
Benzo(a)pyrene	39	2	0.0166 (J)	0.102	n/a	0.102	Maximum detected concentration
Benzo(b)fluoranthene	39	7	0.0236 (J)	0.215	Nonparametric	0.0461	95% KM (t)
Benzo(g,h,i)perylene	39	3	0.0131 (J)	0.109	n/a	0.109	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	39	1	0.0878 (J)	0.204 (U)	n/a	0.0878	Maximum detected concentration
Chloroform	30	2	0.000237 (J)	0.00123 (U)	n/a	0.000281	Maximum detected concentration

Table H-2.2-45 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Chrysene	39	8	0.0118 (J)	0.154	Nonparametric	0.0329	95% KM (t)
Fluoranthene	39	13	0.0139 (J)	0.387	Nonparametric	0.064	95% KM (BCA)
Fluorene	39	2	0.0255 (U)	0.0407 (U)	n/a	0.0363	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	2	2	0.00000863	0.0000108	n/a	1.08E-05	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	2	2	0.00000357	0.00000443	n/a	4.43E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	2	1	0.000000413 (U)	0.0000006 (J)	n/a	6E-07	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	2	2	0.000000367 (J)	0.000000426 (J)	n/a	4.26E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	2	2	0.000000301 (J)	0.000000886 (J)	n/a	8.86E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	2	1	0.000000207 (J)	0.000000407 (U)	n/a	2.07E-07	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,7,8,9-]	2	1	0.000000174 (U)	0.000000175 (J)	n/a	1.75E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	2	1	0.000000229 (J)	0.000000356 (U)	n/a	2.29E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	39	2	0.0255 (UJ)	0.0867	n/a	0.0867	Maximum detected concentration
Isopropyltoluene[4-]	30	2	0.000368 (J)	0.00762	n/a	0.00762	Maximum detected concentration
Methylene chloride	30	8	0.00299 (J)	0.00617 (U)	Nonparametric	0.00352	95% KM (t)
Naphthalene	39	2	0.0102 (J)	0.0407 (U)	n/a	0.0122	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	2	2	0.0000521	0.0000851	n/a	8.51E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	2	2	0.0000088	0.0000103	n/a	1.03E-05	Maximum detected concentration
Pentachlorodibenzodioxin [1,2,3,7,8-]	2	1	0.000000101 (U)	0.000000159 (J)	n/a	1.59E-07	Maximum detected concentration

Table H-2.2-45 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Methodology
Pentachlorodibenzofuran [1,2,3,7,8-]	2	1	0.000000136 (U)	0.000000463 (J)	n/a	4.63E-07	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	2	1	0.000000128 (U)	0.00000035 (J)	n/a	3.5E-07	Maximum detected concentration
Phenanthrene	39	9	0.0164 (J)	0.291	Nonparametric	0.0485	95% KM (BCA)
Pyrene	39	12	0.0139 (J)	0.345	Nonparametric	0.0564	95% KM (% Bootstrap)
Tetrachlorodibenzofuran [2,3,7,8-]	2	2	0.000000154 (J)	0.000000476 (J)	n/a	4.76E-07	Maximum detected concentration
Toluene	30	3	0.000673 (J)	0.00177	n/a	0.00177	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	39	6	-0.00585 (U)	0.145	Nonparametric	0.0637	95% KM (Percentile Bootstrap)
Cesium-137	34	8	-0.063 (U)	1.48	Nonparametric	0.288	95% KM (t)
Plutonium-239/240	39	15	-0.00847 (U)	0.423	Nonparametric	0.0845	95% KM (t)
Tritium	39	28	-2.19 (U)	0.768421	Nonparametric	0.153	95% KM (Percentile Bootstrap)
Uranium-234	39	39	0.46	21.7	Nonparametric	6.239	95% Chebyshev (Mean, Sd)
Uranium-235/236	4	3	0.0464 (U)	0.0973	n/a	0.0973	Maximum detected concentration

* n/a = Not applicable.

Table H-2.2-46
Exposure Point Concentrations for Consolidated Unit 21-024(l)-99 for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	14	14	3040	16000 (J+)	Normal	9743	95% Student's-t
Barium	14	14	48.7	146	Normal	102.6	95% Student's-t
Cadmium	3	3	0.132 (J)	0.565 (U)	n/a*	0.449	Maximum detected concentration
Chromium	14	14	4.67	11.3	Normal	9.98	95% Student's-t
Cobalt	14	14	1.57	5.03	Normal	3.616	95% Student's-t
Copper	13	13	5.99	14.2	Normal	10.94	95% Student's-t
Lead	15	15	9.6	38	Lognormal	22.45	95% H
Lithium	14	14	5.1 (J+)	15.3 (J+)	Normal	12.27	95% Student's-t
Mercury	15	15	0.013 (J)	0.0786	Nonparametric	0.0487	95% Chebyshev (Mean, Sd)
Nitrate	8	8	0.918 (UJ)	2.27	Nonparametric	1.811	95% KM (Percentile Bootstrap)
Perchlorate	4	4	0.000628 (J-)	0.00232 (U)	n/a	0.00154	Maximum detected concentration
Selenium	13	13	0.045 (U)	1.55 (U)	Nonparametric	1.022	95% KM (Percentile Bootstrap)
Zinc	15	15	25	91.5	Gamma	60.32	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	7	7	0.0161 (J)	0.68 (U)	Nonparametric	0.0488	95% KM (t)
Anthracene	9	9	0.00773 (J)	0.68 (U)	Nonparametric	0.0783	95% KM (BCA)
Benzo(a)anthracene	12	12	0.0242 (J)	0.584	Nonparametric	0.234	95% KM (t)
Benzo(a)pyrene	11	11	0.0107 (U)	0.558	Nonparametric	0.199	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	14	14	0.0163 (J)	0.84	Nonparametric	0.385	95% KM (t)
Benzo(g,h,i)perylene	13	13	0.018 (J)	0.257 (J)	Nonparametric	0.147	95% KM (t)
Benzo(k)fluoranthene	7	7	0.0189 (J)	0.21 (J)	Nonparametric	0.12	95% KM (Percentile Bootstrap)
Bis(2-ethylhexyl)phthalate	2	2	0.0876 (J)	0.25 (J)	n/a	0.25	Maximum detected concentration
Chrysene	14	14	0.0187 (J)	0.584	Nonparametric	0.252	95% KM (t)

Table H-2.2-46 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Fluoranthene	14	14	0.0268 (J)	1.41	Nonparametric	0.833	95% KM (Chebyshev)
Fluorene	7	7	0.0114 (J)	0.68 (U)	Nonparametric	0.0419	95% KM (t)
Indeno(1,2,3-cd)pyrene	13	13	0.0188 (J)	0.24 (J)	Nonparametric	0.143	95% KM (t)
Methylene chloride	1	1	0.00411 (J)	0.00411 (J)	n/a	0.00411	Maximum detected concentration
Phenanthrene	12	12	0.0206 (J)	0.972	Nonparametric	0.504	95% KM (Chebyshev)
Pyrene	14	14	0.0246 (J)	1.21	Nonparametric	0.714	95% KM (Chebyshev)
Radionuclides (pCi/g)							
Americium-241	15	15	0.000443 (U)	0.375	Nonparametric	0.197	95% KM (Chebyshev)
Cesium-137	9	9	0.0305 (U)	0.624	Nonparametric	0.324	95% KM (Percentile Bootstrap)
Plutonium-238	10	10	-0.00382 (U)	4.9	Nonparametric	2.913	99% KM (Chebyshev)
Plutonium-239/240	18	18	0.0138 (U)	6.23	Nonparametric	2.246	95% KM (Chebyshev)
Tritium	6	6	0.00498369 (U)	0.193801	Nonparametric	0.0764	95% KM (Percentile Bootstrap)
Uranium-234	14	14	0.735	3.72	Nonparametric	2.403	95% Chebyshev (Mean, Sd)
Uranium-235/236	14	10	0.0174 (U)	0.276	Nonparametric	0.122	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-47
Exposure Point Concentrations for Consolidated Unit 21-024(l)-99 for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	50	50	577	17200 (J+)	Nonparametric	9804	95% KM (BCA)
Barium	50	50	14.3	236 (J-)	Nonparametric	115.3	95% KM (t)
Cadmium	6	50	0.112 (J)	0.991	Nonparametric	0.343	95% KM (t)
Chromium	50	50	4.4	16.8	Nonparametric	10.26	95% KM (t)
Cobalt	50	50	0.387 (J)	8.46	Nonparametric	4.524	95% KM (Chebyshev)
Copper	44	44	2.48	36.4	Nonparametric	11.24	95% KM (BCA)
Lead	51	51	2.72	970 (J)	Nonparametric	149.1	95% KM (Chebyshev)
Lithium	50	50	2.3	17.8 (J+)	Nonparametric	12.72	95% KM (Chebyshev)
Mercury	51	51	0.004 (J)	0.628	Nonparametric	0.0987	95% KM (Chebyshev)
Nitrate	30	48	0.694 (J-)	6.1 (J-)	Nonparametric	1.547	95% KM (BCA)
Perchlorate	15	50	0.000628 (J-)	0.00632 (J+)	Nonparametric	0.00169	95% KM (t)
Selenium	40	52	0.045 (U)	1.79	Nonparametric	1.096	95% KM (Percentile Bootstrap)
Zinc	51	51	25	552 (J)	Nonparametric	122.9	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthylene	1	51	0.0122 (J)	0.68 (U)	n/a*	0.0122	Maximum detected concentration
Acenaphthene	21	51	0.0124 (J)	1.02	Nonparametric	0.147	95% KM (BCA)
Acetone	4	37	0.00522 (U)	0.35	n/a	0.35	Maximum detected concentration
Anthracene	30	51	0.00773 (J)	1.49	Nonparametric	0.44	97.5% KM (Chebyshev)
Benzo(a)anthracene	32	51	0.0146 (J)	3.2	Nonparametric	1.033	97.5% KM (Chebyshev)
Benzo(a)pyrene	31	51	0.0107 (U)	3.12 (J)	Nonparametric	0.657	95% KM (Chebyshev)
Benzo(b)fluoranthene	41	51	0.0135 (J)	4.8 (J)	Nonparametric	1.433	97.5% KM (Chebyshev)
Benzo(g,h,i)perylene	32	51	0.0147 (J)	1.29 (J)	Nonparametric	0.278	95% KM (BCA)
Benzo(k)fluoranthene	24	51	0.0124 (J)	1.8 (J)	Nonparametric	0.236	95% KM (t)

Table H-2.2-47 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Bis(2-ethylhexyl)phthalate	2	51	0.0876 (J)	0.25 (J)	n/a	0.25	Maximum detected concentration
Chloroform	1	37	0.000215 (J)	0.00125 (U)	n/a	0.000215	Maximum detected concentration
Chrysene	40	51	0.014 (J)	3.24	Nonparametric	1.041	97.5% KM (Chebyshev)
Dibenzofuran	8	51	0.0754 (J)	0.68 (U)	Nonparametric	0.221	95% KM (Percentile Bootstrap)
Fluoranthene	42	51	0.0118 (J)	8.61	Nonparametric	2.621	97.5% KM (Chebyshev)
Fluorene	21	51	0.0109 (J)	0.932	Nonparametric	0.129	95% KM (BCA)
Indeno(1,2,3-cd)pyrene	33	51	0.0123 (J)	1.31	Nonparametric	0.275	95% KM (BCA)
Methylene chloride	1	37	0.00411 (J)	0.00625 (U)	n/a	0.00411	Maximum detected concentration
Methylnaphthalene[2-]	11	51	0.00778 (J)	0.68 (U)	Nonparametric	0.0429	95% KM (Percentile Bootstrap)
Naphthalene	9	51	0.0112 (U)	0.739	Nonparametric	0.166	95% KM (Percentile Bootstrap)
Phenanthrene	36	51	0.0182 (J)	7.01	Nonparametric	2.016	97.5% KM (Chebyshev)
Pyrene	41	51	0.0162 (J)	7.37	Nonparametric	2.19	97.5% KM (Chebyshev)
Toluene	10	37	0.000411 (J)	0.0038	Nonparametric	0.00139	95% KM (Percentile Bootstrap)
Xylene[1,3-]+[1,4-]	1	37	0.000381(J)	0.0025 (U)	n/a	0.000381	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	25	54	-0.00569 (U)	3.44	Nonparametric	0.864	99% KM (Chebyshev)
Cesium-137	12	45	-0.0238 (U)	0.701	Nonparametric	0.191	95% KM (t)
Plutonium-238	15	55	-0.0101 (U)	4.9	Nonparametric	1.045	99% KM (Chebyshev)
Plutonium-239/240	51	55	0.0138 (U)	103	Nonparametric	17.5	97.5% KM (Chebyshev)
Tritium	35	50	0.00446 (U)	0.68	Nonparametric	0.159	95% KM (Chebyshev)
Uranium-234	50	50	0.504	3.72	Nonparametric	1.372	95% KM (Chebyshev)
Uranium-235/236	30	50	0.0174 (U)	0.276	Nonparametric	0.0774	95% KM (% Bootstrap)

* n/a = Not applicable.

Table H-2.2-48
Exposure Point Concentrations for Consolidated Unit 21-024(l)-99 for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	65	65	577	46800 (J+)	Gamma	10187	95% Approximate Gamma
Barium	65	65	14.3	342	Normal	113.5	95% Student's-t
Cadmium	9	9	0.112 (J)	2.74 (U)	Nonparametric	0.315	95% KM (t)
Chromium	65	65	1.35 (J)	24.9 (J)	Normal	10.36	95% Student's-t
Cobalt	65	65	0.387 (J)	8.46	Normal	3.674	95% Student's-t
Copper	54	54	2.15	36.4	Lognormal	9.917	95% H
Lead	68	68	2.72	970 (J)	Nonparametric	147.6	97.5% Chebyshev (Mean, Sd)
Lithium	65	65	2.3	17.8 (J+)	Normal	11.2	95% Student's-t
Mercury	68	68	0.004 (J)	0.628	Nonparametric	0.0797	95% Chebyshev (Mean, Sd)
Nitrate	38	38	0.694 (J-)	6.1 (J-)	Nonparametric	1.494	95% KM (BCA)
Perchlorate	22	22	0.000609 (J)	0.00632 (J+)	Nonparametric	0.00168	95% KM (Percentile Bootstrap)
Selenium	48	48	0.045 (U)	8.22 (U)	Nonparametric	1.094	95% KM (Percentile Bootstrap)
Zinc	70	70	16	949	Nonparametric	150.6	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	26	26	0.0124 (J)	1.51	Nonparametric	0.155	95% KM (BCA)
Acenaphthylene	1	1	0.0122 (J)	0.68 (U)	n/a*	0.0122	Maximum detected concentration
Acetone	4	4	0.00522 (U)	0.35	n/a	0.35	Maximum detected concentration
Anthracene	40	40	0.00773 (J)	2.38	Nonparametric	0.468	97.5% KM (Chebyshev)
Benzo(a)anthracene	38	38	0.0146 (J)	3.88	Nonparametric	0.98	97.5% KM (Chebyshev)
Benzo(a)pyrene	40	40	0.0107 (U)	3.92	Nonparametric	0.673	95% KM (Chebyshev)
Benzo(b)fluoranthene	51	51	0.0135 (J)	4.8 (J)	Nonparametric	1.314	97.5% KM (Chebyshev)
Benzo(g,h,i)perylene	40	40	0.0147 (J)	2.11 (J)	Nonparametric	0.287	95% KM (BCA)
Benzo(k)fluoranthene	29	29	0.0124 (J)	1.8	Nonparametric	0.234	95% KM (t)

Table H-2.2-48 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	2	2	0.0876 (J)	0.37 (U)	n/a	0.25	Maximum detected concentration
Carbazole	2	1	0.12 (J)	0.68 (U)	n/a	0.12	Maximum detected concentration
Chloroform	1	1	0.000215 (J)	0.00125 (U)	n/a	0.000215	Maximum detected concentration
Chrysene	50	50	0.014 (J)	3.76	Nonparametric	0.802	95% KM (Chebyshev)
Dibenzofuran	9	9	0.0754 (J)	0.694	Nonparametric	0.224	95% KM (Percentile Bootstrap)
Dichlorobenzene[1,4-]	1	1	0.000316 (J)	0.68 (U)	n/a	0.000316	Maximum detected concentration
Fluoranthene	53	53	0.0115 (J)	10.5	Nonparametric	2.527	97.5% KM (Chebyshev)
Fluorene	26	26	0.0109 (J)	1.2	Nonparametric	0.135	95% KM (t)
Indeno(1,2,3-cd)pyrene	42	42	0.0123 (J)	2.03 (J)	Nonparametric	0.399	95% KM (Chebyshev)
Isopropyltoluene[4-]	2	2	0.000443 (J)	0.00125 (U)	n/a	0.000463	Maximum detected concentration
Methylene chloride	1	1	0.00411 (J)	0.00625 (U)	n/a	0.00411	Maximum detected concentration
Methylnaphthalene[2-]	14	14	0.00778 (J)	0.68 (U)	Nonparametric	0.0444	95% KM (t)
Naphthalene	13	13	0.0112 (U)	1.22	Nonparametric	0.112	95% KM (t)
Phenanthrene	46	46	0.0182 (J)	9.28	Nonparametric	2.023	97.5% KM (Chebyshev)
Pyrene	51	51	0.0162 (J)	7.37	Nonparametric	2.013	97.5% KM (Chebyshev)
Toluene	15	15	0.000337 (U)	0.00515	Nonparametric	0.00128	95% KM (Percentile Bootstrap)
Xylene[1,3-]+xylene[1,4-]	1	1	0.000381 (J)	0.0025 (U)	n/a	0.000381	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	28	28	-0.0152 (U)	3.44	Nonparametric	0.478	97.5% KM (Chebyshev)
Cesium-137	12	12	-0.102 (U)	0.701	Nonparametric	0.165	95% KM (t)
Plutonium-238	16	16	-0.0101 (U)	4.9	Nonparametric	0.543	97.5% KM (Chebyshev)
Plutonium-239/240	67	67	0.0039 (UJ)	103	Nonparametric	14.19	97.5% KM (Chebyshev)
Tritium	48	48	0.0044551 (U)	2.06204	Nonparametric	0.296	95% KM (Chebyshev)
Uranium-234	65	65	0.504	3.72	Normal	1.108	95% Modified-t
Uranium-235/236	39	39	-0.33 (U)	0.276	Nonparametric	0.0905	97.5% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-49
Exposure Point Concentrations for SWMU 21-024(o) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	12	12	3150 (J+)	14300 (J+)	Normal	11130	95% Student's-t
Chromium	12	12	3.7 (J)	12.1	Normal	9.287	95% Student's-t
Cyanide (total)	12	6	0.084 (J)	1.33	Nonparametric	0.445	95% KM (t)
Lead	12	12	8.09	52.9	Normal	32.53	95% Student's-t
Nitrate	12	11	0.927 (J)	38	Nonparametric	26.85	97.5% KM (Chebyshev)
Perchlorate	12	10	0.000539 (J-)	0.00221 (UJ)	Nonparametric	0.00107	95% KM (t)
Uranium	12	12	0.84 (J)	5.13 (J-)	Lognormal	3.08	95% H
Zinc	13	13	24	192	Normal	107.9	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	12	4	0.0353 (U)	0.0877	n/a*	0.0877	Maximum detected concentration
Anthracene	12	7	0.0155 (J)	0.173	Nonparametric	0.0988	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	12	7	0.0219 (U)	0.44	Nonparametric	0.269	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	12	6	0.0358 (UJ)	0.452 (J)	Nonparametric	0.281	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	12	5	0.0358 (UJ)	0.985 (J)	Nonparametric	0.601	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	12	1	0.0353 (UJ)	0.237 (J)	n/a	0.237	Maximum detected concentration
Benzo(k)fluoranthene	12	2	0.0357 (UJ)	0.775 (J)	n/a	0.775	Maximum detected concentration
Benzoic acid	12	1	0.589 (J)	0.776 (U)	n/a	0.589	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	12	2	0.0937 (J)	0.194 (U)	n/a	0.119	Maximum detected concentration
Chrysene	12	8	0.0228 (J)	0.553	Nonparametric	0.274	95% KM (Percentile Bootstrap)
Fluoranthene	12	9	0.0292 (J)	1.02	Nonparametric	0.507	95% KM (t)
Fluorene	12	6	0.0122 (J)	0.127	Nonparametric	0.0869	95% KM (Percentile Bootstrap)
Hexachlorobenzene	12	1	0.0892 (J)	0.388 (U)	n/a	0.0892	Maximum detected concentration
Methylnaphthalene[2-]	12	4	0.0263 (J)	0.052	n/a	0.052	Maximum detected concentration

Table H-2.2-49 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Naphthalene	12	4	0.0353 (U)	0.104	n/a	0.104	Maximum detected concentration
Phenanthrene	12	9	0.0127 (J)	0.734	Nonparametric	0.424	95% KM (t)
Pyrene	12	9	0.034 (J)	0.983	Nonparametric	0.529	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	13	10	0.00115 (U)	0.0941	Nonparametric	0.0552	95% KM (Percentile Bootstrap)
Cesium-137	12	12	0.129	0.994	Normal	0.602	95% Student's-t
Plutonium-238	13	1	-0.00862 (U)	0.0846	n/a	0.0846	Maximum detected concentration
Plutonium-239/240	13	13	0.12	5.18	Gamma	2.321	95% Approximate Gamma
Tritium	12	3	-0.00465133 (U)	0.021444	n/a	0.0214	Maximum detected concentration

* n/a = Not applicable.

Table H-2.2-50
Exposure Point Concentrations for SWMU 21-024(o) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	22	22	970 (J+)	14300 (J+)	Nonparametric	9080	95% KM (t)
Chromium	22	22	1.54 (J)	24.7	Nonparametric	10.19	95% KM (BCA)
Cyanide (total)	5	22	0.084 (J)	1.33	Nonparametric	0.28	95% KM (t)
Lead	22	22	4.12	52.9	Nonparametric	30.39	95% KM (Chebyshev)
Nitrate	17	22	0.766 (J)	38	Nonparametric	17.51	97.5% KM (Chebyshev)
Perchlorate	10	22	0.000539 (J-)	0.00248 (UJ)	Nonparametric	0.00107	95% KM (t)
Selenium	1	22	0.599 (J)	1.78 (U)	n/a*	0.599	Maximum detected concentration
Uranium	22	22	0.631 (J)	5.13 (J-)	Nonparametric	2.417	95% KM (Chebyshev)
Zinc	23	23	18.7	192	Nonparametric	102.2	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	6	22	0.0156 (J)	0.0877	Nonparametric	0.0614	95% KM (Percentile Bootstrap)
Acetone	1	11	0.00268 (J)	0.00599 (UJ)	n/a	0.00268	Maximum detected concentration
Anthracene	8	22	0.0155 (J)	0.173	Nonparametric	0.0674	95% KM (Percentile Bootstrap)
Aroclor-1260	1	1	0.0201	0.0201	n/a	0.0201	Maximum detected concentration
Benzo(a)anthracene	8	22	0.0219 (U)	0.44	Nonparametric	0.18	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	6	22	0.0341 (U)	0.452 (J)	Nonparametric	0.265	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	5	22	0.0341 (U)	0.985 (J)	Nonparametric	0.563	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	1	22	0.0341 (U)	0.237 (J)	n/a	0.237	Maximum detected concentration
Benzo(k)fluoranthene	2	22	0.0341 (U)	0.775 (J)	n/a	0.775	Maximum detected concentration
Benzoic acid	1	22	0.589 (J)	0.798 (UJ)	n/a	0.589	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	3	22	0.0796 (J)	0.2 (U)	n/a	0.119	Maximum detected concentration
Chrysene	10	22	0.0228 (J)	0.553	Nonparametric	0.168	95% KM (Percentile Bootstrap)
Fluoranthene	16	22	0.013 (J)	1.02	Nonparametric	0.466	95% KM (Chebyshev)

Table H-2.2-50 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Fluorene	6	22	0.0122 (J)	0.127	Nonparametric	0.0829	95% KM (Percentile Bootstrap)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	4.89E-06	4.89E-06	n/a	4.89E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	1.17E-06 (J)	1.17E-06 (J)	n/a	1.17E-06	Maximum detected concentration
Hexachlorobenzene	1	22	0.0892 (J)	0.399 (U)	n/a	0.0892	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	1.96E-07 (J)	1.96E-07 (J)	n/a	1.96E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	1.79E-07 (J)	1.79E-07 (J)	n/a	1.79E-07	Maximum detected concentration
Methylnaphthalene[2-]	4	22	0.0263 (J)	0.052	n/a	0.052	Maximum detected concentration
Naphthalene	4	22	0.0341 (U)	0.104	n/a	0.104	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	4.31E-05	4.31E-05	n/a	4.31E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	2.67E-06 (J)	2.67E-06 (J)	n/a	2.67E-06	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	3.33E-07 (J)	3.33E-07 (J)	n/a	3.33E-07	Maximum detected concentration
Phenanthrene	14	22	0.0127 (J)	0.734	Nonparametric	0.259	95% KM (BCA)
Pyrene	16	22	0.015 (J)	0.983	Nonparametric	0.487	95% KM (Chebyshev)
Toluene	9	11	0.000493 (U)	0.01 (J+)	Nonparametric	0.00568	95% KM (Chebyshev)
Radionuclides (pCi/g)							
Americium-241	10	23	-0.00784 (U)	0.0941	Nonparametric	0.0469	95% KM (Percentile Bootstrap)
Cesium-137	12	19	-0.00786 (U)	0.994	Nonparametric	0.454	95% KM (Percentile Bootstrap)
Plutonium-238	1	23	-0.0247 (U)	0.0846	n/a	0.0846	Maximum detected concentration
Plutonium-239/240	20	23	0.00000000155 (U)	5.18	Nonparametric	1.946	95% KM (Chebyshev)
Tritium	6	22	-0.00543 (U)	0.0214	Nonparametric	0.0141	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-51
Exposure Point Concentrations for SWMU 21-024(o) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	24	24	970 (J+)	14300 (J+)	Normal	8786	95% Student's-t
Chromium	24	24	1.54 (J)	24.7	Gamma	9.946	95% Approximate Gamma
Cyanide (total)	24	6	0.084 (J)	1.33	Nonparametric	0.274	95% KM (t)
Lead	24	24	4.12	52.9	Lognormal	23.75	95% H
Nitrate	24	19	0.766 (J)	38	Nonparametric	16.24	97.5% KM (Chebyshev)
Perchlorate	24	11	0.000539 (J-)	0.00248 (UJ)	Nonparametric	0.00104	95% KM (t)
Selenium	24	1	0.599 (J)	1.78 (U)	n/a*	0.599	Maximum detected concentration
Uranium	24	24	0.631 (J)	5.13 (J-)	Nonparametric	2.487	95% KM Chebyshev (Mean, Sd)
Zinc	25	25	18.7	192	Nonparametric	96.77	95% KM Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acenaphthene	24	6	0.0156 (J)	0.0877	Nonparametric	0.0613	95% KM (Percentile Bootstrap)
Acetone	12	1	0.00268 (J)	0.00599 (UJ)	n/a	0.00268	Maximum detected concentration
Anthracene	24	8	0.0155 (J)	0.173	Nonparametric	0.0658	95% KM (Percentile Bootstrap)
Benzo(a)anthracene	24	8	0.0219 (U)	0.44	Nonparametric	0.166	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	24	6	0.0341 (U)	0.452 (J)	Nonparametric	0.264	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	24	5	0.0341 (U)	0.985 (J)	Nonparametric	0.579	95% KM (Percentile Bootstrap)
Benzo(g,h,i)perylene	24	1	0.0341 (U)	0.237 (J)	n/a	0.237	Maximum detected concentration
Benzo(k)fluoranthene	24	2	0.0341 (U)	0.775 (J)	n/a	0.775	Maximum detected concentration
Benzoic acid	24	1	0.589 (J)	0.798 (UJ)	n/a	0.589	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	24	3	0.0796 (J)	0.2 (U)	n/a	0.119	Maximum detected concentration
Chrysene	24	10	0.0228 (J)	0.553	Nonparametric	0.16	95% KM (Percentile Bootstrap)
Fluoranthene	24	16	0.013 (J)	1.02	Nonparametric	0.282	95% KM [BCA]
Fluorene	24	6	0.0122 (J)	0.127	Nonparametric	0.0819	95% KM (Percentile Bootstrap)

Table H-2.2-51 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.00000489	0.00000489	n/a	4.89E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.00000117 (J)	0.00000117 (J)	n/a	1.17E-06	Maximum detected concentration
Hexachlorobenzene	24	1	0.0892 (J)	0.399 (U)	n/a	0.0892	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	1	1	0.000000196 (J)	0.000000196 (J)	n/a	1.96E-07	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	1	1	0.000000179 (J)	0.000000179 (J)	n/a	1.79E-07	Maximum detected concentration
Methylnaphthalene[2-]	24	4	0.0263 (J)	0.052	n/a	0.052	Maximum detected concentration
Naphthalene	24	4	0.0341 (U)	0.104	n/a	0.104	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.0000431	0.0000431	n/a	4.31E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.00000267 (J)	0.00000267 (J)	n/a	2.67E-06	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	1	1	0.000000333 (J)	0.000000333 (J)	n/a	3.33E-07	Maximum detected concentration
Phenanthrene	24	14	0.0127 (J)	0.734	Nonparametric	0.227	95% KM [BCA]
Pyrene	24	16	0.015 (J)	0.983	Nonparametric	0.285	95% KM [BCA]
Toluene	12	10	0.000493 (U)	0.01 (J+)	Nonparametric	0.0034	95% KM [BCA]
Radionuclides (pCi/g)							
Americium-241	25	10	-0.00784 (U)	0.0941	Nonparametric	0.0465	95% KM (Percentile Bootstrap)
Cesium-137	21	14	-0.00786 (U)	0.994	Nonparametric	0.427	95% KM (Percentile Bootstrap)
Plutonium-238	25	1	-0.0247 (U)	0.0846	n/a	0.0846	Maximum detected concentration
Plutonium-239/240	25	21	0.00000000155 (U)	5.18	Nonparametric	1.819	95% KM (Chebyshev)
Tritium	24	6	-0.00543103 (U)	0.0214444	Nonparametric	0.0138	95% KM (Percentile Bootstrap)

* n/a = Not applicable.

Table H-2.2-52
Exposure Point Concentrations for Consolidated Unit 21-026(a)-99 for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	24	23	5.5 (U)	7440	Nonparametric	4264	95% KM (t)
Antimony	24	7	0.067 (J-)	1.5 (J-)	Nonparametric	0.317	95% KM (BCA)
Arsenic	24	23	0.83 (J)	11.9	Nonparametric	4.395	95% KM (Chebyshev)
Barium	23	22	2.2 (U)	708	Nonparametric	290.9	97.5% KM (Chebyshev)
Cadmium	24	13	0.023 (J)	12.1	Nonparametric	6.117	99% KM (Chebyshev)
Calcium	16	16	556	13900	Gamma	6600	95% Approximate Gamma
Chromium	24	23	1.1 (U)	252	Nonparametric	90.62	97.5% KM (Chebyshev)
Copper	24	23	1 (J)	556	Nonparametric	199.3	97.5% KM (Chebyshev)
Cyanide (total)	25	3	0.104 (U)	2.7 (J)	n/a*	2.7	Maximum detected concentration
Lead	24	23	0.33 (U)	249	Nonparametric	90.61	97.5% KM (Chebyshev)
Mercury	24	23	0.0071 (J)	14.7	Nonparametric	9.002	99% KM (Chebyshev)
Nickel	24	24	0.3	62.6	Nonparametric	34.93	99% Chebyshev (Mean, Sd)
Nitrate	24	20	0.2 (U)	9.8 (J)	Nonparametric	4.079	95% KM (Chebyshev)
Perchlorate	24	1	0.000991 (J)	0.0064 (UJ)	n/a	0.000991	Maximum detected concentration
Selenium	24	9	0.16 (J)	1.9 (U)	Nonparametric	0.677	95% KM (t)
Silver	25	24	0.055 (J)	42.2	Nonparametric	26.19	99% KM (Chebyshev)
Uranium	25	24	0.11 (U)	19.2	Nonparametric	7.35	97.5% KM (Chebyshev)
Zinc	24	23	2.2 (U)	1640	Nonparametric	555.4	97.5% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	25	2	0.0322 (U)	0.42 (U)	n/a	0.24	Maximum detected concentration
Anthracene	25	2	0.0322 (U)	0.65	n/a	0.65	Maximum detected concentration
Benzo(a)anthracene	25	3	0.0322 (U)	5.9	n/a	5.9	Maximum detected concentration
Benzo(a)pyrene	25	4	0.0322 (U)	4.4 (J)	n/a	4.4	Maximum detected concentration
Benzo(b)fluoranthene	25	7	0.0123 (J)	6 (J)	Nonparametric	1.078	95% KM (t)
Benzo(g,h,i)perylene	25	3	0.0322 (U)	2.1 (J)	n/a	2.1	Maximum detected concentration

Table H-2.2-52 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(k)fluoranthene	25	4	0.0322 (U)	4.6 (J)	n/a	4.6	Maximum detected concentration
Benzoic acid	25	3	0.388 (U)	2 (U)	n/a	0.501	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	25	5	0.078 (J)	4.2	Nonparametric	1.114	95% KM (Percentile Bootstrap)
Butylbenzylphthalate	25	2	0.322 (U)	1.2	n/a	1.2	Maximum detected concentration
Chrysene	25	5	0.0322 (U)	6	Nonparametric	1.14	95% KM (t)
Dibenz(a,h)anthracene	25	2	0.0322 (U)	0.84 (J)	n/a	0.84	Maximum detected concentration
Dibenzofuran	25	1	0.055 (J)	0.42 (U)	n/a	0.055	Maximum detected concentration
Dichlorobenzene[1,4-]	25	1	0.064 (J)	0.42 (U)	n/a	0.064	Maximum detected concentration
Dimethylphenol[2,4-]	25	1	0.063 (J)	0.42 (U)	n/a	0.063	Maximum detected concentration
Di-n-butylphthalate	25	4	0.04 (J)	0.85	n/a	0.85	Maximum detected concentration
Di-n-octylphthalate	25	1	0.1 (J)	0.42 (U)	n/a	0.1	Maximum detected concentration
Fluoranthene	25	6	0.0137 (J)	6.7	Nonparametric	4.279	99% KM (Chebyshev)
Fluorene	25	2	0.0322 (U)	0.42 (U)	n/a	0.17	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	25	3	0.0322 (U)	2.2 (J)	n/a	2.2	Maximum detected concentration
Phenanthrene	25	2	0.0322 (UJ)	2.2	n/a	2.2	Maximum detected concentration
Pyrene	25	6	0.0114 (J)	6	Nonparametric	1.055	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	24	10	-0.0112 (U)	58.1	Nonparametric	27.73	99% KM (Chebyshev)
Cesium-137	23	11	-0.0055 (U)	0.785	Nonparametric	0.356	95% KM (Percentile Bootstrap)
Plutonium-238	24	6	-0.0059 (U)	3.24	Nonparametric	0.555	95% KM (t)
Plutonium-239/240	24	18	0.0016 (U)	83.5	Nonparametric	40.04	99% KM (Chebyshev)
Tritium	24	13	0.003199	6.12	Nonparametric	2.878	99% KM (Chebyshev)
Uranium-234	25	25	0.273	43.1	Nonparametric	20.25	99% Chebyshev (Mean, Sd)
Uranium-235/236	25	16	0.009 (U)	1.8	Nonparametric	0.605	97.5% KM (Chebyshev)
Uranium-238	25	25	0.225	5.2	Nonparametric	1.906	95% Chebyshev (Mean, Sd)

* n/a = Not applicable.

Table H-2.2-53
Exposure Point Concentrations for Consolidated Unit 21-026(a)-99 for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Aluminum	49	50	5.5 (U)	13200	Nonparametric	5056	95% KM (Chebyshev)
Antimony	12	50	0.066 (J-)	1.5 (J-)	Nonparametric	0.214	95% KM (BCA)
Arsenic	49	50	0.45 (J)	11.9	Nonparametric	2.884	95% KM (Chebyshev)
Barium	47	48	2.2 (U)	708	Nonparametric	130.6	95% KM (Chebyshev)
Cadmium	24	50	0.015 (J)	12.1	Nonparametric	1.585	95% KM (Chebyshev)
Calcium	34	34	433	42800 (J)	Nonparametric	10465	95% KM (Chebyshev)
Chromium	49	50	1.1 (U)	252	Nonparametric	38.52	95% KM (Chebyshev)
Copper	49	50	0.949 (J)	556	Nonparametric	76.55	95% KM (Chebyshev)
Cyanide (total)	4	51	0.0799 (J)	2.7 (J)	n/a*	2.7	Maximum detected concentration
Lead	49	50	0.33 (U)	249	Nonparametric	41	95% KM (Chebyshev)
Mercury	48	50	0.0043 (J)	14.7	Nonparametric	3.009	97.5% KM (Chebyshev)
Nickel	50	50	0.3	62.6	Nonparametric	11.48	95% KM (Chebyshev)
Nitrate	23	50	0.093 (U)	9.8 (J)	Nonparametric	1.993	95% KM (% Bootstrap)
Perchlorate	5	50	0.000675 (J)	0.0064 (UJ)	Nonparametric	0.00135	95% KM (t)
Selenium	21	50	0.16 (J)	1.9	Nonparametric	0.559	95% KM (% Bootstrap)
Silver	48	52	0.046 (J)	42.2	Nonparametric	8.849	97.5% KM (Chebyshev)
Uranium	50	51	0.11 (U)	19.2	Nonparametric	3.216	95% KM (Chebyshev)
Zinc	49	50	2.2 (U)	1640	Nonparametric	224.8	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	3	51	0.0322 (U)	0.42 (U)	n/a	0.281	Maximum detected concentration
Anthracene	4	51	0.0322 (U)	0.65	n/a	0.65	Maximum detected concentration
Aroclor-1254	1	1	0.0044	0.0044	n/a	0.0044	Maximum detected concentration
Aroclor-1260	1	1	0.0031 (J)	0.0031 (J)	n/a	0.0031	Maximum detected concentration

Table H-2.2-53 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(a)anthracene	6	51	0.0291 (J)	5.9	Nonparametric	0.552	95% KM (t)
Benzo(a)pyrene	7	51	0.0184 (J)	4.4 (J)	Nonparametric	0.418	95% KM (t)
Benzo(b)fluoranthene	10	51	0.0123 (J)	6 (J)	Nonparametric	0.547	95% KM (t)
Benzo(g,h,i)perylene	5	51	0.0322 (U)	2.1 (J)	Nonparametric	0.233	95% KM (t)
Benzo(k)fluoranthene	6	51	0.0322 (U)	4.6 (J)	Nonparametric	0.469	95% KM (t)
Benzoic acid	4	51	0.388 (U)	2 (U)	n/a	0.501	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	8	51	0.078 (J)	4.2	Nonparametric	0.689	95% KM (Chebyshev)
Butylbenzylphthalate	5	51	0.069 (J)	1.2	Nonparametric	0.216	95% KM (Percentile Bootstrap)
Chloroform	2	26	0.000219 (J)	0.0056 (U)	n/a	0.000254	Maximum detected concentration
Chrysene	8	51	0.0248 (J)	6	Nonparametric	0.571	95% KM (t)
Dibenzo(a,h)anthracene	2	51	0.0322 (U)	0.84 (J)	n/a	0.84	Maximum detected concentration
Dibenzofuran	1	51	0.055 (J)	0.42 (U)	n/a	0.055	Maximum detected concentration
Dichlorobenzene[1,4-]	1	51	0.064 (J)	0.42 (U)	n/a	0.064	Maximum detected concentration
Dimethylphenol[2,4-]	1	51	0.063 (J)	0.42 (U)	n/a	0.063	Maximum detected concentration
Di-n-butylphthalate	5	51	0.04 (J)	0.85	Nonparametric	0.239	95% KM (t) UCL
Di-n-octylphthalate	1	51	0.1 (J)	0.42 (U)	n/a	0.1	Maximum detected concentration
Ethylbenzene	1	26	0.00043 (J)	0.0056 (UJ)	n/a	0.00043	Maximum detected concentration
Fluoranthene	9	51	0.0137 (J)	6.7	Nonparametric	0.599	95% KM (t)
Fluorene	2	51	0.0322 (U)	0.42 (U)	n/a	0.17	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	1.58E-06 (J)	1.58E-06 (J)	n/a	1.58E-06	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	5	51	0.0322 (U)	2.2 (J)	Nonparametric	0.235	95% KM (t)
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	9.95E-06	9.95E-06	n/a	9.95E-06	Maximum detected concentration
Phenanthrene	4	51	0.0322 (UJ)	2.2	n/a	2.2	Maximum detected concentration
Pyrene	9	51	0.0114 (J)	6	Nonparametric	0.537	95% KM (t)

Table H-2.2-53 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Trimethylbenzene[1,2,4-]	2	26	0.000413 (J)	0.0056 (UJ)	n/a	0.00049	Maximum detected concentration
Xylene (Total)	1	9	0.0015 (J)	0.0056 (U)	n/a	0.0015	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	16	51	-0.012 (UJ)	58.1	Nonparametric	13.04	99% KM (Chebyshev)
Cesium-137	15	50	-0.0155 (U)	0.785	Nonparametric	0.232	95% KM (Percentile Bootstrap)
Plutonium-238	10	50	-0.0059 (U)	3.24	Nonparametric	0.957	99% KM (Chebyshev)
Plutonium-239/240	27	51	-0.012 (U)	83.5	Nonparametric	19.1	99% KM (Chebyshev)
Tritium	36	50	0.0032	6.12	Nonparametric	0.717	95% KM (Chebyshev)
Uranium-234	51	51	0.273	43.1	Nonparametric	5.631	95% KM (Chebyshev)
Uranium-235/236	35	51	0.009 (U)	1.8	Nonparametric	0.17	95% KM (BCA)
Uranium-238	51	51	0.225	5.2	Nonparametric	1.33	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-54
Exposure Point Concentrations for Consolidated Unit 21-026(a)-99 for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	58	57	5.5 (U)	13200	Nonparametric	4696	95% KM (Chebyshev)
Antimony	58	12	0.066 (J-)	1.5 (J-)	Nonparametric	0.2	95% KM (BCA)
Arsenic	58	57	0.45 (J)	11.9	Nonparametric	2.744	95% KM (Chebyshev)
Barium	54	53	2.2 (U)	708	Nonparametric	120.2	95% KM (Chebyshev)
Cadmium	58	26	0.015 (J)	12.1	Nonparametric	1.381	95% KM (Chebyshev)
Calcium	43	43	433	42800 (J)	Gamma	7081	95% Approximate Gamma
Chromium	58	57	1.1 (U)	252	Nonparametric	34.34	95% KM (Chebyshev)
Copper	58	57	0.949 (J)	556	Nonparametric	66.56	95% KM (Chebyshev)
Cyanide (total)	59	4	0.0799 (J)	2.7 (J)	n/a*	2.7	Maximum detected concentration
Lead	58	57	0.33 (U)	249	Nonparametric	50.7	95% KM (Chebyshev)
Mercury	58	55	0.0043 (J)	14.7	Nonparametric	2.603	97.5% KM (Chebyshev)
Nickel	58	58	0.3	62.6	Nonparametric	10.3	95% Chebyshev (Mean, Sd)
Nitrate	58	23	0.093 (U)	9.8 (J)	Nonparametric	1.883	95% KM (Percentile Bootstrap)
Perchlorate	58	9	0.000627 (J)	0.0064 (UJ)	Nonparametric	0.00132	95% KM (t)
Selenium	58	24	0.16 (J)	1.9 (U)	Nonparametric	0.557	95% KM (Percentile Bootstrap)
Silver	60	56	0.037 (J)	42.2	Nonparametric	7.698	97.5% KM (Chebyshev)
Uranium	59	58	0.11 (U)	19.2	Nonparametric	2.882	95% KM (Chebyshev)
Zinc	58	57	2.2 (U)	1640	Nonparametric	199.6	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	59	3	0.0322 (U)	0.42 (U)	n/a	0.281	Maximum detected concentration
Anthracene	59	4	0.0322 (U)	0.65	n/a	0.65	Maximum detected concentration
Aroclor-1254	1	1	0.0044	0.0044	n/a	0.0044	Maximum detected concentration
Aroclor-1260	1	1	0.0031	0.0031	n/a	0.0031	Maximum detected concentration

Table H-2.2-54 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(a)anthracene	59	8	0.0142 (J)	5.9	Nonparametric	0.471	95% KM (t)
Benzo(a)pyrene	59	8	0.0184 (J)	4.4 (J)	Nonparametric	0.363	95% KM (t)
Benzo(b)fluoranthene	59	12	0.0123 (J)	6 (J)	Nonparametric	1.662	99% KM (Chebyshev)
Benzo(g,h,i)perylene	59	6	0.0322 (U)	2.1 (J)	Nonparametric	0.2	95% KM (t)
Benzo(k)fluoranthene	59	7	0.0322 (U)	4.6 (J)	Nonparametric	0.4	95% KM (t)
Benzoic acid	59	4	0.388 (U)	2 (U)	n/a	0.501	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	59	9	0.078 (J)	4.2	Nonparametric	0.605	95% KM (Chebyshev)
Butylbenzylphthalate	59	5	0.069 (J)	1.2	Nonparametric	0.206	95% KM (Percentile Bootstrap)
Chloroform	34	2	0.000219 (J)	0.0056 (U)	n/a	0.000254	Maximum detected concentration
Chrysene	59	9	0.0248 (J)	6	Nonparametric	0.497	95% KM (t)
Dibenz(a,h)anthracene	59	2	0.0322 (U)	0.84 (J)	n/a	0.84	Maximum detected concentration
Dibenzofuran	59	1	0.055 (J)	0.42 (U)	n/a	0.055	Maximum detected concentration
Dichlorobenzene[1,4-]	59	1	0.00103 (U)	0.42 (U)	n/a	0.064	Maximum detected concentration
Dimethylphenol[2,4-]	59	1	0.063 (J)	0.42 (U)	n/a	0.063	Maximum detected concentration
Di-n-butylphthalate	59	5	0.04 (J)	0.85	Nonparametric	0.236	95% KM (t)
Di-n-octylphthalate	59	1	0.1 (J)	0.42 (U)	n/a	0.1	Maximum detected concentration
Ethylbenzene	34	1	0.00043 (J)	0.0056 (U)	n/a	0.00043	Maximum detected concentration
Fluoranthene	59	11	0.0109 (J)	6.7	Nonparametric	0.518	95% KM (t)
Fluorene	59	2	0.0322 (U)	0.42 (U)	n/a	0.17	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.00000158 (J)	1.58E-06 (J)	1.58E-06	n/a	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	59	5	0.0393	2.2	Nonparametric	0.208	95% KM (t)
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.00000995	9.95E-06	9.95E-06	n/a	Maximum detected concentration
Phenanthrene	59	5	0.0322 (UJ)	2.2	Nonparametric	0.393	95% KM (Percentile Bootstrap)
Pyrene	59	10	0.0114 (J)	6	Nonparametric	0.467	95% KM (t)

Table H-2.2-54 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Trimethylbenzene[1,2,4-]	34	2	0.000413 (J)	0.0056 (U)	n/a	0.00049	Maximum detected concentration
Xylene[1,3-]+xylene[1,4-]	24	2	0.000283 (J)	0.00241 (U)	n/a	0.000283	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	59	19	-0.012 (UJ)	58.1	Nonparametric	11.25	99% KM (Chebyshev)
Cesium-137	60	16	-0.0421 (U)	0.785	Nonparametric	0.192	95% KM (Percentile Bootstrap)
Plutonium-238	59	10	-0.0059 (U)	3.24	Nonparametric	0.817	99% KM (Chebyshev)
Plutonium-239/240	59	31	-0.012 (U)	83.5	Nonparametric	16.52	99% KM (Chebyshev)
Tritium	58	44	0.00319871	6.12	Nonparametric	0.624	95% KM (Chebyshev)
Uranium-234	59	59	0.273	43.1	Nonparametric	4.987	95% Chebyshev (Mean, Sd)
Uranium-235/236	59	40	0.009 (U)	1.8	Nonparametric	0.15	95% KM (BCA)
Uranium-238	59	59	0.225	5.2	Nonparametric	1.027	95% Modified-t

* n/a = Not applicable.

Table H-2.2-55
Exposure Point Concentrations for SWMU 21-027(a) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	3	3	0.116 (J)	0.299 (J)	n/a*	0.299	Maximum detected concentration
Arsenic	9	9	0.796 (J)	5.9	Gamma	3.44	95% Approximate Gamma
Barium	9	9	14.7	114	Normal	72.73	95% Student's-t
Cadmium	9	8	0.457 (J)	2.86	Nonparametric	1.891	95% KM (t)
Chromium	12	12	1.4 (J+)	509	Gamma	248.5	95% Approximate Gamma
Copper	10	10	1.34	148	Gamma	78.07	95% Approximate Gamma
Lead	10	10	7.88 (J)	57	Normal	37.5	95% Student's-t
Lithium	9	9	6.73	15.3	Normal	11.01	95% Student's-t
Mercury	10	10	0.009 (J)	0.457	Gamma	0.26	95% Approximate Gamma
Nickel	9	9	1.67	7.69	Normal	4.844	95% Student's-t
Nitrate	9	9	2.6	13.9	Nonparametric	10.07	95% Chebyshev (Mean, Sd)
Perchlorate	9	3	0.000581 (J)	0.00364	n/a	0.00364	Maximum detected concentration
Selenium	9	5	0.538 (J)	1.5 (U)	Nonparametric	1.051	95% KM (t)
Strontium	9	9	3.06	43.2 (J)	Normal	28.68	95% Student's-t
Vanadium	9	9	2.19	21.4	Normal	11.96	95% Student's-t
Zinc	10	10	9.7	398	Gamma	224.7	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	10	3	0.0227 (J)	0.35 (U)	n/a	0.0557	Maximum detected concentration
Anthracene	10	5	0.00724 (J)	0.35 (U)	Nonparametric	0.0543	95% KM (t)
Aroclor-1254	1	1	0.0518	0.0518	n/a	0.0518	Maximum detected concentration
Aroclor-1260	1	1	0.0284	0.0284	n/a	0.0284	Maximum detected concentration
Benzo(a)anthracene	10	5	0.0335 (U)	0.713	Nonparametric	0.355	95% KM (Percentile Bootstrap)
Benzo(a)pyrene	10	3	0.0335 (U)	0.819	n/a	0.819	Maximum detected concentration

Table H-2.2-55 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(b)fluoranthene	10	7	0.0335 (U)	1.55	Nonparametric	0.64	95% KM (BCA)
Benzo(g,h,i)perylene	10	6	0.0273 (J)	0.457	Nonparametric	0.209	95% KM (Percentile Bootstrap)
Bis(2-ethylhexyl)phthalate	10	1	0.168 (U)	0.35 (U)	n/a	0.287	Maximum detected concentration
Chrysene	10	8	0.0273 (J)	0.801	Nonparametric	0.549	95% KM (Chebyshev)
Fluoranthene	10	9	0.012 (J)	1.84	Nonparametric	1.197	95% KM (Chebyshev)
Fluorene	10	2	0.0156 (J)	0.35 (U)	n/a	0.0344	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	3	3	0.000000613 (J)	0.0837	n/a	0.0837	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	3	3	0.000000177 (J)	0.0109	n/a	0.0109	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	3	2	0.0000000741 (U)	0.000799	n/a	0.000799	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	3	2	0.000000182 (U)	0.000499	n/a	0.000499	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	3	2	0.000000187 (U)	0.00304	n/a	0.00304	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	3	2	0.000000182 (U)	0.00129	n/a	0.00129	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	3	2	0.0000000548 (U)	0.000279	n/a	0.000279	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	3	2	0.0000000624 (U)	0.000296	n/a	0.000296	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,7,8,9-]	3	1	0.0000000762 (U)	7.85E-05	n/a	7.85E-05	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	3	2	0.0000000681 (U)	0.000619	n/a	0.000619	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	10	5	0.0218 (J)	0.721	Nonparametric	0.318	95% KM (Percentile Bootstrap)
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	3	3	0.00000441 (J)	0.35	n/a	0.35	Maximum detected concentration

Table H-2.2-55 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	3	3	0.000000395 (J)	0.0351	n/a	0.0351	Maximum detected concentration
Pentachlorodibenzodioxin [1,2,3,7,8-]	3	2	0.000000122 (U)	0.000247	n/a	0.000247	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	3	1	0.00000011 (U)	3.03E-05	n/a	3.03E-05	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	3	1	0.000000114 (U)	8.49E-05	n/a	8.49E-05	Maximum detected concentration
Phenanthrene	10	8	0.0142 (J)	0.611	Nonparametric	0.441	95% KM (Chebyshev)
Pyrene	10	9	0.0109 (J)	1.72	Nonparametric	1.1	95% KM (Chebyshev)
Tetrachlorodibenzodioxin [2,3,7,8-]	3	1	0.0000000575 (U)	2.59E-05	n/a	2.59E-05	Maximum detected concentration
Tetrachlorodibenzofuran [2,3,7,8-]	3	2	0.000000104 (U)	9.24E-06	n/a	9.24E-06	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	10	9	0.014 (U)	54.5 (J)	Nonparametric	36.18	95% KM (Chebyshev)
Cesium-137	9	9	0.322	1.32	Gamma	0.952	95% Approximate Gamma
Plutonium-238	10	9	0.018 (U)	28.3	Nonparametric	19.02	95% KM (t)
Plutonium-239/240	10	10	0.211	159	Normal	92.22	95% Student's-t
Tritium	9	3	-2.61 (U)	3.96 (U)	n/a	0.109	Maximum detected concentration
Uranium-234	10	10	0.905	51.9	Gamma	32.57	95% Approximate Gamma
Uranium-235/236	10	10	0.059	2.74	Gamma	1.66	95% Approximate Gamma
Uranium-238	10	10	0.761	2.77	Normal	2.01	95% Student's-t

* n/a = Not applicable.

Table H-2.2-56
Exposure Point Concentrations for SWMU 21-027(a) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Antimony	6	17	0.116 (J)	1.8 (J-)	Nonparametric	0.538	95% KM (t)
Arsenic	27	29	0.596 (J)	9.28	Nonparametric	4.587	95% KM (Chebyshev)
Barium	29	29	2.98	161	Nonparametric	90.33	95% KM (Chebyshev)
Cadmium	19	29	0.134 (J)	2.86	Nonparametric	1.451	97.5% KM (Chebyshev)
Chromium	32	32	1.4 (J+)	561 (J)	Nonparametric	359.7	99% KM (Chebyshev)
Copper	28	28	0.334 (J)	148	Nonparametric	46.36	95% KM (Chebyshev)
Lead	30	30	5.6 (J)	57	Nonparametric	24.03	95% KM (BCA)
Lithium	29	29	1.86 (J)	18.1	Nonparametric	9.698	95% KM (t)
Mercury	29	30	0.0023 (J)	0.598 (J+)	Nonparametric	0.295	97.5% KM (Chebyshev)
Nickel	29	29	0.448	11.9	Nonparametric	7.749	95% KM (Chebyshev)
Nitrate	21	29	0.959 (U)	13.9	Nonparametric	3.815	95% KM (Percentile Bootstrap)
Perchlorate	6	29	0.000581 (J)	0.0052 (U)	Nonparametric	0.00177	95% KM (Percentile Bootstrap)
Selenium	18	29	0.18 (J)	4.09	Nonparametric	1.589	95% KM (Percentile Bootstrap)
Strontium	29	29	0.703	43.2 (J)	Nonparametric	19.65	95% KM (t)
Vanadium	29	29	1.15	35	Nonparametric	17.96	95% KM (Chebyshev)
Zinc	30	30	9.7	698 (J)	Nonparametric	235.9	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	5	30	0.0188 (J)	0.35 (U)	Nonparametric	0.0467	95% KM (Percentile Bootstrap)
Acetone	1	20	0.00502 (UJ)	0.0269 (J)	n/a*	0.0269	Maximum detected concentration
Anthracene	8	30	0.00724 (J)	0.35 (U)	Nonparametric	0.035	95% KM (Percentile Bootstrap)
Aroclor-1254	2	2	0.0095	0.0518	n/a	0.0518	Maximum detected concentration
Aroclor-1260	2	2	0.0069	0.0284 (J)	n/a	0.0284	Maximum detected concentration
Benzo(a)anthracene	11	30	0.0189 (J)	0.713	Nonparametric	0.136	95% KM (t)
Benzo(a)pyrene	5	30	0.0185 (U)	0.819	Nonparametric	0.393	95% KM (Percentile Bootstrap)

Table H-2.2-56 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Benzo(b)fluoranthene	12	30	0.0306 (U)	1.55	Nonparametric	0.262	95% KM (t)
Benzo(g,h,i)perylene	8	30	0.0273 (J)	0.457	Nonparametric	0.138	95% KM (Percentile Bootstrap)
Benzo(k)fluoranthene	1	30	0.0246 (U)	0.35 (U)	n/a	0.244	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	2	30	0.044 (J)	0.35 (U)	n/a	0.287	Maximum detected concentration
Butanone[2-]	1	20	0.00502 (UJ)	0.021 (U)	n/a	0.00581	Maximum detected concentration
Chrysene	14	30	0.0206 (J)	0.801	Nonparametric	0.158	95% KM (t)
Di-n-butylphthalate	3	30	0.036 (J)	1.37 (U)	n/a	0.12	Maximum detected concentration
Fluoranthene	18	30	0.0108 (J)	1.84	Nonparametric	0.354	95% KM (BCA)
Fluorene	3	30	0.0156 (J)	0.35 (U)	n/a	0.0344	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	8	9	1.25E-07 (J)	0.0837	Nonparametric	0.0505	95% KM (Chebyshev)
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	6	9	0.000000088 (U)	0.0109	Nonparametric	0.00367	95% KM (BCA)
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	5	9	0.0000000631 (U)	0.000799	Nonparametric	3.5525E-4	95% KM (BCA)
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	5	9	0.000000106 (U)	0.000499	Nonparametric	6.3648E-4	99% KM (Chebyshev)
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	5	9	0.000000107 (U)	0.00304	Nonparametric	0.00136	95% KM (BCA)
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	5	9	0.000000102 (U)	0.00129	Nonparametric	4.3790E-4	95% KM (BCA)
Hexachlorodibenzofuran [1,2,3,4,7,8-]	5	9	0.0000000548 (U)	0.000279	Nonparametric	1.2540E-4	95% KM (BCA)
Hexachlorodibenzofuran [1,2,3,6,7,8-]	5	9	0.0000000415 (U)	0.000296	Nonparametric	1.0083E-4	95% KM (BCA)
Hexachlorodibenzofuran [1,2,3,7,8,9-]	4	9	0.0000000561 (U)	7.85E-05	n/a	7.85E-05	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	5	9	0.000000044 (U)	0.000619	Nonparametric	2.0975E-4	95% KM (BCA)
Indeno(1,2,3-cd)pyrene	7	30	0.0218 (J)	0.721	Nonparametric	0.118	95% KM (t)

Table H-2.2-56 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Naphthalene	1	30	0.0143 (J)	0.35 (U)	n/a	0.0143	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	9	9	4.75E-07 (J)	0.35	Nonparametric	0.212	95% KM (Chebyshev)
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	6	9	0.00000023 (U)	0.0351	Nonparametric	0.0118	95% KM (BCA)
Pentachlorodibenzodioxin [1,2,3,7,8-]	5	9	0.000000111 (U)	0.000247	Nonparametric	3.1502E-4	99% KM (Chebyshev)
Pentachlorodibenzofuran [1,2,3,7,8-]	3	9	0.0000000873 (U)	3.03E-05	n/a	3.03E-05	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	3	9	0.000000089 (U)	8.49E-05	n/a	8.49E-05	Maximum detected concentration
Phenanthrene	12	30	0.0142 (J)	0.611	Nonparametric	0.142	95% KM (t)
Pyrene	17	30	0.0109 (J)	1.72	Nonparametric	0.315	95% KM (BCA)
Tetrachlorodibenzodioxin [2,3,7,8-]	4	9	0.0000000467 (U)	2.59E-05	n/a	2.59E-05	Maximum detected concentration
Tetrachlorodibenzofuran [2,3,7,8-]	5	9	0.0000000732 (U)	9.24E-06	Nonparametric	3.2996E-6	95% KM (BCA)
Tetrachloroethene	4	20	0.000227 (J)	0.00559	n/a	0.00559	Maximum detected concentration
Toluene	7	20	0.00018 (U)	0.0051 (U)	Nonparametric	0.000654	95% KM (Percentile Bootstrap)
Radionuclides (pCi/g)							
Americium-241	27	30	0.00139 (U)	54.5 (J)	Nonparametric	17.72	95% KM (Chebyshev)
Cesium-137	13	28	-0.0414 (U)	1.32	Nonparametric	0.456	95% KM (t)
Plutonium-238	26	30	-0.00346 (U)	89.4 (J)	Nonparametric	40.01	99% KM (Chebyshev)
Plutonium-239/240	30	30	0.0329	168	Nonparametric	81.91	95% KM (Chebyshev)
Tritium	9	29	-2.61 (U)	3.96 (U)	Nonparametric	0.368	99% KM (Chebyshev)
Uranium-234	28	30	0.905	51.9	Nonparametric	20.36	97.5% KM (Chebyshev)
Uranium-235/236	28	29	0.059	2.74	Nonparametric	1.103	97.5% KM (Chebyshev)
Uranium-238	28	30	0.761	2.77	Nonparametric	1.635	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-57
Exposure Point Concentrations for SWMU 21-027(a) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	18	6	0.116 (J)	1.8 (J-)	Nonparametric	0.524	95% KM (t)
Arsenic	31	29	0.596 (J)	9.28	Nonparametric	4.398	95% KM (Chebyshev)
Barium	31	31	2.98	161	Gamma	70.51	95% Approximate Gamma
Cadmium	31	19	0.134 (J)	2.86	Nonparametric	1.383	97.5% KM (Chebyshev)
Chromium	34	34	1.23	561 (J)	Nonparametric	200.8	95% Chebyshev (Mean, Sd)
Copper	30	30	0.334 (J)	148	Gamma	29.85	95% Approximate Gamma
Lead	32	32	3.88	57	Gamma	23.42	95% Approximate Gamma
Lithium	31	31	1.86 (J)	18.1	Normal	9.411	95% Student's-t
Mercury	32	30	0.0023 (J)	0.598 (J+)	Nonparametric	0.279	97.5% KM (Chebyshev)
Nickel	31	31	0.448	11.9	Gamma	6.021	95% Approximate Gamma
Nitrate	31	22	0.959 (U)	13.9	Nonparametric	3.692	95% KM (Percentile Bootstrap)
Perchlorate	31	6	0.000581 (J)	0.0052 (U)	Nonparametric	0.00176	95% KM (Percentile Bootstrap)
Selenium	31	19	0.18 (J)	4.09	Nonparametric	1.581	95% KM (Percentile Bootstrap)
Strontium	31	31	0.703	43.2 (J)	Gamma	20.29	95% Approximate Gamma
Vanadium	31	31	1.15	35	Gamma	13.67	95% Approximate Gamma
Zinc	33	33	9.7	698 (J)	Lognormal	177.9	95% H
Organic Chemicals (mg/kg)							
Acenaphthene	32	5	0.0188 (J)	0.35 (U)	Nonparametric	0.0469	95% KM (Percentile Bootstrap)
Acetone	22	1	0.00502 (UJ)	0.0269 (J)	n/a*	0.0269	Maximum detected concentration
Anthracene	32	8	0.00724 (J)	0.35 (U)	Nonparametric	0.0345	95% KM (Percentile Bootstrap)
Aroclor-1254	2	2	0.0095	0.0518	n/a	0.0518	Maximum detected concentration
Aroclor-1260	2	2	0.0069	0.0284 (J)	n/a	0.0284	Maximum detected concentration
Benzo(a)anthracene	32	11	0.0189 (J)	0.713	Nonparametric	0.129	95% KM (t)
Benzo(a)pyrene	32	5	0.0185 (U)	0.819	Nonparametric	0.392	95% KM (Percentile Bootstrap)
Benzo(b)fluoranthene	32	12	0.0306 (U)	1.55	Nonparametric	0.248	95% KM (t)

Table H-2.2-57 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Benzo(g,h,i)perylene	32	8	0.0273 (J)	0.457	Nonparametric	0.136	95% KM (Percentile Bootstrap)
Benzo(k)fluoranthene	32	1	0.0246 (U)	0.35 (U)	n/a	0.244	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	32	2	0.044 (J)	0.35 (U)	n/a	0.287	Maximum detected concentration
Butanone[2-]	22	1	0.00502 (U)	0.021 (U)	n/a	0.00581	Maximum detected concentration
Chrysene	32	14	0.0206 (J)	0.801	Nonparametric	0.15	95% KM (t)
Di-n-butylphthalate	32	3	0.036 (J)	1.37 (U)	n/a	0.12	Maximum detected concentration
Fluoranthene	32	18	0.0108 (J)	1.84	Nonparametric	0.316	95% KM (BCA)
Fluorene	32	3	0.0156 (J)	0.35 (U)	n/a	0.0344	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	11	10	0.000000125 (J)	0.0837	Nonparametric	0.0414	95% KM (Chebyshev)
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	11	8	0.000000088 (U)	0.0109	n/a	0.0109	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,7,8,9-]	11	7	0.0000000631 (U)	0.000799	n/a	0.000799	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,4,7,8-]	11	7	0.000000106 (U)	0.000499	n/a	0.000499	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,6,7,8-]	11	7	0.000000107 (U)	0.00304	n/a	0.00304	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	11	7	0.000000102 (U)	0.00129	n/a	0.00129	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,4,7,8-]	11	7	0.0000000548 (U)	0.000279	n/a	0.000279	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,6,7,8-]	11	7	0.0000000415 (U)	0.000296	n/a	0.000296	Maximum detected concentration
Hexachlorodibenzofuran [1,2,3,7,8,9-]	11	6	0.0000000561 (U)	0.0000785	n/a	7.85E-05	Maximum detected concentration
Hexachlorodibenzofuran [2,3,4,6,7,8-]	11	7	0.000000044 (U)	0.000619	n/a	0.000619	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	32	7	0.0218 (J)	0.721 (J)	Nonparametric	0.111	95% KM (t)
Naphthalene	32	1	0.0143 (J)	0.35 (U)	n/a	0.0143	Maximum detected concentration

Table H-2.2-57 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	11	11	0.000000475 (J)	0.35	Gamma	0.301	95% Adjusted Gamma
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	11	8	0.00000023 (U)	0.0351	n/a	0.0351	Maximum detected concentration
Pentachlorodibenzodioxin [1,2,3,7,8-]	11	7	0.000000111 (U)	0.000247	n/a	0.000247	Maximum detected concentration
Pentachlorodibenzofuran [1,2,3,7,8-]	11	5	0.0000000873 (U)	0.0000303	n/a	3.03E-05	Maximum detected concentration
Pentachlorodibenzofuran [2,3,4,7,8-]	11	5	0.000000089 (U)	0.0000849	n/a	8.49E-05	Maximum detected concentration
Phenanthrene	32	12	0.0142 (J)	0.0142 (J)	Nonparametric	0.135	95% KM (t)
Pyrene	32	17	0.0109 (J)	0.0109 (J)	Nonparametric	0.307	95% KM (BCA)
Tetrachlorodibenzodioxin [2,3,7,8-]	11	5	0.0000000467 (U)	0.0000259	Nonparametric	1.82E-05	97.5% KM (Chebyshev)
Tetrachlorodibenzofuran [2,3,7,8-]	11	5	0.0000000732 (U)	0.00000924	Nonparametric	2.64E-06	95% KM (t)
Tetrachloroethene	23	4	0.000227 (J)	0.0056 (U)	n/a	0.00559	Maximum detected concentration
Toluene	22	7	0.00018 (U)	0.0051 (U)	Nonparametric	0.0006482	95% KM (Percentile Bootstrap)
Radionuclides (pCi/g)							
Americium-241	34	29	-0.00621 (U)	54.5 (J)	Nonparametric	10.25	95% KM (BCA)
Cesium-137	30	13	-0.0414 (U)	1.32	Nonparametric	0.438	95% KM (t)
Plutonium-238	34	28	-0.00346 (U)	89.4 (J)	Nonparametric	35.62	99% KM (Chebyshev)
Plutonium-239/240	34	34	0.0272	168	Gamma	61.27	95% Adjusted Gamma
Tritium	32	11	-2.61 (U)	3.96 (U)	Nonparametric	0.384	99% KM (Chebyshev)
Uranium-234	32	30	0.737	51.9	Nonparametric	19.24	97.5% KM (Chebyshev)
Uranium-235/236	31	29	0.021 (U)	2.74	Nonparametric	0.843	95% KM (Chebyshev)
Uranium-238	32	30	0.669	2.77	Nonparametric	1.597	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-58
Exposure Point Concentrations for SWMU 21-027(c) for Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Barium	14	14	11.6 (J-)	114 (J-)	Gamma	78.59	95% Approximate Gamma
Chromium	14	14	1.11	15.6	Normal	8.767	95% Student's-t
Cobalt	14	13	0.358 (J)	4.79	Nonparametric	2.701	95% KM (t)
Copper	14	14	0.798 (J)	17.7	Normal	8.866	95% Student's-t
Lead	16	16	5.54	120	Gamma	46.26	95% Approximate Gamma
Mercury	14	14	0.0031 (J)	0.111	Gamma	0.0529	95% Approximate Gamma
Nitrate	14	9	0.788 (J-)	2.75	Nonparametric	1.376	95% KM (BCA)
Perchlorate	14	2	0.00104 (J)	0.00247 (U)	n/a*	0.00155	Maximum detected concentration
Selenium	14	5	0.649 (J)	1.81 (U)	Nonparametric	0.819	95% KM (t)
Uranium	14	14	0.418	2.77	Gamma	1.167	95% Approximate Gamma
Zinc	14	14	7.72 (J-)	108 (J-)	Normal	61.03	95% Student's-t
Organic Chemicals (mg/kg)							
Acenaphthene	14	3	0.032 (J)	0.565	n/a	0.565	Maximum detected concentration
Anthracene	14	4	0.0108 (J)	0.949	n/a	0.949	Maximum detected concentration
Aroclor-1260	1	1	0.0016	0.0016	n/a	0.0016	Maximum detected concentration
Benzo(a)anthracene	14	3	0.035 (U)	3.08 (J)	n/a	3.08	Maximum detected concentration
Benzo(a)pyrene	14	6	0.0301 (J)	2.43 (J)	Nonparametric	0.584	95% KM (t)
Benzo(b)fluoranthene	14	10	0.0127 (J)	5.67 (J)	Nonparametric	2.365	95% KM (Chebyshev)
Benzo(g,h,i)perylene	14	2	0.035 (UJ)	1.12 (J)	n/a	1.12	Maximum detected concentration
Benzo(k)fluoranthene	14	2	0.0116 (J)	0.352 (U)	n/a	0.0212	Maximum detected concentration
Benzoic acid	14	1	0.306 (J)	7.04 (U)	n/a	0.306	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	14	3	0.159 (J)	48.8	n/a	48.8	Maximum detected concentration
Chrysene	14	8	0.0154 (J)	3.18 (J)	Nonparametric	0.781	95% KM (BCA)
Di-n-butylphthalate	14	3	0.0381 (J)	3.52 (U)	n/a	0.506	Maximum detected concentration
Dibenzofuran	14	1	0.25 (J)	3.52 (U)	n/a	0.25	Maximum detected concentration

Table H-2.2-58 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Fluoranthene	14	10	0.0142 (J)	5.78	Nonparametric	2.385	95% KM (Chebyshev)
Fluorene	14	3	0.0244 (J)	0.48	n/a	0.48	Maximum detected concentration
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	5.16E-06	5.16E-06	n/a	5.16E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	1.2E-06(J)	1.2E-06(J)	n/a	1.2E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	1.91E-07(J)	1.91E-07(J)	n/a	1.91E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	14	4	0.035 (UJ)	1.11 (J)	n/a	1.11	Maximum detected concentration
Methylnaphthalene[2-]	14	1	0.035 (U)	0.352 (U)	n/a	0.0794	Maximum detected concentration
Naphthalene	14	1	0.035 (U)	0.352 (U)	n/a	0.223	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	4.96E-05	4.96E-05	n/a	4.96E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	2.18E-06(J)	2.18E-06(J)	n/a	2.18E-06	Maximum detected concentration
Phenanthrene	14	8	0.0158 (J)	4.98	Nonparametric	1.165	95% KM (BCA)
Pyrene	14	10	0.0237 (J)	9.91 (J)	Nonparametric	4.081	95% KM (Chebyshev)
Radionuclides (pCi/g)							
Americium-241	15	10	0.00275 (U)	3.59	Nonparametric	1.158	95% KM (BCA)
Cesium-134	5	1	0.0352 (U)	0.141	n/a	0.141	Maximum detected concentration
Cesium-137	12	8	0.0067 (U)	0.458	Nonparametric	0.394	95% KM (BCA)
Plutonium-238	15	7	-0.00871 (U)	0.248	Nonparametric	0.113	95% KM (Percentile Bootstrap)
Plutonium-239/240	15	15	0.0688	17.8	Gamma	9.59	95% Approximate Gamma
Strontium-90	15	1	0.141 (U)	2.97	n/a	2.97	Maximum detected concentration
Tritium	14	5	0.0132973 (U)	0.04843	Nonparametric	0.0325	95% KM (Percentile Bootstrap)
Uranium-234	14	14	0.55	3.31	Gamma	1.617	95% Approximate Gamma

* n/a = Not applicable.

Table H-2.2-59
Exposure Point Concentrations for SWMU 21-027(c) for Ecological Risk

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Inorganic Chemicals (mg/kg)							
Barium	31	31	2.64	197 (J+)	Nonparametric	92.73	95% KM (Chebyshev)
Calcium	31	31	233 (J)	21500 (J)	Nonparametric	5434	95% KM (Chebyshev)
Chromium	31	31	0.742	52.3	Nonparametric	17.34	95% KM (Chebyshev)
Cobalt	27	31	0.211 (J)	8.57	Nonparametric	2.725	95% KM (BCA)
Copper	31	31	0.47 (J)	35.3 (J+)	Nonparametric	13.86	95% KM (Chebyshev)
Lead	34	34	4.72	120 (J)	Nonparametric	57.62	95% KM (Chebyshev)
Mercury	28	31	0.0031 (J)	0.37	Nonparametric	0.0903	95% KM (Chebyshev)
Nitrate	10	31	0.788 (J-)	2.75	Nonparametric	1.103	95% KM (% Bootstrap)
Perchlorate	3	31	0.000649 (J)	0.00247 (U)	n/a*	0.00155	Maximum detected concentration
Selenium	11	31	0.649 (J)	1.81 (U)	Nonparametric	0.907	95% KM (t)
Uranium	31	31	0.418	3.92	Nonparametric	1.22	95% KM (BCA)
Zinc	31	31	5.76 (J-)	231 (J+)	Nonparametric	83.9	95% KM (Chebyshev)
Organic Chemicals (mg/kg)							
Acenaphthene	6	32	0.0215 (J)	0.565	Nonparametric	0.0805	95% KM (BCA)
Acenaphthylene	1	32	0.0206 (J)	0.39 (U)	n/a	0.0206	Maximum detected concentration
Acetone	3	17	0.0044 (J)	0.0112 (J)	n/a	0.0112	Maximum detected concentration
Anthracene	9	32	0.0106 (J)	0.949	Nonparametric	0.113	95% KM (BCA)
Aroclor-1260	1	1	0.0016 (J)	0.0016 (J)	n/a	0.0016	Maximum detected concentration
Benzo(a)anthracene	7	32	0.0342 (U)	3.08 (J)	Nonparametric	0.567	95% KM (BCA)
Benzo(a)pyrene	9	29	0.0301 (J)	2.43 (J)	Nonparametric	0.331	95% KM (t)
Benzo(b)fluoranthene	13	29	0.0127 (J)	5.67 (J)	Nonparametric	0.702	95% KM (t)
Benzo(g,h,i)perylene	3	27	0.0342 (UJ)	1.12 (J)	n/a	1.12	Maximum detected concentration
Benzo(k)fluoranthene	3	28	0.0116 (J)	0.39 (U)	n/a	0.228	Maximum detected concentration
Benzoic acid	2	32	0.256 (J)	7.45 (U)	n/a	0.306	Maximum detected concentration

Table H-2.2-59 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Bis(2-ethylhexyl)phthalate	7	32	0.0767 (J)	48.8	Nonparametric	17.74	99% KM (Chebyshev)
Chrysene	12	32	0.0154 (J)	3.18 (J)	Nonparametric	0.376	95% KM (t)
Dibenzofuran	1	32	0.25 (J)	3.72 (U)	n/a	0.25	Maximum detected concentration
Di-n-butylphthalate	5	32	0.0381 (J)	3.72 (U)	Nonparametric	0.125	95% KM (t)
Fluoranthene	17	32	0.0114 (J)	5.78	Nonparametric	0.678	95% KM (BCA)
Fluorene	6	32	0.0159 (J)	0.48	Nonparametric	0.0789	95% KM (BCA)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	5.16E-06	5.16E-06	n/a	5.16E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	1.2E-06 (J)	1.2E-06 (J)	n/a	1.2E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	1.91E-07 (J)	1.91E-07 (J)	n/a	1.91E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	5	27	0.0342 (UJ)	1.11 (J)	Nonparametric	0.185	95% KM (t)
Isopropyltoluene[4-]	2	17	0.0003 (J)	0.00162 (J)	n/a	0.00162	Maximum detected concentration
Methylene chloride	2	17	0.00477 (J)	0.00699 (J+)	n/a	0.00699	Maximum detected concentration
Methylnaphthalene[2-]	1	32	0.0342 (U)	0.39 (U)	n/a	0.0794	Maximum detected concentration
Naphthalene	1	32	0.0342 (UJ)	0.39 (U)	n/a	0.223	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	4.96E-05	4.96E-05	n/a	4.96E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	2.18E-06 (J)	2.18E-06 (J)	n/a	2.18E-06	Maximum detected concentration
Phenanthrene	13	32	0.0151 (J)	4.98	Nonparametric	0.519	95% KM (t)
Pyrene	17	32	0.0173 (J)	9.91 (J)	Nonparametric	1.15	95% KM (BCA)
Toluene	15	17	0.000378 (J)	0.00516 (J)	Nonparametric	0.00183	95% KM (BCA)
Trichloroethene	2	17	0.000874 (J)	0.00188	n/a	0.00188	Maximum detected concentration

Table H-2.2-59 (continued)

COPC	Number of Detects	Number of Analyses	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Calculation Method
Radionuclides (pCi/g)							
Americium-241	19	33	-0.0125 (U)	3.59	Nonparametric	0.66	95% KM (t)
Cesium-134	1	12	0.007 (U)	0.141	n/a	0.141	Maximum detected concentration
Cesium-137	11	29	-0.0395 (U)	1.12	Nonparametric	0.263	95% KM (t)
Plutonium-238	12	33	-0.00871 (U)	0.248	Nonparametric	0.0918	95% KM (Percentile Bootstrap)
Plutonium-239/240	31	33	-0.00176 (U)	43.3	Nonparametric	7.841	95% KM (BCA)
Strontium-90	2	32	-0.169 (U)	2.97	n/a	2.97	Maximum detected concentration
Tritium	14	31	-0.0133 (U)	0.0586	Nonparametric	0.0255	95% KM (Percentile Bootstrap)
Uranium-234	31	31	0.55	3.31	Nonparametric	1.645	95% KM (Chebyshev)

* n/a = Not applicable.

Table H-2.2-60
Exposure Point Concentrations for SWMU 21-027(c) for Construction Worker and Residential Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Barium	35	35	2.64	197 (J+)	Nonparametric	138	99% Chebyshev (Mean, Sd)
Chromium	35	35	0.742	52.3	Gamma	11.56	95% Approximate Gamma
Cobalt	35	31	0.211 (J)	8.57	Nonparametric	3.656	95% KM (Chebyshev)
Copper	35	35	0.47 (J)	35.3 (J+)	Gamma	10.97	95% Approximate Gamma
Lead	39	39	4.72	120 (J)	Gamma	42.92	95% Approximate Gamma
Mercury	35	32	0.0031 (J)	0.895	Nonparametric	0.233	97.5% KM (Chebyshev)
Nitrate	35	10	0.788 (J-)	2.75	Nonparametric	1.077	95% KM (t)
Perchlorate	35	4	0.000649 (J)	0.00247 (U)	n/a*	0.00155	Maximum detected concentration
Selenium	35	13	0.649 (J)	1.81 (U)	Nonparametric	0.914	95% KM (t)
Uranium	35	35	0.418	3.92	Normal	1.221	95% Modified-t
Zinc	35	35	5.76 (J-)	231 (J+)	Gamma	62.03	95% Approximate Gamma
Organic Chemicals (mg/kg)							
Acenaphthene	36	6	0.0215 (J)	0.565	Nonparametric	0.0791	95% KM (BCA)
Acenaphthylene	36	1	0.0206 (J)	0.39 (U)	n/a	0.0206	Maximum detected concentration
Acetone	21	4	0.00417 (J)	0.0112 (J)	n/a	0.0112	Maximum detected concentration
Anthracene	36	10	0.0106 (J)	0.949	Nonparametric	0.103	95% KM (BCA)
Aroclor-1260	1	1	0.0016	0.0016	n/a	0.0016	Maximum detected concentration
Benzo(a)anthracene	36	7	0.0342 (U)	3.08 (J)	Nonparametric	0.532	95% KM (BCA)
Benzo(a)pyrene	33	10	0.0301 (J)	2.43 (J)	Nonparametric	0.3	95% KM (t)
Benzo(b)fluoranthene	33	15	0.0127 (J)	5.67 (J)	Nonparametric	0.631	95% KM (t)
Benzo(g,h,i)perylene	31	3	0.0342 (UJ)	1.12 (J)	n/a	1.12	Maximum detected concentration
Benzo(k)fluoranthene	32	3	0.0116 (J)	0.39 (U)	n/a	0.228	Maximum detected concentration
Benzoic acid	36	2	0.256 (J)	7.46 (UJ)	n/a	0.306	Maximum detected concentration

Table H-2.2-60 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	36	7	0.0767 (J)	48.8	Nonparametric	15.81	99% KM (Chebyshev)
Chrysene	36	14	0.0154 (J)	3.18 (J)	Nonparametric	0.344	95% KM (t)
Di-n-butylphthalate	36	5	0.0381 (J)	3.73 (U)	Nonparametric	0.124	95% KM (t)
Dibenzofuran	36	1	0.25 (J)	3.73 (U)	n/a	0.25	Maximum detected concentration
Dichlorobenzene[1,4-]	57	3	0.000302 (J)	3.73 (U)	n/a	0.000461	Maximum detected concentration
Fluoranthene	36	19	0.0114 (J)	5.78	Nonparametric	0.631	95% KM (BCA)
Fluorene	36	6	0.0159 (J)	0.48	Nonparametric	0.0734	95% KM (BCA)
Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	1	1	0.00000516	0.00000516	n/a	5.16E-06	Maximum detected concentration
Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	1	1	0.0000012 (J)	0.0000012 (J)	n/a	1.2E-06	Maximum detected concentration
Hexachlorodibenzodioxin [1,2,3,7,8,9-]	1	1	0.000000191 (J)	0.000000191 (J)	n/a	1.91E-07	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	31	5	0.0342 (UJ)	1.11 (J)	Nonparametric	0.17	95% KM (t)
Isopropyltoluene[4-]	21	2	0.0003 (J)	0.00162 (J)	n/a	0.00162	Maximum detected concentration
Methylene chloride	21	4	0.00293 (J)	0.00699 (J+)	n/a	0.00699	Maximum detected concentration
Methylnaphthalene[2-]	36	1	0.00992 (U)	0.39 (U)	n/a	0.0794	Maximum detected concentration
Naphthalene	36	1	0.0342 (UJ)	0.39 (U)	n/a	0.223	Maximum detected concentration
Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	1	1	0.0000496	0.0000496	n/a	4.96E-05	Maximum detected concentration
Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	1	1	0.00000218 (J)	0.00000218 (J)	n/a	2.18E-06	Maximum detected concentration
Phenanthrene	36	15	0.0151 (J)	4.98	Nonparametric	0.473	95% KM (t)
Pyrene	36	19	0.0173 (J)	9.91 (J)	Nonparametric	1.075	95% KM (BCA)
Toluene	21	18	0.000358 (J)	0.00516 (J)	Nonparametric	0.00158	95% KM (BCA)
Trichloroethene	21	2	0.000874 (J)	0.00188	n/a	0.00188	Maximum detected concentration

Table H-2.2-60 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Americium-241	37	23	-0.0125 (U)	3.59	Nonparametric	0.648	95% KM (Percentile Bootstrap)
Cesium-134	15	1	0.007 (U)	0.141	n/a	0.141	Maximum detected concentration
Cesium-137	32	12	-0.0395 (U)	1.12	Nonparametric	0.248	95% KM (t)
Plutonium-238	37	14	-0.00871 (U)	0.248	Nonparametric	0.0772	95% KM (t)
Plutonium-239/240	37	35	-0.00176 (U)	43.3	Nonparametric	8.567	95% KM (BCA)
Strontium-90	36	2	-0.169 (U)	2.97	n/a	2.97	Maximum detected concentration
Tritium	35	14	-0.0132973 (U)	0.0585882	Nonparametric	0.0244	95% KM (Percentile Bootstrap)
Uranium-234	35	35	0.55	3.31	Normal	1.373	95% Modified-t

* n/a = Not applicable.

Table H-3.3-1
Physical and Chemical Properties of Inorganic COPCs
for DP Site Aggregate Area

COPC	K_d[a] (cm^3/g)	Water Solubility[a,b] (g/L)
Aluminum	1.50E+03	Insoluble
Antimony	45	Insoluble
Arsenic	29	Insoluble
Barium	41	Insoluble
Beryllium	7.90E+02	Insoluble
Cadmium	75	Insoluble
Calcium	na[c]	na
Chromium (VI)	19	Insoluble
Cobalt	45	Insoluble
Copper	35	Insoluble
Cyanide (total)	9.9	na
Iron	25	Insoluble
Lead	900	Insoluble
Lithium	3.00E+02	Insoluble
Manganese	65	Insoluble
Mercury	52	Insoluble
Molybdenum	20	Insoluble
Nickel	6.50E+01[d]	Insoluble
Nitrate	0.0356	na
Perchlorate	na	245000
Selenium	5	Insoluble
Silver	8.3	Insoluble
Strontium	3.50E+01	Insoluble
Thallium	71[e]	Insoluble
Uranium	4.50E+02[f]	Insoluble
Vanadium	1.00E+03	Insoluble
Zinc	62	Insoluble

[a] Information from http://rais.ornl.gov/cgi-bin/tox/TOX_select?select=nrad.

[b] Denotes reference information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] na = Not available.

[d] As nickel salts.

[e] As thallium salts.

[f] As uranium salts.

Table H-3.3-2
Physical and Chemical Properties of Organic COPCs for DP Site Aggregate Area

COPC	Water Solubility[a] (mg/L)	Organic Carbon Coefficient K_{oc}[a] (L/kg)	Log Octanol-Water Partition Coefficient K_{ow}[a]	Vapor Pressure[a] (mm Hg at 25°C)
Acenaphthene	3.6E+00[b]	6.12E+03	3.92E+00[b]	2.5E-03[b]
Acenaphthylene	1.61E+01	5.03E+03	3.94E+00	6.68E-03
Acetone	1.00E+06[b]	1.98E+00	-2.40E-01[b]	2.31E+02[b]
Anthracene	4.34E-02[b]	2.04E+04	4.45E+00[b]	2.67E-06[b]
Aroclor-1242	2.77E-01	7.81E+04	6.29E+00	8.63E-05
Aroclor-1254	3.40E-03[b]	5.30E+05[c]	6.79E+00[b]	6.53E-06[b]
Aroclor-1260	2.84E-04[b]	5.30E+05[c]	8.27E+00[b]	4.05E-05[b]
Benzo(a)anthracene	9.40E-03[b]	2.31E+05	5.76+00[b]	1.90E-06[b]
Benzo(a)pyrene	1.62E-03[b]	7.87E+05	6.13E+00[b]	5.49E-09[b]
Benzo(b)fluoranthene	1.50E-03[b]	8.03E+05	5.78E+00[b]	5.00E-07[b]
Benzo(g,h,i)perylene	2.60E-04[b]	2.68E+06	6.63E+00[b]	1.00E-10[b]
Benzo(k)fluoranthene	8.00E-04[b]	7.87E+05	6.1E+00[b]	9.65E-10[b]
Benzoic acid	3.40E+03[b]	1.45E+01	1.87E+00[b]	7.00E-04[b]
Bis(2-ethylhexyl)phthalate	2.70E-01[b]	1.65E+05	7.60E+00[b]	1.42E-07[b]
Bromomethane	1.52E+04	1.32E+01	1.19E+00	1.62E+03
Butanone[2-]	2.23E+05	3.83E+00	2.90E-01	9.06E+01
Butylbenzylphthalate	2.69E+00	7.16E+03	4.73E+00	8.25E-06
Carbazole	1.80E+00	1.13E+04	3.72E+00	7.50E-07
Chloroaniline[4-]	3.90E+03	1.13E+02	1.83E+00	2.70E-02
Chloroform	7.95E+03	3.18E+01	1.97E+00	1.97E+02
Chrysene	6.30E-03[b]	2.36E+05	5.81E+00[b]	6.23E-09[b]
DDT[4,4-]	5.50E-03	1.69E+05	6.91E+00	1.60E-07
Dibenz(a,h)anthracene	1.03E-03	2.62E+06	6.54E+00	1.39E-11
Dibenzofuran	3.10E+00	1.13E+04	4.12E+00	2.48E-03
Dichlorobenzene[1,4-]	8.13E+01	3.75E+02	3.44E+00	1.74E+00
Dichloroethene[1,1-]	2.42E+03	3.18E+01	2.13E+00	6.34E+02
Dimethylphenol[2,4-]	2.80E+02	4.86E+01	2.16E+00	4.85E+03
Dimethylphthalate	4.00E+03	3.16E+01	1.60E+00	3.08E-03
Di-n-butylphthalate	1.12E+01	1.46E+03	4.50E+00	2.01E-05
Di-n-octylphthalate	na[d]	na	na	na
Ethylbenzene	1.69E+02	4.46E+02	3.15E+00	9.60E+00

Table H-3.3-2 (continued)

COPC	Water Solubility[a] (mg/L)	Organic Carbon Coefficient K_{oc}[a] (L/kg)	Log Octanol-Water Partition Coefficient K_{ow}[a]	Vapor Pressure[a] (mm Hg at 25°C)
Fluoranthene	2.06E-01[c]	7.09E+04[c]	5.16E+00[c]	9.22E-06[c]
Fluorene	1.89E+00[b]	1.13E+04	4.18E+00[b]	8.42E-04[b]
Hexachlorobenzene	6.20E-03	6.20E+03	5.73E+00	1.80E-05
Indeno(1,2,3-cd)pyrene	1.90E-04[b]	2.68E+06	6.70E+00[b]	1.25E-10[b]
Isopropylbenzene (Cumene)	6.13E+01	6.98E+02	3.66E+00	4.50E+00
Isopropyltoluene[4-]	2.34E+01[b]	na	4.10E+00[b]	1.64E+00[b]
Methyl-2-pentanone[4-]	1.64E+04	8.16E+00	1.68E+00	5.30E+00
Methylene chloride	1.30E+04[b]	2.37E+01	1.30E+00b	4.30E+02[b]
Methylnaphthalene[2-]	2.46E+01	2.98E+03	3.86E+00	5.50E-02
Naphthalene	3.10E+01	1.84E+03	3.30E+00	8.50E-02
Phenanthrene	1.15E+00[b]	2.08E+04	4.46E+00[b]	1.12E-04[b]
Pyrene	1.35E-01[b]	6.94E+04	4.88E+00[b]	4.50E-06[b]
Tetrachlorodibenzodioxin[2,3,7,8-]	2.00E-04	2.49E+05	6.80E+00	1.50E-09
Tetrachlorodibenzofuran[2,3,7,8-]	6.92E-04	1.40E+05	6.53E+00	1.47E-07
Tetrachloroethene	2.06E+02	9.49E+01	3.40E+00	1.85E+01
Toluene	5.26E+02	2.68E+02	2.73E+00	2.84E+01
Trichloroethene	1.28E+03	6.07E+01	2.42E+00	6.90E+01
Trichlorofluoromethane	1.10E+03	4.86E+01	2.53E+00	8.03E+02
Trimethylbenzene[1,2,4-]	5.70E+01	7.18E+02	3.63E+00	2.10E+00
Trimethylbenzene[1,3,5-]	4.82E+01	6.02E+02	3.42E+00	2.10E+00
Xylene[1,2-]	1.78E+02	3.83E+02	3.12E+00	7.99E+00
Xylene[1,3-]+Xylene[1,4-]	1.06E+02	3.83E+02	3.12E+00	7.99E+00

[a] Information from http://rais.ornl.gov/cgi-bin/tools/TOX_search, unless noted otherwise.

[b] Information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] Information from NMED 2009, 108070.

[d] na = Not available.

Table H-3.3-3
Physical and Chemical Properties of Radionuclide COPC for DP Site Aggregate Area

COPC	Soil-Water Partition Coefficient, K_d[a] (cm^3/g)	Water Solubility[b] (g/L)
Americium-241	680	Insoluble
Cesium-134	na[c]	na
Cesium-137	1000	Insoluble
Europium-152	na	na
Plutonium-238	4500	Insoluble
Plutonium-239/240	4500	Insoluble
Strontium-90	35	Soluble
Thorium-228	20	Insoluble
Thorium-230	20	Insoluble
Tritium	9.9	Soluble
Uranium-234	0.4	Insoluble
Uranium-235/236	0.4	Insoluble
Uranium-238	0.4	Insoluble

[a] Denotes reference information from Superfund Chemical Data Matrix (EPA 1996, 064708).

[b] Denotes reference information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] na = Not available.

Table H-4.1-1
Exposure Parameter Values Used to Calculate
Chemical SSLs for the Industrial, Construction Worker, and Residential Scenarios

Parameters	Residential Values	Industrial Values	Construction Worker Values
Target HQ	1	1	1
Target cancer risk	10^{-5}	10^{-5}	10^{-5}
Averaging time (carcinogen)	70 yr x 365 days	70 yr x 365 days	70 yr x 365 days
Averaging time (noncarcinogen)	ED x 365 days	ED x 365 days	ED x 365 days
Skin absorption factor	Semivolatile organic compound (SVOC) = 0.1	SVOC = 0.1	SVOC = 0.1
	Chemical-specific	Chemical-specific	Chemical-specific
Adherence factor–child	0.2 mg/cm^2	n/a[a]	n/a
Body weight–child	15 kg (0–6 years of age)	n/a	n/a
Cancer slope factor–oral (chemical-specific)	(mg/kg-day-)^1	(mg/kg-day-)^1	(mg/kg-day-)^1
Cancer slope factor–inhalation (chemical-specific)	(mg/kg-day-)^1	(mg/kg-day-)^1	(mg/kg-day-)^1
Exposure frequency	350 day/yr	225 day/yr	250 day/yr
Exposure time	24 hr/day	8 hr/day	8 hr/day
Exposure duration–child	6 yr	n/a	n/a
Age-adjusted ingestion factor	114 mg-yr/kg-day	n/a	n/a
Age-adjusted inhalation factor	11 m^3-yr/kg-day	n/a	n/a
Inhalation rate–child	10 m^3/day	n/a	n/a
Soil ingestion rate–child	200 mg/day	n/a	n/a
Particulate emission factor	6.61 x 10^9 m^3/kg	6.61 x 10^9 m^3/kg	2.1 x 10^6 m^3/kg
Reference dose–oral (chemical-specific)	(mg/kg-day)	(mg/kg-day)	(mg/kg-day)
Reference dose–inhalation (chemical-specific)	(mg/kg-day)	(mg/kg-day)	(mg/kg-day)
Exposed surface area–child	2800 cm^2/day	n/a	n/a
Age-adjusted skin contact factor for carcinogens	361 mg-yr/kg-day	n/a	n/a
Volatilization factor for soil (chemical-specific)	(m^3/kg)	(m^3/kg)	(m^3/kg)
Body weight–adult	70 kg	70 kg	70 kg
Exposure duration[b]	30 yr	25 yr	1 yr
Adherence factor–adult	0.07 mg/cm^2	0.2 mg/cm^2	0.3 mg/cm^2
Soil ingestion rate–adult	100 mg/day	100 mg/day	330 mg/day
Exposed surface area–adult	5700 cm^2/day	3300 cm^2/day	3300 cm^2/day
Inhalation rate–adult	20 m^3/day	20 m^3/day	20 m^3/day

Note: Parameter values from NMED 2009, 108070.

[a] n/a = Not applicable.

[b] Exposure duration for lifetime resident is 30 years. For carcinogens, the exposures are combined for child (6 yr) and adult (24 yr).

Table H-4.1-2
Parameters Used in the SAL Calculations for Radionuclides, Residential

Parameters	Residential, Child	Residential, Adult
Inhalation rate (m^3/yr)	3652.5[a]	7305[b]
Mass loading (g/m^3)	1.5×10^{-7}[c]	1.5×10^{-7}[c]
Outdoor time fraction	0.2236[d]	0.0599[e]
Indoor time fraction	0.7347[f]	0.8984[g]
Soil ingestion (g/yr)	73[h]	36.5[i]

[a] Calculated as (10 m^3/d × 350 d/yr] / (indoor + outdoor time fractions], where 10 m^3/d is the daily inhalation rate of a child (NMED 2009, 108070).

[b] Calculated as (20 m^3/d × 350 d/yr] / (indoor + outdoor time fractions], where 20 m^3/d is the daily inhalation rate of an adult (NMED 2009, 108070).

[c] Calculated as (1/ $6.6 \times 10^{+9}$ m^3/kg) x 1000 g/kg, where $6.6 \times 10^{+9}$ m^3/kg is the particulate emission factor (NMED 2009, 108070).

[d] Calculated as (5.6 hr/d × 350 d/yr] / 8766 hr/yr, where 5.6 hr/dis an estimate of time spent outdoors for a 3- to 11-yr-old child (EPA 1997, 066598, section 15.4-1).

[e] Calculated as (1.5 hr/d × 350 d/yr] / 8766 hr/yr, where 1.5 hr/d is an estimate of time spent outdoors for an adult 12 yr and older (EPA 1997, 066598, section 15.4-1).

[f] Calculated as [(24–5.6 hr/d × 350 d/yr] / 8766 hr/yr.

[g] Calculated as [(24–1.5 hr/d × 350 d/yr] / 8766 hr/yr.

[h] Calculated as [0.2 g/d × 350 d/yr] / [indoor + outdoor time fractions], where 0.2 g/d is the child soil-ingestion rate (NMED 2009, 108070).

[i] Calculated as [0.1 g/d × 350 d/yr] / [indoor + outdoor time fractions], where 0.1 g/d is the adult soil-ingestion rate (NMED 2009, 108070).

Table H-4.1-3
Parameter Values Used to Calculate Radionuclide SALs
for the Industrial and Construction Worker Scenarios

Parameters	Industrial, Adult	Construction Worker, Adult
Inhalation rate (m^3/yr)	19,481[a]	19,478[b]
Mass loading (g/m^3)	1.5 x 10^{-7}[c]	0.0004[d]
Outdoor time fraction	0.2053[e]	0.2567[f]
Indoor time fraction	0	0
Soil ingestion (g/yr)	97.4[g]	321[h]

[a] Calculated as [20 m^3/day x 225 day/yr] / [indoor + outdoor time fractions], where 20 m^3/day is the daily inhalation rate of an adult and 225 days/yr is the exposure frequency (NMED 2009, 108070).

[b] Calculated as [20 m^3/day x 250 day/yr] / [indoor + outdoor time fractions], where 20 m^3/day is the daily inhalation rate of an adult and 250 days/yr is the exposure frequency (NMED 2009, 108070).

[c] Calculated as [1/ 6.6 x 10^{+9} m^3/kg) x 1000 g/kg, where 6.6 x 10^{+9} m^3/kg is the particulate emission factor (NMED 2009, 108070).

[d] Calculated as [1/ 2.1 x 10^{+6} m^3/kg) x 1000 g/kg, where 2.1 x 10^{+6} m^3/kg is the particulate emission factor (NMED 2009, 108070).

[e] Calculated as [8 hr/day x 225 day/yr] / 8766 hr/yr, where 8 hr/day is an estimate of the average length of the work day.

[f] Calculated as [9 hr/day x 250 day/yr] / 8766 hr/yr, where 9 hr/day is an estimate of the average length of the work day, including a 1-hr break on-site.

[g] Calculated as [0.1 g/day x 225 day/yr] / [indoor + outdoor time fractions], where 0.1 g/day is the adult soil ingestion rate (NMED 2009, 108070).

[h] Calculated as [0.33 g/day x 250 day/yr] / [indoor + outdoor time fractions], where 0.33 g/day is the adult soil ingestion rate NMED 2009, 108070).

Table H-4.2-1
Industrial Noncarcinogenic
Screening Evaluation for AOC 21-002(b)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Aluminum	9137	1.13E+06	8E-03
Anthracene	0.0149	1.83E+05	8E-08
Barium	121.9	2.24E+05	5E-04
Benzo(g,h,i)perylene	0.139	1.83E+04[b]	8E-06
Cadmium	0.575	1.12E+03	5E-04
Chromium	13.99	2.92E+03[c]	5E-03
Cyanide (total)	0.574	2.27E+04	3E-05
Dimethylphthalate	0.12	6.84E+06	2E-08
Di-n-butylphthalate	0.47	6.84E+04	7E-06
Fluoranthene	0.0733	2.44E+04	3E-06
Lead	171.4	8.00E+02	2E-01
Nitrate	5.742	1.82E+06	3E-06
Perchlorate	0.00127	7.95E+02	2E-06
Phenanthrene	0.0368	2.05E+04	2E-06
Pyrene	0.0708	1.83E+04	4E-06
Selenium	6.915	5.68E+03	1E-03
Silver	0.569	5.68E+03	1E-04
Zinc	121.4	3.41E+05	4E-04
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

Table H-4.2-2
Industrial Carcinogenic Screening Evaluation for AOC 21-002(b)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Arsenic	2.742	1.77E+01	2E-06
Benzo(a)anthracene	0.0654	2.34E+01	3E-08
Benzo(a)pyrene	0.076	2.34E+00	3E-07
Benzo(b)fluoranthene	0.167	2.34E+01	7E-08
Benzo(k)fluoranthene	0.41	2.34E+02	2E-08
Bis(2-ethylhexyl)phthalate	1.99	1.37E+03	1E-08
Chrysene	0.0656	2.34E+03	3E-10
Indeno(1,2,3-cd)pyrene	0.144	2.34E+01	6E-08
		Total Excess Cancer Risk	**2E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-3
Industrial Radionuclide Screening Evaluation for AOC 21-002(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0673	180	0.006
Plutonium-238	0.0417	240	0.003
Plutonium-239/240	2.178	210	0.2
Tritium	0.0423	4.4E+05	1E-06
		Total Dose	**0.2**

* SALs from LANL (2009, 107655).

Table H-4.2-4
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for AOC 21-002(b)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	2.63E-06	0.01	2.6E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.07E-06	0.01	1.1E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1.96E-07	0.1	2.0E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1.24E-07	0.1	1.2E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	9.43E-08	0.1	9.4E-09
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	2.5E-05	0.0003	7.5E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	2.78E-06	0.0003	8.3E-10
Pentachlorodibenzodioxin[1,2,3,7,8-]	8.52E-08	1	8.5E-08
Pentachlorodibenzofuran[2,3,4,7,8-]	2.04E-07	0.3	6.1E-08
Tetrachlorodibenzofuran[2,3,7,8-]	4.66E-07	0.1	4.7E-08
		2,3,7,8-TCDD Equivalent	2.8E-07

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-5
Construction Worker Noncarcinogenic
Screening Evaluation for AOC 21-002(b)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.0123	2.63E+05	4.7E-08
Aluminum	8486	4.07E+04	2.1E-01
Anthracene	0.0149	6.68E+04	2.2E-07
Aroclor-1254	0.0418	4.36E+00	9.6E-03
Arsenic	3.805	6.54E+01	5.8E-02
Barium	92.65	4.35E+03	2.1E-02
Benzo(g,h,i)perylene	0.172	6.68E+03[b]	2.6E-05
Bis(2-ethylhexyl)phthalate	1.99	4.76E+03	4.2E-04
Cadmium	0.403	3.09E+02	1.3E-03
Chromium	14.85	4.49E+02[c]	3.3E-02
Cyanide (total)	0.4	6.19E+03	6.5E-05
Dimethylphthalate	0.12	2.38E+06	5.0E-08
Di-n-butylphthalate	0.47	2.38E+04	2.0E-05
Fluoranthene	0.0517	8.91E+03	5.8E-06
Lead	183.5	8.00E+02	2.3E-01
Methyl-2-pentanone[4-]	0.00171	2.31E+04	7.4E-08
Methylene chloride	0.00547	1.06E+04	5.2E-07
Nitrate	3.481	4.96E+05	7.0E-06
Perchlorate	0.00117	2.17E+02	5.4E-06
Phenanthrene	0.0368	7.15E+03	5.1E-06
Pyrene	0.0485	6.68E+03	7.3E-06
Selenium	4.648	1.55E+03	3.0E-03
Silver	0.334	1.55E+03	2.2E-04
2,3,7,8-TCDD equivalent	2.8E-07	2.84E-04	9.9E-04
Xylene[1,3-]+xylene[1,4-]	0.000502	3.13E+03[d]	1.6E-07
Zinc	78.6	9.29E+04	8.5E-04
		Hazard Index	**0.6**

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-6
Construction Worker Carcinogenic
Screening Evaluation for AOC 21-002(b)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.017	7.58E+01	2E-09
Benzo(a)anthracene	0.0654	2.13E+02	3E-09
Benzo(a)pyrene	0.0807	2.13E+01	4E-08
Benzo(b)fluoranthene	0.168	2.13E+02	8E-09
Benzo(k)fluoranthene	0.41	2.06E+03	2E-09
Chrysene	0.0594	2.06E+04	3E-11
Indeno(1,2,3-cd)pyrene	0.166	2.13E+02	8E-09
		Total Excess Cancer Risk	**6E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-7
Construction Worker Radionuclide
Screening Evaluation for AOC 21-002(b)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0546	34	0.02
Plutonium-238	0.0373	40	0.01
Plutonium-239/240	0.844	36	0.4
Tritium	0.0199	3.2E+05	9E-07
		Total Dose	**0.4**

* SALs from LANL (2009, 107655).

Table H-4.2-8
Residential Noncarcinogenic
Screening Evaluation for AOC 21-002(b)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.0123	6.75E+04	2E-07
Aluminum	8486	7.81E+04	1E-01
Anthracene	0.0149	1.72E+04	9E-07
Aroclor-1254	0.0418	1.12E+00	4E-02
Barium	92.65	1.56E+04	6E-03
Benzo(g,h,i)perylene	0.172	1.72E+03[b]	1E-04
Cadmium	0.403	7.79E+01	5E-03
Chromium	14.85	2.19E+02[c]	7E-02
Cyanide (total)	0.4	1.56E+03	3E-04
Dimethylphthalate	0.12	6.11E+05	2E-07
Di-n-butylphthalate	0.47	6.11E+03	8E-05
Fluoranthene	0.0517	2.29E+03	2E-05
Lead	183.5	4.00E+02	5E-01
Methyl-2-pentanone[4-]	0.00171	5.95E+03	3E-07
Nitrate	3.481	1.25E+05	3E-05
Perchlorate	0.00117	5.48E+01	2E-05
Phenanthrene	0.0368	1.83E+03	2E-05
Pyrene	0.0485	1.72E+03	3E-05
Selenium	4.648	3.91E+02	1E-02
Silver	0.334	3.91E+02	9E-04
Xylene[1,3-]+xylene[1,4-]	0.000502	1.09E+03[d]	5E-07
Zinc	78.6	2.35E+04	3E-03
		Hazard Index	**0.7**

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-9
Residential Carcinogenic
Screening Evaluation for AOC 21-002(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.017	2.22E+00	8E-08
Arsenic	3.805	3.90E+00	1E-05
Benzo(a)anthracene	0.0654	6.21E+00	1E-07
Benzo(a)pyrene	0.0807	6.21E-01	1E-06
Benzo(b)fluoranthene	0.168	6.21E+00	3E-07
Benzo(k)fluoranthene	0.41	6.21E+01	7E-08
Bis(2-ethylhexyl)phthalate	1.99	3.47E+02	6E-08
Chrysene	0.0594	6.21E+02	1E-09
Indeno(1,2,3-cd)pyrene	0.166	6.21E+00	3E-07
Methylene chloride	0.00547	1.99E+02	3E-10
2,3,7,8-TCDD Equivalent	2.8E-07	4.50E-05	6E-08
		Total Excess Cancer Risk	**1E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-10
Residential Radionuclide
Screening Evaluation for AOC 21-002(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0546	30	0.03
Plutonium-238	0.0373	37	0.02
Plutonium-239/240	0.844	33	0.38
Tritium	0.0199	750	0.0004
		Total Dose	**0.4**

* SALs from LANL (2009, 107655).

Table H-4.2-11
Dioxin/Furan TEF Calculations for the Industrial, Construction Worker, and Residential Scenarios for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	2.19E-05	0.01	2.2E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	5.17E-06	0.01	5.2E-08
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	2.89E-07	0.01	2.9E-09
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	3E-07	0.1	3.0E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	8.57E-07	0.1	8.6E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	8.93E-07	0.1	8.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	2.51E-07	0.1	2.5E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.46E-07	0.1	2.5E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.68E-07	0.1	2.7E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	2.41E-04	0.0003	7.2E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1.59E-05	0.0003	4.8E-09
Pentachlorodibenzofuran[1,2,3,7,8-]	9.64E-08	0.03	2.9E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	1.9E-07	0.3	5.7E-08
Tetrachlorodibenzofuran[2,3,7,8-]	2.12E-07	0.1	2.1E-08
2,3,7,8-TCDD Equivalent			**7.1E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-12
Industrial Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Barium	59.84	2.24E+05	3E-04
Benzo(g,h,i)perylene	2.81	1.83E+04[b]	2E-04
Chromium	6.719	2.92E+03[c]	2E-03
Copper	5.627	4.54E+04	1E-04
Fluoranthene	2.92	2.44E+04	1E-04
Lead	32.77	8.00E+02	4E-02
Mercury	0.0182	3.1E+02[d]	6E-05
Nickel	3.55	2.27E+04	2E-04
Nitrate	45.91	1.82E+06	3E-05
Perchlorate	0.0345	7.95E+02	4E-05
Phenanthrene	1.38	2.05E+04	7E-05
Pyrene	2.26	1.83E+04	1E-04
Selenium	1.3	5.68E+03	2E-04
Zinc	42.94	3.41E+05	1E-04
		Hazard Index	**0.04**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-13
Industrial Carcinogenic
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.98	2.34E+01	4E-07
Benzo(a)pyrene	0.948	2.34E+00	4E-06
Benzo(b)fluoranthene	1.81	2.34E+01	8E-07
Benzo(k)fluoranthene	0.635	2.34E+02	3E-08
Bis(2-ethylhexyl)phthalate	8.73	1.37E+03	6E-08
Chrysene	1.5	2.34E+03	6E-09
Indeno(1,2,3-cd)pyrene	2.25	2.34E+01	1E-06
2,3,7,8-TCDD equivalent	7.1E-07	2.04E-04	4E-08
		Total Excess Cancer Risk	**6E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-14
Industrial Radionuclide
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.308	180	0.03
Cesium-137	1.144	23	0.8
Plutonium-238	0.096	240	0.01
Plutonium-239/240	15.8	210	1
Uranium-234	2.249	1500	0.02
Uranium-235/236	0.154	87	0.03
Uranium-238	1.742	430	0.06
		Total Dose	**2**

* SALs from LANL (2009, 107655).

Table H-4.2-15
Construction Worker Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Anthracene	0.00966	6.68E+04	2E-07
Antimony	1.7	1.24E+02	1E-02
Barium	46.08	4.35E+03	1E-02
Benzo(g,h,i)perylene	2.81	6.68E+03[b]	4E-04
Bis(2-ethylhexyl)phthalate	8.73	4.76E+03	2E-03
Chromium	8.151	4.49E+02[c]	2E-02
Copper	60.65	1.24E+04	5E-03
Cyanide (total)	0.205	6.19E+03	3E-05
Fluoranthene	0.347	8.91E+03	4E-05
Lead	13.54	8.00E+02	2E-02
Mercury	0.0527	9.29E+01[d]	6E-04
Methylene chloride	0.00223	1.06E+04	2E-07
Nickel	4.186	6.19E+03	7E-04
Nitrate	40.28	4.96E+05	8E-05
Perchlorate	0.0345	2.17E+02	2E-04
Phenanthrene	1.38	7.15E+03	2E-04
Pyrene	0.276	6.68E+03	4E-05
Selenium	1.658	1.55E+03	1E-03
2,3,7,8-TCDD equivalent	7.1E-07	2.84E-04	3E-03
Toluene	0.000533	2.11E+04	3E-08
Xylene[1,2-]	0.000481	2.75E+04	2E-08
Xylene[1,3-]+xylene[1,4-]	0.000566	3.13E+03[e]	2E-07
Zinc	283	9.29E+04	3E-03
		Hazard Index	**0.08**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009,108070).

[e] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-16
Construction Worker Carcinogenic
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.98	2.13E+02	5E-08
Benzo(a)pyrene	0.948	2.13E+01	5E-07
Benzo(b)fluoranthene	1.81	2.13E+02	9E-08
Benzo(k)fluoranthene	0.635	2.06E+03	3E-09
Chrysene	1.5	2.06E+04	7E-10
Indeno(1,2,3-cd)pyrene	2.25	2.13E+02	1E-07
Tetrachloroethene	0.00626	3.38E+02	2E-10
Total Excess Cancer Risk			**7E-07**

* SSLs from NMED (2009, 108070).

Table H-4.2-17
Construction Worker Radionuclide
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.724	34	0.3
Cesium-137	0.74	18	0.6
Plutonium-238	0.107	40	0.04
Plutonium-239/240	15.5	36	6.5
Strontium-90	0.49	800	0.009
Tritium	0.279	3.2E+05	1E-05
Uranium-234	4.576	220	0.3
Uranium-235/236	0.167	43	0.06
Uranium-238	1.106	160	0.1
Total Dose			**8**

* SALs from LANL (2009, 107655).

Table H-4.2-18
Residential Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Anthracene	0.00966	1.72E+04	6E-07
Antimony	1.7	3.13E+01	5E-02
Barium	46.08	1.56E+04	3E-03
Benzo(g,h,i)perylene	2.81	1.72E+03[b]	2E-03
Chromium	8.151	2.19E+02[c]	4E-02
Copper	60.65	3.13E+03	2E-02
Cyanide (total)	0.205	1.56E+03	1E-04
Fluoranthene	0.347	2.29E+03	2E-04
Lead	13.54	4.00E+02	3E-02
Mercury	0.0527	2.3E+01[d]	2E-03
Nickel	4.186	1.56E+03	3E-03
Nitrate	40.28	1.25E+05	3E-04
Perchlorate	0.0345	5.48E+01	6E-04
Phenanthrene	1.38	1.83E+03	8E-04
Pyrene	0.276	1.72E+03	2E-04
Selenium	1.658	3.91E+02	4E-03
Toluene	0.000533	5.57E+03	1E-07
Xylene[1,2-]	0.000481	9.55E+03	5E-08
Xylene[1,3-]+xylene[1,4-]	0.000566	1.09E+03[e]	5E-07
Zinc	283	2.35E+04	1E-02
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-19
Residential Carcinogenic
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.98	6.21E+00	1.6E-06
Benzo(a)pyrene	0.948	6.21E-01	1.5E-05
Benzo(b)fluoranthene	1.81	6.21E+00	2.9E-06
Benzo(k)fluoranthene	0.635	6.21E+01	1.0E-07
Bis(2-ethylhexyl)phthalate	8.73	3.47E+02	2.5E-07
Chrysene	1.5	6.21E+02	2.4E-08
Indeno(1,2,3-cd)pyrene	2.25	6.21E+00	3.6E-06
Methylene chloride	0.00223	1.99E+02	1.1E-10
2,3,7,8-TCDD equivalent	7.1E-07	4.50E-05	1.6E-07
Tetrachloroethene	0.00626	6.99E+00	9.0E-09
		Total Excess Cancer Risk	**2E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-20
Residential Radionuclide
Screening Evaluation for Consolidated Unit 21-006(c)-99

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.724	30	0.3
Cesium-137	0.74	5.6	2
Plutonium-238	0.107	37	0.04
Plutonium-239/240	15.5	33	7
Strontium-90	0.49	5.7	1
Tritium	0.279	750	0.006
Uranium-234	4.576	170	0.4
Uranium-235/236	0.167	17	0.2
Uranium-238	1.106	87	0.2
		Total Dose	**11**

* SALs from LANL (2009, 107655).

Table H-4.2-21
Industrial Noncarcinogenic Screening Evaluation for SWMU 21-009

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Aluminum	17393	1.13E+06	1.5E-02
Barium	162	2.24E+05	7.2E-04
Chromium	13.68	2.92E+03[b]	4.7E-03
Cyanide (total)	0.709	2.27E+04	3.1E-05
Fluoranthene	0.103	2.44E+04	4.2E-06
Lead	22.92	8.00E+02	2.9E-02
Nitrate	6.455	1.82E+06	3.5E-06
Perchlorate	0.000659	7.95E+02	8.3E-07
Pyrene	0.162	1.83E+04	8.9E-06
Selenium	11.44	5.68E+03	2.0E-03
Zinc	67.2	3.41E+05	2.0E-04
		Hazard Index	**0.05**

[a] SSLs from NMED (2009, 108070).

[b] Chromium VI SSL used.

Table H-4.2-22
Industrial Carcinogenic Screening Evaluation for SWMU 21-009

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)pyrene	0.0686	2.34E+00	3E-07
Benzo(b)fluoranthene	0.16	2.34E+01	7E-08
Benzo(k)fluoranthene	0.0573	2.34E+02	2E-09
		Total Excess Cancer Risk	**4E-07**

* SSLs from NMED (2009, 108070).

Table H-4.2-23
Industrial Radionuclide Screening Evaluation for SWMU 21-009

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.108	180	0.009
Plutonium-239/240	0.479	210	0.03
Tritium	0.0445	4.4E+05	2E-06
		Total Dose	**0.04**

* SALs from LANL (2009, 107655).

Table H-4.2-24
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-009

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.1E-05	0.01	1.1E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.55E-06	0.01	1.6E-08
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	3.47E-07	0.1	3.5E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	6.74E-07	0.1	6.7E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	5.52E-07	0.1	5.5E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1.07E-07	0.1	1.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1.45E-07	0.1	1.5E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	8.7E-05	0.0003	2.6E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	3.66E-06	0.0003	1.1E-09
Pentachlorodibenzodioxin[1,2,3,7,8-]	1.77E-07	1	1.8E-07
Tetrachlorodibenzofuran[2,3,7,8-]	1.47E-07	0.1	1.5E-08
2,3,7,8-TCDD Equivalent			**5.3E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-25
Construction Worker Noncarcinogenic Screening Evaluation for SWMU 21-009

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Aluminum	17222	4.07E+04	4E-01
Anthracene	0.0149	6.68E+04	2E-07
Barium	153	4.35E+03	4E-02
Chromium	14.37	4.49E+02[b]	3E-02
Cyanide (total)	0.315	6.19E+03	5E-05
Dichloroethene[1,1-]	0.000891	1.83E+03	5E-07
Fluoranthene	0.103	8.91E+03	1E-05
Lead	16.74	8.00E+02	2E-02
Nitrate	6.179	4.96E+05	1E-05
Perchlorate	0.000659	2.17E+02	3E-06
Pyrene	0.051	6.68E+03	8E-06
Selenium	10.63	1.55E+03	7E-03
2,3,7,8-TCDD equivalent	5.3E-07	2.84E-04	2E-03
Zinc	49.36	9.29E+04	5E-04
Hazard Index			**0.5**

[a] SSLs from NMED (2009, 108070).

[b] Chromium VI SSL used.

Table H-4.2-26
Construction Worker
Carcinogenic Screening Evaluation for SWMU 21-009

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)pyrene	0.0686	2.13E+01	3E-08
Benzo(b)fluoranthene	0.1600	2.13E+02	8E-09
Benzo(k)fluoranthene	0.0573	2.06E+03	3E-10
Chloroform	0.0012	6.71E+02	2E-11
Tetrachloroethene	0.0007	3.38E+02	2E-11
Total Excess Cancer Risk			**4E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-27
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-009

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.211	34	0.09
Plutonium-239/240	0.289	36	0.1
Tritium	0.044	3.2E+05	2E-06
Total Dose			**0.2**

* SALs from LANL (2009, 107655).

Table H-4.2-28
Residential Noncarcinogenic Screening Evaluation for SWMU 21-009

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Aluminum	17222	7.81E+04	2E-01
Anthracene	0.0149	1.72E+04	9E-07
Barium	153	1.56E+04	1E-02
Chromium	14.37	2.19E+02[b]	7E-02
Cyanide (total)	0.315	1.56E+03	2E-04
Dichloroethene[1,1-]	0.000891	6.18E+02	1E-06
Fluoranthene	0.103	2.29E+03	5E-05
Lead	16.74	4.00E+02	4E-02
Nitrate	6.179	1.25E+05	5E-05
Perchlorate	0.000659	5.48E+01	1E-05
Pyrene	0.051	1.72E+03	3E-05
Selenium	10.63	3.91E+02	3E-02
Zinc	49.36	2.35E+04	2E-03
		Hazard Index	**0.4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

Table H-4.2-29
Residential Carcinogenic Screening Evaluation for SWMU 21-009

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)pyrene	0.0686	6.21E-01	1E-06
Benzo(b)fluoranthene	0.1600	6.21E+00	3E-07
Benzo(k)fluoranthene	0.0573	6.21E+01	9E-09
Chloroform	0.0012	5.72E+00	2E-09
2,3,7,8-TCDD equivalent	5.3E-07	4.50E-05	1E-07
Tetrachloroethene	0.0007	6.99E+00	1E-09
		Total Excess Cancer Risk	**1E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-30
Residential Radionuclide Screening Evaluation for SWMU 21-009

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.211	30	0.1
Plutonium-239/240	0.289	33	0.1
Tritium	0.044	750	0.0009
		Total Dose	**0.2**

* SALs from LANL (2009, 107655).

Table H-4.2-31
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-012(b)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Aluminum	12258	1.13E+06	1E-02
Antimony	0.239	4.54E+02	5E-04
Barium	88.79	2.24E+05	4E-04
Beryllium	0.719	2.26E+03	3E-04
Cadmium	0.302	1.12E+03	3E-04
Chromium	9.324	2.92E+03[b]	3E-03
Cobalt	2.334	3.0E+02[c]	8E-03
Copper	115.6	4.54E+04	3E-03
Cyanide (total)	0.344	2.27E+04	2E-05
Fluoranthene	0.0209	2.44E+04	9E-07
Iron	10861	7.95E+05	1E-02
Lead	25.59	8.00E+02	3E-02
Lithium	14.85	2.0E+03[c]	7E-03
Mercury	2.453	3.1E+02[c]	8E-03
Molybdenum	1.299	5.68E+03	2E-04
Nickel	6.224	2.27E+04	3E-04
Nitrate	5.005	1.82E+06	3E-06
Perchlorate	0.00183	7.95E+02	2E-06
Phenanthrene	0.0264	2.05E+04	1E-06
Pyrene	0.022	1.83E+04	1E-06
Selenium	0.956	5.68E+03	2E-04
Strontium	34.68	6.81E+05	5E-05
Uranium	2.29	3.41E+03	7E-04
Vanadium	14.21	5.68E+03	3E-03
Zinc	135.3	3.41E+05	4E-04
		Hazard Index	**0.09**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-32
Industrial Carcinogenic
Screening Evaluation for SWMU 21-012(b)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Arsenic	2.696	1.77E+01	2E-06
Benzo(a)anthracene	0.024	2.34E+01	1E-08
Benzo(b)fluoranthene	0.0161	2.34E+01	7E-09
Chrysene	0.0306	2.34E+03	1E-10
Total Excess Cancer Risk			**2E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-33
Industrial Radionuclide
Screening Evaluation for SWMU 21-012(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.175	180	0.01
Cesium-134	0.128	9.7	0.2
Cesium-137	0.758	23	0.5
Plutonium-238	0.0971	240	0.006
Plutonium-239/240	0.945	210	0.07
Tritium	0.0534	4.4E+05	2E-06
Uranium-234	1.677	1500	0.02
Uranium-235/236	0.096	87	0.02
Uranium-238	1.541	430	0.05
Total Dose			**0.9**

* SALs from LANL (2009, 107655).

Table H-4.2-34
Construction Worker
Noncarcinogenic Screening Evaluation for SWMU 21-012(b)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.00729	2.63E+05	3E-08
Aluminum	11338	4.07E+04	3E-01
Antimony	0.193	1.24E+02	2E-03
Arsenic	2.866	6.54E+01	4E-02
Barium	76.41	4.35E+03	2E-02
Benzoic acid	0.629	9.52E+05[b]	7E-07
Beryllium	0.638	1.44E+02	4E-03
Cadmium	0.293	3.09E+02	1E-03
Chromium	16.95	4.49E+02[c]	4E-02
Cobalt	1.857	3.49E+01[b]	5E-02
Copper	75.17	1.24E+04	6E-03
Cyanide (total)	0.194	6.19E+03	3E-05
Fluoranthene	0.0168	8.91E+03	2E-06
Iron	10016	2.17E+05	5E-02
Isopropyltoluene[4-]	0.00153	1.03E+04[d]	2E-07
Lead	15.96	8.00E+02	2E-02
Lithium	11.32	6.19E+02[b]	2E-02
Mercury	1.239	9.29E+01[b]	1E-02
Methylene chloride	0.00476	1.06E+04	5E-07
Molybdenum	1.219	1.55E+03	8E-04
Nickel	5.418	6.19E+03	9E-04
Nitrate	3.503	4.96E+05	7E-06
Perchlorate	0.00125	2.17E+02	6E-06
Phenanthrene	0.0264	7.15E+03	4E-06
Pyrene	0.02	6.68E+03	3E-06
Selenium	0.954	1.55E+03	6E-04
Strontium	27.77	1.86E+05	2E-04
Toluene	0.0043	2.11E+04	2E-07
Trimethylbenzene[1,2,4-]	0.000281	6.88E+02[b]	4E-07
Uranium	2.042	9.29E+02	2E-03
Vanadium	14.54	1.55E+03	9E-03
Xylene[1,3-]+xylene[1,4-]	0.000553	3.13E+03[e]	2E-07
Zinc	112.1	9.29E+04	1E-03
		Hazard Index	**0.6**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-35
Construction Worker
Carcinogenic Screening Evaluation for SWMU 21-012(b)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0015	7.58E+01	2E-10
Benzo(a)anthracene	0.024	2.13E+02	1E-09
Benzo(b)fluoranthene	0.0161	2.13E+02	8E-10
Chloroform	0.000365	6.71E+02	5E-12
Chrysene	0.0306	2.06E+04	2E-11
Dichlorobenzene[1,4-]	0.00042	3.78E+03	1E-12
Trichloroethene	0.000322	4.60E+03	7E-13
		Total Excess Cancer Risk	**2E-09**

* SSLs from NMED (2009, 108070).

Table H-4.2-36
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-012(b)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.675	34	0.3
Cesium-134	0.128	7.7	0.2
Cesium-137	0.36	18	0.3
Plutonium-238	0.0373	40	0.01
Plutonium-239/240	0.388	36	0.2
Tritium	0.0802	3.2E+05	4E-06
Uranium-234	1.364	220	0.09
Uranium-235/236	0.0945	43	0.03
Uranium-238	1.312	160	0.1
		Total Dose	**1**

* SALs from LANL (2009, 107655).

Table H-4.2-37
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-012(b)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.00729	6.75E+04	1E-07
Aluminum	11338	7.81E+04	2E-01
Antimony	0.193	3.13E+01	6E-03
Barium	76.41	1.56E+04	5E-03
Benzoic acid	0.629	2.4E+05[b]	3E-06
Beryllium	0.638	1.56E+02	4E-03
Cadmium	0.293	7.79E+01	4E-03
Chromium	16.95	2.19E+02[c]	8E-02
Cobalt	1.857	2.3E+01[b]	8E-02
Copper	75.17	3.13E+03	2E-02
Cyanide (total)	0.194	1.56E+03	1E-04
Fluoranthene	0.0168	2.29E+03	7E-06
Iron	10016	5.48E+04	2E-01
Isopropyltoluene[4-]	0.00153	3.21E+03[d]	5E-07
Lead	15.96	4.00E+02	4E-02
Lithium	11.32	1.6E+02[b]	7E-02
Mercury	1.239	2.3E+01[b]	5E-02
Molybdenum	1.219	3.91E+02	3E-03
Nickel	5.418	1.56E+03	4E-03
Nitrate	3.503	1.25E+05	3E-05
Perchlorate	0.00125	5.48E+01	2E-05
Phenanthrene	0.0264	1.83E+03	1E-05
Pyrene	0.02	1.72E+03	1E-05
Selenium	0.954	3.91E+02	2E-03
Strontium	27.77	4.69E+04	6E-04
Toluene	0.0043	5.57E+03	8E-07
Trimethylbenzene[1,2,4-]	0.000281	6.2E+01[b]	5E-06
Uranium	2.042	2.35E+02	9E-03
Vanadium	14.54	3.91E+02	4E-02
Xylene[1,3-]+xylene[1,4-]	0.000553	1.09E+03[e]	5E-07
Zinc	112.1	2.35E+04	5E-03
		Hazard Index	**0.8**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-38
Residential Carcinogenic
Screening Evaluation for SWMU 21-012(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0015	2.22E+00	7E-09
Arsenic	2.866	3.90E+00	7E-06
Benzo(a)anthracene	0.024	6.21E+00	4E-08
Benzo(b)fluoranthene	0.0161	6.21E+00	3E-08
Chloroform	0.000365	5.72E+00	6E-10
Chrysene	0.0306	6.21E+02	5E-10
Dichlorobenzene[1,4-]	0.00042	3.22E+01	1E-10
Methylene chloride	0.00476	1.99E+02	2E-10
Trichloroethene	0.000322	4.57E+01	7E-11
Total Excess Cancer Risk			**7E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-39
Residential Radionuclide
Screening Evaluation for SWMU 21-012(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.675	30	0.3
Cesium-134	0.128	2.4	0.8
Cesium-137	0.36	5.6	1
Plutonium-238	0.0373	37	0.02
Plutonium-239/240	0.388	33	0.2
Tritium	0.0802	750	0.002
Uranium-234	1.364	170	0.1
Uranium-235/236	0.0945	17	0.08
Uranium-238	1.312	87	0.2
Total Dose			**3**

* SALs from LANL (2009, 107655).

Table H-4.2-40
Dioxin/Furan TEF Calculations for the Industrial Scenario for SWMU 21-013(c)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.32E-05	0.01	1.3E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	2.4E-06	0.01	2.4E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	5.37E-07	0.1	5.4E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	4.87E-07	0.1	4.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	3.93E-07	0.1	3.9E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.14E-07	0.1	2.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.25E-07	0.1	2.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1.12E-04	0.0003	3.4E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	5.21E-06	0.0003	1.6E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	2.69E-07	0.3	8.1E-08
Tetrachlorodibenzofuran[2,3,7,8-]	2.56E-07	0.1	2.6E-08
	2,3,7,8-TCDD Equivalent		**4.8E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-41
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-013(c)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0194	3.67E+04	5E-07
Aluminum	15903	1.13E+06	1E-02
Anthracene	0.026	1.83E+05	1E-07
Barium	119.6	2.24E+05	5E-04
Benzo(g,h,i)perylene	0.0464	1.83E+04[b]	3E-06
Benzoic acid	0.464	2.5E+06[c]	2E-07
Cadmium	0.223	1.12E+03	2E-04
Chromium	10.43	2.92E+03[d]	4E-03
Fluoranthene	0.0995	2.44E+04	4E-06
Fluorene	0.0214	2.44E+04	9E-07
Lead	16.81	8.00E+02	2E-02
Mercury	0.741	3.1E+02[c]	2E-03
Nickel	8.511	2.27E+04	4E-04
Nitrate	2.493	1.82E+06	1E-06
Perchlorate	0.00114	7.95E+02	1E-06
Phenanthrene	0.0637	2.05E+04	3E-06
Pyrene	0.102	1.83E+04	6E-06
Selenium	2.611	5.68E+03	5E-04
Thallium	0.193	7.49E+01	3E-03
Uranium	1.553	3.41E+03	5E-04
Vanadium	22.4	5.68E+03	4E-03
		Hazard Index	**0.05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

Table H-4.2-42
Industrial Carcinogenic Screening Evaluation for SWMU 21-013(c)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1254	0.00444	8.26E+00	5.4E-09
Aroclor-1260	0.00236	8.26E+00	2.9E-09
Arsenic	3.881	1.77E+01	2.2E-06
Benzo(a)anthracene	0.08	2.34E+01	3.4E-08
Benzo(a)pyrene	0.0446	2.34E+00	1.9E-07
Benzo(b)fluoranthene	0.0828	2.34E+01	3.5E-08
Benzo(k)fluoranthene	0.18	2.34E+02	7.7E-09
Bis(2-ethylhexyl)phthalate	0.355	1.37E+03	2.6E-09
Chloroform	0.000287	3.19E+01	9.0E-11
Chrysene	0.059	2.34E+03	2.5E-10
Indeno(1,2,3-cd)pyrene	0.0436	2.34E+01	1.9E-08
2,3,7,8-TCDD equivalent	4.8E-07	2.04E-04	2.4E-08
		Total Excess Cancer Risk	**3E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-43
Industrial Radionuclide
Screening Evaluation for SWMU 21-013(c)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0437	180	0.004
Cesium-137	0.386	23	0.3
Plutonium-239/240	0.191	210	0.01
Strontium-90	0.108	1900	0.0009
Tritium	0.151	4.4E+05	5E-06
Uranium-235/236	0.0668	87	0.01
		Total Dose	**0.3**

* SALs from LANL (2009, 107655).

Table H-4.2-44
Dioxin/Furan TEF Calculations for
Construction Worker and Residential Scenarios for SWMU 21-013(c)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.32E-05	0.01	1.3E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	2.4E-06	0.01	2.4E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	5.37E-07	0.1	5.4E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	4.87E-07	0.1	4.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	3.93E-07	0.1	3.9E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.14E-07	0.1	2.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.25E-07	0.1	2.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1.12E-04	0.0003	3.4E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	5.21E-06	0.0003	1.6E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	2.69E-07	0.3	8.1E-08
Tetrachlorodibenzofuran[2,3,7,8-]	2.56E-07	0.1	2.6E-08
2,3,7,8-TCDD Equivalent			**4.8E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-45
Construction Worker
Noncarcinogenic Screening Evaluation for SWMU 21-013(c)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0366	1.86E+04	2E-06
Aluminum	14425	4.07E+04	4E-01
Anthracene	0.024	6.68E+04	4E-07
Aroclor-1254	0.00412	4.36E+00	9E-04
Arsenic	3.802	6.54E+01	6E-02
Barium	107.3	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.0419	6.68E+03[b]	6E-06
Benzoic acid	0.458	9.52E+05[c]	5E-07
Bis(2-ethylhexyl)phthalate	0.355	4.76E+03	7E-05
Cadmium	0.215	3.09E+02	7E-04
Chromium	10.42	4.49E+02[d]	2E-02
Fluoranthene	0.0651	8.91E+03	7E-06
Fluorene	0.0214	8.91E+03	2E-06
Lead	14.13	8.00E+02	2E-02
Mercury	0.319	9.29E+01[c]	3E-03
Nickel	6.66	6.19E+03	1E-03
Nitrate	1.904	4.96E+05	4E-06
Perchlorate	0.00171	2.17E+02	8E-06
Phenanthrene	0.0448	7.15E+03	6E-06
Pyrene	0.0679	6.68E+03	1E-05
Selenium	2.054	1.55E+03	1E-03
Thallium	0.19	2.04E+01	9E-03
Uranium	1.275	9.29E+02	1E-03
Vanadium	23.07	1.55E+03	1E-02
		Hazard Index	**0.5**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

Table H-4.2-46
Construction Worker
Carcinogenic Screening Evaluation for SWMU 21-013(c)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.00227	7.58E+01	3.0E-10
Benzo(a)anthracene	0.08	2.13E+02	3.8E-09
Benzo(a)pyrene	0.0346	2.13E+01	1.6E-08
Benzo(b)fluoranthene	0.0564	2.13E+02	2.6E-09
Benzo(k)fluoranthene	0.18	2.06E+03	8.7E-10
Chloroform	0.000287	6.71E+02	4.3E-12
Chrysene	0.0464	2.06E+04	2.3E-11
Indeno(1,2,3-cd)pyrene	0.0382	2.13E+02	1.8E-09
2,3,7,8-TCDD equivalent	4.8E-07	2.84E-04	1.7E-08
		Total Excess Cancer Risk	**4E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-47
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-013(c)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.042	34	0.02
Cesium-137	0.254	18	0.2
Plutonium-239/240	0.126	36	0.05
Strontium-90	0.108	800	0.002
Tritium	0.116	3.2E+05	5E-06
Uranium-235/236	0.0646	43	0.02
		Total Dose	**0.3**

* SALs from LANL (2009, 107655).

Table H-4.2-48
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-013(c)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0366	3.44E+03	1E-05
Aluminum	14425	7.81E+04	2E-01
Anthracene	0.024	1.72E+04	1E-06
Aroclor-1254	0.00412	1.12E+00	4E-03
Barium	107.3	1.56E+04	7E-03
Benzo(g,h,i)perylene	0.0419	1.72E+03[b]	2E-05
Benzoic acid	0.458	2.4E+05[c]	2E-06
Cadmium	0.215	7.79E+01	3E-03
Chromium	10.42	2.19E+02[d]	5E-02
Fluoranthene	0.0651	2.29E+03	3E-05
Fluorene	0.0214	2.29E+03	9E-06
Lead	14.13	4.00E+02	4E-02
Mercury	0.319	2.3E+01[c]	1E-02
Nickel	6.66	1.56E+03	4E-03
Nitrate	1.904	1.25E+05	2E-05
Perchlorate	0.00171	5.48E+01	3E-05
Phenanthrene	0.0448	1.83E+03	3E-05
Pyrene	0.0679	1.72E+03	4E-05
Selenium	2.054	3.91E+02	5E-03
Thallium	0.19	5.16E+00	4E-02
Uranium	1.275	2.35E+02	5E-03
Vanadium	23.07	3.91E+02	6E-02
		Hazard Index	**0.4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

Table H-4.2-49
Residential Carcinogenic Screening Evaluation or SWMU 21-013(c)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.00227	2.22E+00	1E-08
Arsenic	3.802	3.90E+00	1E-05
Benzo(a)anthracene	0.08	6.21E+00	1E-07
Benzo(a)pyrene	0.0346	6.21E-01	6E-07
Benzo(b)fluoranthene	0.0564	6.21E+00	9E-08
Benzo(k)fluoranthene	0.18	6.21E+01	3E-08
Bis(2-ethylhexyl)phthalate	0.355	3.47E+02	1E-08
Chloroform	0.000287	5.72E+00	5E-10
Chrysene	0.0464	6.21E+02	8E-10
Indeno(1,2,3-cd)pyrene	0.0382	6.21E+00	6E-08
2,3,7,8-TCDD equivalent	4.8E-07	4.50E-05	1E-07
		Total Excess Cancer Risk	**1E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-50
Residential Radionuclide
Screening Evaluation for SWMU 21-013(c)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.042	30	0.02
Cesium-137	0.254	5.6	0.7
Plutonium-239/240	0.126	33	0.06
Strontium-90	0.108	5.7	0.3
Tritium	0.116	750	0.002
Uranium-235/236	0.0646	17	0.06
		Total Dose	**1**

* SALs from LANL (2009, 107655).

Table H-4.2-51
Dioxin/Furan TEF Calculations for
Construction Worker and Residential Scenarios for SWMU 21-022(f)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1.87E-06	0.0003	5.6E-10
		2,3,7,8-TCDD Equivalent	**5.6E-10**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-52
Construction Worker
Noncarcinogenic Screening Evaluation for SWMU 21-022(f)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.202	2.63E+05	7.7E-07
Barium	42.46	4.35E+03	9.8E-03
Benzo(g,h,i)perylene	0.0264	6.68E+03[b]	4.0E-06
Cobalt	3.911	3.49E+01[c]	1.1E-01
Copper	6.369	1.24E+04	5.1E-04
Fluoranthene	0.0807	8.91E+03	9.1E-06
Lead	28.47	8.00E+02	3.6E-02
Manganese	1121	4.63E+02	2.4E+00
Nitrate	1.95	4.96E+05	3.9E-06
Phenanthrene	0.0174	7.15E+03	2.4E-06
Pyrene	0.0735	6.68E+03	1.1E-05
Selenium	1.221	1.55E+03	7.9E-04
Silver	1.564	1.55E+03	1.0E-03
2,3,7,8-TCDD equivalent	5.6E-10	2.84E-04	2.0E-06
Zinc	3840	9.29E+04	4.1E-02
		Hazard Index	**3**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table H-4.2-53
Construction Worker
Carcinogenic Screening Evaluation for SWMU 21-022(f)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.0738	2.13E+02	4E-09
Benzo(a)pyrene	0.0634	2.13E+01	3E-08
Benzo(b)fluoranthene	0.122	2.13E+02	6E-09
Benzo(k)fluoranthene	0.012	2.06E+03	6E-11
Chrysene	0.0741	2.06E+04	4E-11
Indeno(1,2,3-cd)pyrene	0.0275	2.13E+02	1E-09
		Total Excess Cancer Risk	**4E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-54
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-022(f)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Tritium	2.099	3.2E+05	0.0001
Uranium-234	1.234	220	0.08
Uranium-235/236	0.0776	43	0.03
		Total Dose	**0.1**

* SALs from LANL (2009, 107655).

Table H-4.2-55
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-022(f)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.202	6.75E+04	3.0E-06
Barium	42.46	1.56E+04	2.7E-03
Benzo(g,h,i)perylene	0.0264	1.72E+03[b]	1.5E-05
Cobalt	3.911	2.3E+01[c]	1.7E-01
Copper	6.369	3.13E+03	2.0E-03
Fluoranthene	0.0807	2.29E+03	3.5E-05
Lead	28.47	4.00E+02	7.1E-02
Manganese	1121	1.07E+04	1.0E-01
Nitrate	1.95	1.25E+05	1.6E-05
Phenanthrene	0.0174	1.83E+03	9.5E-06
Pyrene	0.0735	1.72E+03	4.3E-05
Selenium	1.221	3.91E+02	3.1E-03
Silver	1.564	3.91E+02	4.0E-03
Zinc	3840	2.35E+04	1.6E-01
		Hazard Index	**0.5**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-56
Residential Carcinogenic
Screening Evaluation for SWMU 21-022(f)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.0738	6.21E+00	1E-07
Benzo(a)pyrene	0.0634	6.21E-01	1E-06
Benzo(b)fluoranthene	0.122	6.21E+00	2E-07
Benzo(k)fluoranthene	0.012	6.21E+01	2E-09
Chrysene	0.0741	6.21E+02	1E-09
Indeno(1,2,3-cd)pyrene	0.0275	6.21E+00	4E-08
2,3,7,8-TCDD equivalent	5.6E-10	4.50E-05	1E-10
		Total Excess Cancer Risk	**1E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-57
Residential Radionuclide
Screening Evaluation for SWMU 21-022(f)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Tritium	2.099	750	0.04
Uranium-234	1.234	170	0.1
Uranium-235/236	0.0776	17	0.07
		Total Dose	**0.2**

* SALs from LANL (2009, 107655).

Table H-4.2-58
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-022(h)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	2	3.67E+04	5E-05
Aluminum	6899	1.13E+06	6E-03
Anthracene	2.3	1.83E+05	1E-05
Antimony	0.218	4.54E+02	5E-04
Barium	67.76	2.24E+05	3E-04
Benzo(g,h,i)perylene	6.4	1.83E+04[b]	4E-04
Cadmium	2.371	1.12E+03	2E-03
Chromium	326.5	2.92E+03[c]	1E-01
Copper	249	4.54E+04	6E-03
Cyanide (total)	0.277	2.27E+04	1E-05
Dibenzofuran	1.1	1.0E+03[d]	1E-03
Di-n-butylphthalate	0.35	6.84E+04	5E-06
Fluoranthene	3.576	2.44E+04	2E-04
Fluorene	1.6	2.44E+04	7E-05
Lead	3602	8.00E+02	5E+00
Mercury	1.92	3.1E+02[d]	6E-02
Methylnaphthalene[2-]	0.51	4.1E+03[d]	1E-04
Molybdenum	14.19	5.68E+03	3E-03
Nickel	8.17	2.27E+04	4E-04
Nitrate	33.04	1.82E+06	2E-05
Perchlorate	0.015	7.95E+02	2E-05
Phenanthrene	5.767	2.05E+04	3E-04
Pyrene	6.178	1.83E+04	3E-04
Selenium	0.483	5.68E+03	9E-05
Silver	43.24	5.68E+03	8E-03
Zinc	1200	3.41E+05	4E-03
		Hazard Index	**5**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-59
Industrial Carcinogenic Screening Evaluation for SWMU 21-022(h)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	5.5	2.34E+01	2.4E-06
Benzo(a)pyrene	5.9	2.34E+00	2.5E-05
Benzo(b)fluoranthene	2.636	2.34E+01	1.1E-06
Benzo(k)fluoranthene	2.7	2.34E+02	1.2E-07
Bis(2-ethylhexyl)phthalate	3.109	1.37E+03	2.3E-08
Butylbenzylphthalate	0.51	9.1E+03[b]	5.6E-10
Carbazole	1.5	9.6E+02[c]	1.6E-08
Chrysene	2.376	2.34E+03	1.0E-08
Dibenz(a,h)anthracene	0.43	2.34E+00	1.8E-06
Indeno(1,2,3-cd)pyrene	5	2.34E+01	2.1E-06
Naphthalene	1.7	2.52E+02	6.7E-08
		Total Excess Cancer Risk	**3E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] EPA Region 6 SSL (EPA 2007, 099314).

Table H-4.2-60
Industrial Radionuclide Screening Evaluation for SWMU 21-022(h)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	2.15	180	0.2
Cesium-137	0.658	23	0.4
Plutonium-238	12.9	240	0.8
Plutonium-239/240	41.81	210	3
Strontium-90	0.377	1900	0.003
Tritium	0.0344	4.4E+05	1E-06
Uranium-235/236	0.0928	87	0.02
		Total Dose	**4**

* SALs from LANL (2009, 107655).

Table H-4.2-61
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-022(h)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.81E-05	0.01	1.8E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	2.85E-06	0.01	2.9E-08
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	2.46E-07	0.01	2.5E-09
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	2.14E-07	0.1	2.1E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	9.22E-07	0.1	9.2E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	4.88E-07	0.1	4.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	4.1E-07	0.1	4.1E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.52E-07	0.1	2.5E-08
Hexachlorodibenzofuran[1,2,3,7,8,9-]	1.05E-07	0.1	1.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.65E-07	0.1	2.7E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1.32E-04	0.0003	4.0E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	6.63E-06	0.0003	2.0E-09
Pentachlorodibenzodioxin[1,2,3,7,8-]	1.36E-07	1	1.4E-07
Pentachlorodibenzofuran[1,2,3,7,8-]	1.08E-07	0.03	3.2E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	3.35E-07	0.3	1.0E-07
Tetrachlorodibenzofuran[2,3,7,8-]	3.53E-07	0.1	3.5E-08
	2,3,7,8-TCDD Equivalent		**8.0E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-62
Construction Worker
Noncarcinogenic Screening Evaluation for SWMU 21-022(h)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.322	1.86E+04	2E-05
Aluminum	1.024	4.07E+04	3E-05
Anthracene	0.444	6.68E+04	7E-06
Antimony	0.179	1.24E+02	1E-03
Aroclor-1254	0.0478	4.36E+00	1E-02
Barium	64.11	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.954	6.68E+03[b]	1E-04
Bis(2-ethylhexyl)phthalate	1.176	4.76E+03	3E-04
Cadmium	2.76	3.09E+02	9E-03
Chromium	28.18	4.49E+02[c]	6E-02
Copper	162.2	1.24E+04	1E-02
Cyanide (total)	0.227	6.19E+03	4E-05
Dibenzofuran	1.1	2.38E+02[d]	5E-03
Di-n-butylphthalate	0.35	2.4E+04	2E-05
Fluoranthene	5.183	8.91E+03	6E-04
Fluorene	0.266	8.91E+03	3E-05
Isopropyltoluene[4-]	0.0019	1.03E+04[e]	2E-07
Lead	1556	8.00E+02	2E+00
Mercury	0.726	9.29E+01[d]	6E-03
Methylene chloride	0.0033	1.06E+04	3E-07
Methylnaphthalene[2-]	0.51	1.24E+03[d]	4E-04
Molybdenum	9.257	1.55E+03	6E-03
Naphthalene	0.394	7.02E+02	6E-04
Nickel	5.513	6.19E+03	9E-04
Nitrate	28.81	4.96E+05	6E-05
Perchlorate	0.015	2.17E+02	7E-05
Phenanthrene	1.662	7.15E+03	2E-04
Pyrene	2.823	6.68E+03	4E-04
Selenium	0.45	1.55E+03	3E-04
Silver	18.99	1.55E+03	1E-02
2,3,7,8-TCDD equivalent	8.0E-07	2.84E-04	3E-03
Zinc	745.9	9.29E+04	8E-03
		Hazard Index	**2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-63
Construction Worker
Carcinogenic Screening Evaluation for SWMU 21-022(h)

COPC	EPC (mg/kg	Construction Worker SSL[a] (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0211	7.58E+01	3E-09
Benzo(a)anthracene	0.905	2.13E+02	4E-08
Benzo(a)pyrene	0.864	2.13E+01	4E-07
Benzo(b)fluoranthene	1.176	2.13E+02	6E-08
Benzo(k)fluoranthene	0.774	2.06E+03	4E-09
Butylbenzylphthalate	0.51	4.76E+04[b]	1E-10
Carbazole	1.5	1.08E+04[c]	1E-09
Chrysene	0.999	2.06E+04	5E-10
Dibenz(a,h)anthracene	0.43	2.13E+01	2E-07
Indeno(1,2,3-cd)pyrene	2.086	2.13E+02	1E-07
		Total Excess Cancer Risk	**8E-07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

Table H-4.2-64
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-022(h)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.024	34	0.5
Cesium-137	0.376	18	0.3
Plutonium-238	19.48	40	7.3
Plutonium-239/240	34.63	36	14.4
Strontium-90	0.377	800	0.007
Tritium	0.0545	3.2E+05	3E-06
Uranium-235/236	0.0799	43	0.03
		Total Dose	**23**

* SALs from LANL (2009, 107655).

Table H-4.2-65
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-022(h)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.322	3.44E+03	9E-05
Aluminum	1.024	7.81E+04	1E-05
Anthracene	0.444	1.72E+04	3E-05
Antimony	0.179	3.13E+01	6E-03
Aroclor-1254	0.0478	1.12E+00	4E-02
Barium	64.11	1.56E+04	4E-03
Benzo(g,h,i)perylene	0.954	1.72E+03[b]	6E-04
Cadmium	2.76	7.79E+01	4E-02
Chromium	28.18	2.19E+02[c]	1E-01
Copper	162.2	3.13E+03	5E-02
Cyanide (total)	0.227	1.56E+03	2E-04
Dibenzofuran	1.1	7.8E+01[d]	1E-02
Di-n-butylphthalate	0.35	6.1E+03	6E-05
Fluoranthene	5.183	2.29E+03	2E-03
Fluorene	0.266	2.29E+03	1E-04
Isopropyltoluene[4-]	0.0019	3.21E+03[e]	6E-07
Lead	1556	4.00E+02	4E+00
Mercury	0.726	2.3E+01[d]	3E-02
Methylnaphthalene[2-]	0.51	3.1E+02[d]	2E-03
Molybdenum	9.257	3.91E+02	2E-02
Nickel	5.513	1.56E+03	4E-03
Nitrate	28.81	1.25E+05	2E-04
Perchlorate	0.015	5.48E+01	3E-04
Phenanthrene	1.662	1.83E+03	9E-04
Pyrene	2.823	1.72E+03	2E-03
Selenium	0.45	3.91E+02	1E-03
Silver	18.99	3.91E+02	5E-02
Zinc	745.9	2.35E+04	3E-02
		Hazard Index	**4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-66
Residential Carcinogenic
Screening Evaluation for SWMU 21-022(h)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0211	2.22E+00	9.5E-08
Benzo(a)anthracene	0.905	6.21E+00	1.5E-06
Benzo(a)pyrene	0.864	6.21E-01	1.4E-05
Benzo(b)fluoranthene	1.176	6.21E+00	1.9E-06
Benzo(k)fluoranthene	0.774	6.21E+01	1.2E-07
Bis(2-ethylhexyl)phthalate	1.176	3.47E+02	3.4E-08
Butylbenzylphthalate	0.51	2.6E+03[b]	2.0E-09
Carbazole	1.5	2.4E+02[c]	6.3E-08
Chrysene	0.999	6.21E+02	1.6E-08
Dibenz(a,h)anthracene	0.43	6.21E-01	6.9E-06
Indeno(1,2,3-cd)pyrene	2.086	6.21E+00	3.4E-06
Methylene chloride	0.0033	1.99E+02	1.7E-10
Naphthalene	0.394	4.50E+01	8.8E-08
2,3,7,8-TCDD equivalent	8.0E-07	4.50E-05	1.8E-07
		Total Excess Cancer Risk	**3E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] EPA Region 6 SSL (EPA 2007, 099314).

Table H-4.2-67
Residential Radionuclide
Screening Evaluation for SWMU 21-022(h)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.024	30	0.5
Cesium-137	0.376	5.6	1
Plutonium-238	19.48	37	7.9
Plutonium-239/240	34.63	33	16
Strontium-90	0.377	5.7	0.99
Tritium	0.0545	750	0.001
Uranium-235/236	0.0799	17	0.07
		Total Dose	**26**

* SALs from LANL (2009, 107655).

Table H-4.2-68
Dioxin/Furan TEF Calculations for the Construction Worker and Residential Scenarios for Consolidated Unit 21-023(a)-99

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	9.6E-06	0.01	9.6E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	5.55E-05	0.01	5.6E-07
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	6.05E-07	0.1	6.1E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1.93E-07	0.1	1.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	3.13E-07	0.1	3.1E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1.92E-07	0.1	1.9E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	9.69E-05	0.0003	2.9E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1.8E-05	0.0003	5.4E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	1.33E-07	0.3	4.0E-08
Tetrachlorodibenzofuran[2,3,7,8-]	9.51E-08	0.1	9.5E-09
2,3,7,8-TCDD Equivalent			**8.7E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-69
Construction Worker Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-023(a)-99

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	1.38	1.86E+04	7.4E-05
Acetone	0.0114	2.63E+05	4.3E-08
Anthracene	0.251	6.68E+04	3.8E-06
Antimony	0.27	1.24E+02	2.2E-03
Aroclor-1260	0.0069	7.58E+01	9.1E-05
Arsenic	3.21	6.54E+01	4.9E-02
Barium	71.67	4.35E+03	1.6E-02
Benzo(g,h,i)perylene	0.225	6.68E+03[b]	3.4E-05
Bis(2-ethylhexyl)phthalate	2.12	4.76E+03	4.5E-04
Chromium	6.073	4.49E+02[c]	1.4E-02
Cobalt	2.38	3.49E+01[d]	6.8E-02
Copper	4.184	1.24E+04	3.4E-04
Di-n-butylphthalate	0.0854	2.38E+04	3.6E-06
Fluoranthene	2.006	8.91E+03	2.3E-04
Fluorene	0.42	8.91E+03	4.7E-05
Isopropyltoluene[4-]	0.000399	1.03E+04[e]	3.9E-08
Lead	222.2	8.00E+02	2.8E-01
Manganese	222.8	4.63E+02	4.8E-01
Mercury	0.255	9.29E+01[d]	2.7E-03
Methylnaphthalene[2-]	0.396	1.24E+03[d]	3.2E-04
Naphthalene	1.17	7.02E+02	1.7E-03
Nitrate	2.129	4.96E+05	4.3E-06
Perchlorate	0.00142	2.17E+02	6.5E-06
Phenanthrene	0.659	7.15E+03	9.2E-05
Pyrene	1.837	6.68E+03	2.8E-04
Selenium	4.261	1.55E+03	2.7E-03
2,3,7,8-TCDD equivalent	8.7E-07	2.84E-04	3.1E-03
Toluene	0.000401	2.11E+04	1.9E-08
Vanadium	10.45	1.55E+03	6.7E-03
Xylene[1,2-]	0.00101	2.75E+04	3.7E-08
Xylene[1,3-]+xylene[1,4-]	0.00203	3.13E+03[f]	6.5E-07
		Hazard Index	**0.9**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-70
Construction Worker Carcinogenic
Screening Evaluation for Consolidated Unit 21-023(a)-99

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.844	2.13E+02	4E-08
Benzo(a)pyrene	2.492	2.13E+01	1E-06
Benzo(b)fluoranthene	1.478	2.13E+02	7E-08
Benzo(k)fluoranthene	0.0324	2.06E+03	2E-10
Chrysene	3.001	2.06E+04	2E-09
Ethylbenzene	0.000565	6.63E+03	9E-13
Indeno(1,2,3-cd)pyrene	0.228	2.13E+02	1E-08
Tetrachloroethene	0.00138	3.38E+02	4E-11
		Total Excess Cancer Risk	**1E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-71
Construction Worker Radionuclide
Screening Evaluation for Consolidated Unit 21-023(a)-99

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.635	34	0.3
Cesium-137	0.133	18	0.1
Plutonium-238	0.0544	40	0.02
Plutonium-239/240	1.393	36	0.6
Strontium-90	1.95	800	0.04
Tritium	1.0990	3.2E+05	5E-05
Uranium-234	1.4680	220	0.1
Uranium-235/236	0.0936	43	0.03
		Total Dose	**1**

* SALs from LANL (2009, 107655).

Table H-4.2-72
Residential Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-023(a)-99

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	1.38	3.44E+03	4E-04
Acetone	0.0114	6.75E+04	2E-07
Anthracene	0.251	1.72E+04	2E-05
Antimony	0.27	3.13E+01	9E-03
Aroclor-1260	0.0069	2.22E+00	3E-03
Barium	71.67	1.56E+04	5E-03
Benzo(g,h,i)perylene	0.225	1.72E+03[b]	1E-04
Chromium	6.073	2.19E+02[c]	3E-02
Cobalt	2.38	2.3E+01[d]	1E-01
Copper	4.184	3.13E+03	1E-03
Di-n-butylphthalate	0.0854	6.11E+03	1E-05
Fluoranthene	2.006	2.29E+03	9E-04
Fluorene	0.42	2.29E+03	2E-04
Isopropyltoluene[4-]	0.000399	3.21E+03[e]	1E-07
Lead	222.2	4.00E+02	6E-01
Manganese	222.8	1.07E+04	2E-02
Mercury	0.255	2.3+01[d]	1E-02
Methylnaphthalene[2-]	0.396	3.1E+02[d]	1E-03
Nitrate	2.129	1.25E+05	2E-05
Perchlorate	0.00142	5.48E+01	3E-05
Phenanthrene	0.659	1.83E+03	4E-04
Pyrene	1.837	1.72E+03	1E-03
Selenium	4.261	3.91E+02	1E-02
Toluene	0.000401	5.57E+03	7E-08
Vanadium	10.45	3.91E+02	3E-02
Xylene[1,2-]	0.00101	9.55E+03	1E-07
Xylene[1,3-]+xylene[1,4-]	0.00203	1.09E+03[f]	2E-06
		Hazard Index	**0.8**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-73
Residential Carcinogenic
Screening Evaluation for Consolidated Unit 21-023(a)-99

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Arsenic	3.21	3.90E+00	8E-06
Benzo(a)anthracene	0.844	6.21E+00	1E-06
Benzo(a)pyrene	2.492	6.21E-01	4E-05
Benzo(b)fluoranthene	1.478	6.21E+00	2E-06
Benzo(k)fluoranthene	0.0324	6.21E+01	5E-09
Bis(2-ethylhexyl)phthalate	2.12	3.47E+02	6E-08
Chrysene	3.001	6.21E+02	5E-08
Ethylbenzene	0.000565	6.97E+01	8E-11
Indeno(1,2,3-cd)pyrene	0.228	6.21E+00	4E-07
Naphthalene	1.17	4.50E+01	3E-07
2,3,7,8-TCDD equivalent	8.7E-07	4.50E-05	2E-07
Tetrachloroethene	0.00138	6.99E+00	2E-09
		Total Excess Cancer Risk	**5E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-74
Residential Radionuclide
Screening Evaluation for Consolidated Unit 21-023(a)-99

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.635	30	0.3
Cesium-137	0.133	5.6	0.4
Plutonium-238	0.0544	37	0.02
Plutonium-239/240	1.393	33	0.6
Strontium-90	1.95	5.7	5
Tritium	1.099	750	0.02
Uranium-234	1.468	170	0.1
Uranium-235/236	0.0936	17	0.08
		Total Dose	**7**

* SALs from LANL (2009, 107655).

Table H-4.2-75
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Aluminum	10206	1.13E+06	9.0E-03
Anthracene	0.00916	1.83E+05	5.0E-08
Barium	87.31	2.24E+05	3.9E-04
Benzoic acid	0.621	2.5E+06[b]	2.5E-07
Chromium	7.753	2.92E+03[c]	2.7E-03
Cobalt	2.681	3.0E+02[b]	8.9E-03
Copper	49.42	4.54E+04	1.1E-03
Fluoranthene	0.0222	2.44E+04	9.1E-07
Lead	21.93	8.00E+02	2.7E-02
Mercury	0.225	3.1E+02[b]	7.3E-04
Nickel	4.78	2.27E+04	2.1E-04
Nitrate	2.331	1.82E+06	1.3E-06
Perchlorate	0.000959	7.95E+02	1.2E-06
Phenanthrene	0.0115	2.05E+04	5.6E-07
Pyrene	0.024	1.83E+04	1.3E-06
Uranium	2.093	3.41E+03	6.1E-04
Vanadium	13.8	5.68E+03	2.4E-03
Zinc	54.52	3.41E+05	1.6E-04
		Hazard Index	**0.05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

Table H-4.2-76
Industrial Carcinogenic
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.0146	2.34E+01	6E-09
Benzo(b)fluoranthene	0.0164	2.34E+01	7E-09
Bis(2-ethylhexyl)phthalate	0.116	1.37E+03	9E-10
Chloroaniline[4-]	0.0804	8.6E+01[b]	9E-09
Chrysene	0.0148	2.34E+03	6E-11
		Total Excess Cancer Risk	**2E-08**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-77
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.106	180	0.009
Cesium-137	0.608	23	0.4
Plutonium-238	0.0268	240	0.002
Plutonium-239/240	1.38	210	0.1
Strontium-90	0.18	1900	0.001
Tritium	0.033	4.4E+05	1E-06
Uranium-234	1.572	1500	0.02
Uranium-235/236	0.0701	87	0.01
Uranium-238	1.457	430	0.05
		Total Dose	**0.6**

* SALs from LANL (2009, 107655).

Table H-4.2-78
Dioxin/Furan TEF Calculations for
Construction Worker and Residential Scenarios for SWMU 21-024(a)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.47E-06	0.01	1.5E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	5.14E-07	0.01	5.1E-09
Hexachlorodibenzofuran[2,3,4,6,7,8-]	5.17E-08	0.1	5.2E-09
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1.3E-05	0.0003	3.9E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1.11E-06	0.0003	3.3E-10
Tetrachlorodibenzofuran[2,3,7,8-]	7.73E-08	0.1	7.7E-09
		2,3,7,8-TCDD Equivalent	3.7E-08

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-79
Construction Worker
Noncarcinogenic Screening Evaluation for SWMU 21-024(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.26	2.63E+05	1E-06
Aluminum	7768	4.07E+04	2E-01
Anthracene	0.00916	6.68E+04	1E-07
Barium	65.02	4.35E+03	2E-02
Benzoic acid	0.621	9.52E+05[b]	7E-07
Bis(2-ethylhexyl)phthalate	0.116	4.76E+03	2E-05
Chromium	9.6	4.49E+02[c]	2E-02
Cobalt	2.015	3.49E+01[b]	6E-02
Copper	24.81	1.24E+04	2E-03
Fluoranthene	0.0213	8.91E+03	2E-06
Isopropyltoluene[4-]	0.000488	1.03E+04[d]	5E-08
Lead	16.8	8.00E+02	2E-02
Mercury	0.283	9.29E+01[b]	3E-03
Methylene chloride	0.0055	1.06E+04	5E-07
Nickel	4.164	6.19E+03	7E-04
Nitrate	1.899	4.96E+05	4E-06
Perchlorate	0.00118	2.17E+02	5E-06
Phenanthrene	0.0115	7.15E+03	2E-06
Pyrene	0.0203	6.68E+03	3E-06
Selenium	1.155	1.55E+03	8E-04
2,3,7,8-TCDD equivalent	3.7E-08	2.84E-04	1E-04
Toluene	0.00214	2.11E+04	1E-07
Uranium	2.914	9.29E+02	3E-03
Vanadium	11.78	1.55E+03	8E-03
Xylene[1,3-]+xylene[1,4-]	0.000333	3.13E+03[e]	1E-07
Zinc	46.14	9.29E+04	5E-04
		Hazard Index	**0.3**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-80
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.0146	2.13E+02	7E-10
Benzo(b)fluoranthene	0.0164	2.13E+02	8E-10
Chloroaniline[4-]	0.462	1.08E+03[b]	4E-09
Chloroform	0.000251	6.71E+02	4E-12
Chrysene	0.0148	2.06E+04	7E-12
Dichlorobenzene[1,4-]	0.000442	3.78E+03	1E-12
Trichloroethene	0.00286	4.60E+03	6E-12
		Total Excess Cancer Risk	**6E-09**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table H-4.2-81
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.104	34	0.05
Cesium-137	0.263	18	0.2
Plutonium-238	0.0268	40	0.01
Plutonium-239/240	0.66	36	0.3
Strontium-90	0.166	800	0.003
Tritium	0.0333	3.2E+05	2E-06
Uranium-234	1.374	220	0.09
Uranium-235/236	0.0893	43	0.03
Uranium-238	1.35	160	0.1
		Total Dose	**0.8**

* SALs from LANL (2009, 107655).

Table H-4.2-82
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acetone	0.26	6.75E+04	4E-06
Aluminum	7768	7.81E+04	1E-01
Anthracene	0.00916	1.72E+04	5E-07
Barium	65.02	1.56E+04	4E-03
Benzoic acid	0.621	2.4E+05[b]	3E-06
Chromium	9.6	2.19E+02[c]	4E-02
Cobalt	2.015	2.3E+01[b]	9E-02
Copper	24.81	3.13E+03	8E-03
Fluoranthene	0.0213	2.29E+03	9E-06
Isopropyltoluene[4-]	0.000488	3.21E+03[d]	2E-07
Lead	16.8	4.00E+02	4E-02
Mercury	0.283	2.3E+01[b]	1E-02
Nickel	4.164	1.56E+03	3E-03
Nitrate	1.899	1.25E+05	2E-05
Perchlorate	0.00118	5.48E+01	2E-05
Phenanthrene	0.0115	1.83E+03	6E-06
Pyrene	0.0203	1.72E+03	1E-05
Selenium	1.155	3.91E+02	3E-03
Toluene	0.00214	5.57E+03	4E-07
Uranium	2.914	2.35E+02	1E-02
Vanadium	11.78	3.91E+02	3E-02
Xylene[1,3-]+xylene[1,4-]	0.000333	1.09E+03[e]	3E-07
Zinc	46.14	2.35E+04	2E-03
		Hazard Index	**0.3**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-83
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.0146	6.21E+00	2E-08
Benzo(b)fluoranthene	0.0164	6.21E+00	3E-08
Bis(2-ethylhexyl)phthalate	0.116	3.47E+02	3E-09
Chloroaniline[4-]	0.462	2.4E+01[b]	2E-07
Chloroform	0.000251	5.72E+00	4E-10
Chrysene	0.0148	6.21E+02	2E-10
Dichlorobenzene[1,4-]	0.000442	3.22E+01	1E-10
Methylene chloride	0.0055	1.99E+02	3E-10
Trichloroethene	0.00286	4.57E+01	6E-10
2,3,7,8-TCDD equivalent	3.7E-08	4.50E-05	8E-09
		Total Excess Cancer Risk	**3E-07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-84
Residential Radionuclide
Screening Evaluation for SWMU 21-024(a)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.104	30	0.05
Cesium-137	0.263	5.6	0.7
Plutonium-238	0.0268	37	0.01
Plutonium-239/240	0.66	33	0.3
Strontium-90	0.166	5.7	0.4
Tritium	0.0333	750	0.0007
Uranium-234	1.374	170	0.1
Uranium-235/236	0.0893	17	0.08
Uranium-238	1.35	87	0.2
		Total Dose	**2**

* SALs from LANL (2009, 107655).

Table H-4.2-85
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Barium	65.07	2.24E+05	3E-04
Chromium	6.268	2.92E+03[b]	2E-03
Cobalt	2.258	3.0E+02[c]	8E-03
Copper	6.769	4.54E+04	2E-04
Cyanide (total)	0.945	2.27E+04	4E-05
Fluoranthene	0.0268	2.44E+04	1E-06
Lead	14.53	8.00E+02	2E-02
Mercury	0.0722	3.1E+02[c]	2E-04
Nickel	4.245	2.27E+04	2E-04
Nitrate	34.48	1.82E+06	2E-05
Perchlorate	0.00631	7.95E+02	8E-06
Phenanthrene	0.016	2.05E+04	8E-07
Pyrene	0.0234	1.83E+04	1E-06
Selenium	1.195	5.68E+03	2E-04
Silver	0.0868	5.68E+03	2E-05
Zinc	60.99	3.41E+05	2E-04
		Hazard Index	**0.03**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-86
Industrial Carcinogenic Screening Evaluation for SWMU 21-024(b)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Arsenic	2.402	1.77E+01	1E-06
Benzo(b)fluoranthene	0.0203	2.34E+01	9E-09
Chrysene	0.0146	2.34E+03	6E-11
		Total Excess Cancer Risk	**1E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-87
Industrial Radionuclide Screening Evaluation for SWMU 21-024(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.896	180	0.2
Cesium-137	0.772	23	0.5
Plutonium-238	0.642	240	0.04
Plutonium-239/240	76.3	210	5
Tritium	0.0129	4.4E+05	4E-07
Uranium-234	2.055	1500	0.02
Uranium-235/236	0.146	87	0.03
Uranium-238	1.919	430	0.07
		Total Dose	**6**

* SALs from LANL (2009, 107655).

Table H-4.2-88
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(b)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	8.21E-06	0.01	8.2E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	2.07E-06	0.01	2.1E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	5.92E-07	0.1	5.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	6.0E-07	0.1	6.0E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	3.24E-07	0.1	3.2E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.29E-07	0.1	2.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	7.48E-05	0.0003	2.2E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	3.49E-06	0.0003	1.0E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	3.80E-07	0.3	1.1E-07
Tetrachlorodibenzofuran[2,3,7,8-]	5.22E-07	0.1	5.2E-08
		2,3,7,8-TCDD Equivalent	**4.6E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-89
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthylene	0.0129	6.68E+03[b]	2E-06
Anthracene	0.0576	6.68E+04	9E-07
Aroclor-1254	0.0909	4.36E+00	2E-02
Arsenic	4.702	6.54E+01	7E-02
Barium	84.44	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.0515	6.68E+03[b]	8E-06
Bis(2-ethylhexyl)phthalate	0.147	4.76E+03	3E-05
Chromium	13.31	4.49E+02[c]	3E-02
Cobalt	2.708	3.49E+01[d]	8E-02
Copper	22.67	1.24E+04	2E-03
Cyanide (total)	0.316	6.19E+03	5E-05
Di-n-butylphthalate	0.497	2.38E+04	2E-05
Fluoranthene	0.0878	8.91E+03	1E-05
Lead	24	8.00E+02	3E-02
Mercury	2.048	9.29E+01[d]	2E-02
Nickel	5.511	6.19E+03	9E-04
Nitrate	26.33	4.96E+05	5E-05
Perchlorate	0.00865	2.17E+02	4E-05
Phenanthrene	0.04	7.15E+03	6E-06
Pyrene	0.0864	6.68E+03	1E-05
Selenium	0.998	1.55E+03	6E-04
Silver	8.614	1.55E+03	6E-03
Strontium	21.38	1.86E+05	1E-04
2,3,7,8-TCDD equivalent	4.6E-07	2.84E-04	2E-03
Toluene	0.0008448	2.11E+04	4E-08
Zinc	221.5	9.29E+04	2E-03
		Hazard Index	**0.3**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table H-4.2-90
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0519	7.58E+01	7E-09
Benzo(a)anthracene	0.419	2.13E+02	2E-08
Benzo(a)pyrene	0.0815	2.13E+01	4E-08
Benzo(b)fluoranthene	0.109	2.13E+02	5E-09
Benzo(k)fluoranthene	0.0739	2.06E+03	4E-10
Chrysene	0.0761	2.06E+04	4E-11
Dichlorobenzene[1,4-]	0.237	3.78E+03	6E-10
Indeno(1,2,3-cd)pyrene	0.276	2.13E+02	1E-08
Total Excess Cancer Risk			**8E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-91
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	30.43	34	13
Cesium-137	0.37	18	0.3
Plutonium-238	0.793	40	0.3
Plutonium-239/240	178.9	36	75
Tritium	0.0253	3.2E+05	1E-06
Uranium-234	3.081	220	0.2
Uranium-235/236	0.162	43	0.06
Uranium-238	1.517	160	0.1
Total Dose			**89**

* SALs from LANL (2009, 107655).

Table H-4.2-92
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthylene	0.0129	1.72E+03[b]	7.5E-06
Anthracene	0.0576	1.72E+04	3.3E-06
Aroclor-1254	0.0909	1.12E+00	8.1E-02
Barium	84.44	1.56E+04	5.4E-03
Benzo(g,h,i)perylene	0.0515	1.72E+03[b]	3.0E-05
Chromium	13.31	2.19E+02[c]	6.1E-02
Cobalt	2.708	2.3E+01[d]	1.2E-01
Copper	22.67	3.13E+03	7.2E-03
Cyanide (total)	0.316	1.56E+03	2.0E-04
Di-n-butylphthalate	0.497	6.11E+03	8.1E-05
Fluoranthene	0.0878	2.29E+03	3.8E-05
Lead	24	4.00E+02	6.0E-02
Mercury	2.048	2.3E+01[d]	8.9E-02
Nickel	5.511	1.56E+03	3.5E-03
Nitrate	26.33	1.25E+05	2.1E-04
Perchlorate	0.00865	5.48E+01	1.6E-04
Phenanthrene	0.04	1.83E+03	2.2E-05
Pyrene	0.0864	1.72E+03	5.0E-05
Selenium	0.998	3.91E+02	2.6E-03
Silver	8.614	3.91E+02	2.2E-02
Strontium	21.38	4.69E+04	4.6E-04
Toluene	0.0008448	5.57E+03	1.5E-07
Zinc	221.5	2.35E+04	9.4E-03
		Hazard Index	**0.5**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-93
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0519	2.22E+00	2.3E-07
Arsenic	4.702	3.90E+00	1.2E-05
Benzo(a)anthracene	0.419	6.21E+00	6.7E-07
Benzo(a)pyrene	0.0815	6.21E-01	1.3E-06
Benzo(b)fluoranthene	0.109	6.21E+00	1.8E-07
Benzo(k)fluoranthene	0.0739	6.21E+01	1.2E-08
Bis(2-ethylhexyl)phthalate	0.147	3.47E+02	4.2E-09
Chrysene	0.0761	6.21E+02	1.2E-09
Dichlorobenzene[1,4-]	0.237	3.22E+01	7.4E-08
Indeno(1,2,3-cd)pyrene	0.276	6.21E+00	4.4E-07
2,3,7,8-TCDD equivalent	4.6E-07	4.50E-05	1.0E-07
		Total Excess Cancer Risk	**2E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-94
Residential Radionuclide
Screening Evaluation for SWMU 21-024(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	30.43	30	15
Cesium-137	0.37	5.6	1
Plutonium-238	0.793	37	0.3
Plutonium-239/240	178.9	33	81
Tritium	0.0253	7.50E+02	0.0005
Uranium-234	3.081	170	0.3
Uranium-235/236	0.162	17	0.1
Uranium-238	1.517	87	0.3
		Total Dose	**98**

* SALs from LANL (2009, 107655).

Table H-4.2-95
Dioxin/Furan TEF Calculations for the
Industrial Scenario for SWMU 21-024(d)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.000677	0.01	6.8E-06
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	0.0000333	0.1	3.3E-06
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.0000388	0.1	3.9E-06
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.0000332	0.1	3.3E-06
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.00439	0.0003	1.3E-06
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.0000154	1	1.5E-05
Tetrachlorodibenzodioxin[2,3,7,8-]	2.23E-06	1	2.2E-06
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.000175	0.01	1.8E-06
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	7.31E-06	0.01	7.3E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.0000114	0.1	1.1E-06
Hexachlorodibenzofuran[1,2,3,6,7,8-]	4.82E-06	0.1	4.8E-07
Hexachlorodibenzofuran[1,2,3,7,8,9-]	2.67E-06	0.1	2.7E-07
Hexachlorodibenzofuran[2,3,4,6,7,8-]	6.98E-06	0.1	7.0E-07
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.000414	0.0003	1.2E-07
Pentachlorodibenzofuran[1,2,3,7,8-]	2.65E-06	0.03	8.0E-08
Pentachlorodibenzofuran[2,3,4,7,8-]	6.36E-06	0.3	1.9E-06
Tetrachlorodibenzofuran[2,3,7,8-]	6.11E-06	0.1	6.1E-07
2,3,7,8-TCDD Equivalent			**4.3E-05**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-96
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(d)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0758	3.67E+04	2E-06
Acenaphthylene	0.0162	1.83E+04[b]	9E-07
Barium	100.4	2.24E+05	5E-04
Benzoic acid	0.445	2.5E+06[c]	2E-07
Chromium	25.61	2.92E+03[d]	9E-08
Cobalt	3.136	3.0E+02[c]	1E-07
Copper	97.49	4.54E+04	2E-03
Cyanide (total)	1.273	2.27E+04	6E-05
Di-n-butylphthalate	0.395	6.84E+04	6E-06
Fluoranthene	0.0407	2.44E+04	2E-06
Lead	44.76	8.00E+02	6E-02
Manganese	239.4	1.45E+05	2E-03
Mercury	0.511	3.1E+02[c]	2E-03
Nickel	4.901	2.27E+04	2E-04
Nitrate	74.76	1.82E+06	4E-05
Perchlorate	0.00591	7.95E+02	7E-06
Pyrene	0.0756	1.83E+04	4E-06
Selenium	0.77	5.68E+03	1E-04
Silver	9.683	5.68E+03	2E-03
Uranium	7.362	3.41E+03	2E-03
Zinc	97.9	3.41E+05	3E-04
		Hazard Index	**0.07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

Table H-4.2-97
Industrial Carcinogenic
Screening Evaluation for SWMU 21-024(d)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1242	0.178	8.26E+00	2E-07
Aroclor-1254	0.422	8.26E+00	5E-07
Aroclor-1260	0.186	8.26E+00	2E-07
Arsenic	3.312	1.77E+01	2E-06
Benzo(a)anthracene	0.1	2.34E+01	4E-08
Benzo(b)fluoranthene	0.42	2.34E+01	2E-07
Bis(2-ethylhexyl)phthalate	0.43	1.37E+03	3E-09
Chrysene	0.198	2.34E+03	9E-10
2,3,7,8-TCDD equivalent	4.3E-05	2.04E-04	2E-06
Total Excess Cancer Risk			**5E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-98
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(d)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.65	180	0.1
Cesium-137	0.485	23	0.3
Plutonium-238	0.223	240	0.01
Plutonium-239/240	15.72	210	1
Strontium-90	0.293	1900	0.002
Tritium	0.139	4.4E+05	5E-06
Uranium-234	6.458	1500	0.06
Uranium-235/236	0.479	87	0.08
Uranium-238	4.578	430	0.2
Total Dose			**2**

* SALs from LANL (2009, 107655).

Table H-4.2-99
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(d)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0004661	0.01	4.7E-06
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	2.16E-05	0.1	2.2E-06
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	2.583E-05	0.1	2.6E-06
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	2.251E-05	0.1	2.3E-06
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.00289	0.0003	8.7E-07
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.0000154	1	1.5E-05
Tetrachlorodibenzodioxin[2,3,7,8-]	2.23E-06	1	2.2E-06
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0001295	0.01	1.3E-06
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	7.31E-06	0.01	7.3E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.0000114	0.1	1.1E-06
Hexachlorodibenzofuran[1,2,3,6,7,8-]	4.82E-06	0.1	4.8E-07
Hexachlorodibenzofuran[1,2,3,7,8,9-]	2.67E-06	0.1	2.7E-07
Hexachlorodibenzofuran[2,3,4,6,7,8-]	6.98E-06	0.1	7.0E-07
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0002876	0.0003	8.6E-08
Pentachlorodibenzofuran[1,2,3,7,8-]	2.65E-06	0.03	8.0E-08
Pentachlorodibenzofuran[2,3,4,7,8-]	6.36E-06	0.3	1.9E-06
Tetrachlorodibenzofuran[2,3,7,8-]	4.83E-06	0.1	4.8E-07
2,3,7,8-TCDD Equivalent			**3.7E-05**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-100
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-024(d)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0758	1.86E+04	4E-06
Acenaphthylene	0.0162	6.68E+03[b]	2E-06
Anthracene	0.166	6.68E+04	3E-06
Aroclor-1254	0.332	4.36E+00	8E-02
Arsenic	3.556	6.54E+01	5E-02
Barium	64.17	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.0519	6.68E+03[b]	8E-06
Benzoic acid	0.453	9.52E+05[c]	5E-07
Bis(2-ethylhexyl)phthalate	0.194	4.76E+03	4E-05
Chromium	34.22	4.49E+02[d]	8E-02
Cobalt	2.866	3.49E+01[c]	8E-02
Copper	114	1.24E+04	9E-03
Cyanide (total)	0.455	6.19E+03	7E-05
Di-n-butylphthalate	0.214	2.38E+04	9E-06
Fluoranthene	0.149	8.91E+03	2E-05
Fluorene	0.0206	8.91E+03	2E-06
Isopropyltoluene[4-]	0.000495	1.03E+04[e]	5E-08
Lead	36.34	8.00E+02	5E-02
Manganese	252.9	4.63E+02	6E-01
Mercury	0.404	9.29E+01[c]	4E-03
Methylene chloride	0.019	1.06E+04	2E-06
Nickel	13.14	6.19E+03	2E-03
Nitrate	26.88	4.96E+05	5E-05
Perchlorate	0.0022	2.17E+02	1E-05
Phenanthrene	0.215	7.15E+03	3E-05
Pyrene	0.142	6.68E+03	2E-05
Selenium	1.807	1.55E+03	1E-03
Silver	8.982	1.55E+03	6E-03
2,3,7,8-TCDD equivalent	3.7E-05	2.84E-04	1E-01
Toluene	0.00243	2.11E+04	1E-07
Uranium	4.57	9.29E+02	5E-03
Zinc	80.24	9.29E+04	9E-04
		Hazard Index	**1**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-101
Construction Worker Carcinogenic Screening Evaluation for SWMU 21-024(d)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Excess Cancer Risk
Aroclor-1242	0.256	7.58E+01	3E-08
Aroclor-1260	0.13	7.58E+01	2E-08
Benzo(a)anthracene	0.149	2.13E+02	7E-09
Benzo(a)pyrene	0.159	2.13E+01	8E-08
Benzo(b)fluoranthene	0.176	2.13E+02	8E-09
Benzo(k)fluoranthene	0.33	2.06E+03	2E-09
Butylbenzylphthalate	0.248	4.76E+04[b]	5E-11
Carbazole	0.1	1.08E+04[c]	9E-11
Chrysene	0.219	2.06E+04	1E-10
Dibenz(a,h)anthracene	0.085	2.13E+01	4E-08
Dichlorobenzene[1,4-]	0.097	3.78E+03	3E-10
Indeno(1,2,3-cd)pyrene	0.0484	2.13E+02	2E-09
Trichloroethene	0.0023	4.60E+03	5E-12
		Total Excess Cancer Risk	**2E-07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

Table H-4.2-102
Construction Worker Radionuclide Screening Evaluation for SWMU 21-024(d)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.388	34	0.2
Cesium-137	0.364	18	0.3
Europium-152	0.393	9.1	0.6
Plutonium-238	0.0714	40	0.03
Plutonium-239/240	5.892	36	2
Strontium-90	0.375	800	0.007
Tritium	0.036	3.2E+05	2E-06
Uranium-234	2.553	220	0.2
Uranium-235/236	0.128	43	0.04
Uranium-238	1.6	160	0.2
		Total Dose	**4**

* SALs from LANL (2009, 107655).

Table H-4.2-103
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(d)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0758	3.44E+03	2E-05
Acenaphthylene	0.0162	1.72E+03[b]	9E-06
Anthracene	0.166	1.72E+04	1E-05
Aroclor-1254	0.332	1.12E+00	3E-01
Barium	64.17	1.56E+04	4E-03
Benzo(g,h,i)perylene	0.0519	1.72E+03[b]	3E-05
Benzoic acid	0.453	2.4E+05[c]	2E-06
Chromium	34.22	2.19E+02[d]	2E-01
Cobalt	2.866	2.3E+01[c]	1E-01
Copper	114	3.13E+03	4E-02
Cyanide (total)	0.455	1.56E+03	3E-04
Di-n-butylphthalate	0.214	6.11E+03	4E-05
Fluoranthene	0.149	2.29E+03	7E-05
Fluorene	0.0206	2.29E+03	9E-06
Isopropyltoluene[4-]	0.000495	3.21E+03[e]	2E-07
Lead	36.34	4.00E+02	9E-02
Manganese	252.9	1.07E+04	2E-02
Mercury	0.404	2.3E+01[c]	2E-02
Nickel	13.14	1.56E+03	8E-03
Nitrate	26.88	1.25E+05	2E-04
Perchlorate	0.0022	5.48E+01	4E-05
Phenanthrene	0.215	1.83E+03	1E-04
Pyrene	0.142	1.72E+03	8E-05
Selenium	1.807	3.91E+02	5E-03
Silver	8.982	3.91E+02	2E-02
Toluene	0.00243	5.57E+03	4E-07
Uranium	4.57	2.35E+02	2E-02
Zinc	80.24	2.35E+04	3E-03
		Hazard Index	**0.8**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-104
Residential Carcinogenic Screening Evaluation for SWMU 21-024(d)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Excess Cancer Risk
Aroclor-1242	0.256	2.22E+00	1E-06
Aroclor-1260	0.13	2.22E+00	6E-07
Arsenic	3.556	3.90E+00	9E-06
Benzo(a)anthracene	0.149	6.21E+00	2E-07
Benzo(a)pyrene	0.159	6.21E-01	3E-06
Benzo(b)fluoranthene	0.176	6.21E+00	3E-07
Benzo(k)fluoranthene	0.33	6.21E+01	5E-08
Bis(2-ethylhexyl)phthalate	0.194	3.47E+02	6E-09
Butylbenzylphthalate	0.248	2.6E+03[b]	1E-09
Carbazole	0.1	2.4E+02[c]	4E-09
Chrysene	0.219	6.21E+02	4E-09
Dibenz(a,h)anthracene	0.085	6.21E-01	1E-06
Dichlorobenzene[1,4-]	0.097	3.22E+01	3E-08
Indeno(1,2,3-cd)pyrene	0.0484	6.21E+00	8E-08
Methylene chloride	0.019	1.99E+02	1E-09
2,3,7,8-TCDD equivalent	3.7E-05	4.50E-05	8E-06
Trichloroethene	0.0023	4.57E+01	5E-10
		Total Excess Cancer Risk	**2E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] EPA Region 6 SSL (EPA 2007, 099314).

Table H-4.2-105
Residential Radionuclide Screening Evaluation for SWMU 21-024(d)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.388	30	0.2
Cesium-137	0.364	5.6	1
Europium-152	0.393	2.9	2
Plutonium-238	0.0714	37	0.03
Plutonium-239/240	5.892	33	3
Strontium-90	0.375	5.7	1
Tritium	0.036	750	0.0007
Uranium-234	2.553	170	0.2
Uranium-235/236	0.128	17	0.1
Uranium-238	1.6	87	0.3
		Total Dose	**8**

* SALs from LANL (2009, 107655).

Table H-4.2-106
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0843	3.67E+04	2E-06
Acetone	0.00437	8.51E+05	5E-09
Anthracene	0.158	1.83E+05	9E-07
Antimony	0.674	4.54E+02	2E-03
Barium	98.64	2.24E+05	4E-04
Cadmium	0.921	1.12E+03	8E-04
Chromium	9.287	2.92E+03[b]	3E-03
Copper	10.03	4.54E+04	2E-04
Cyanide (total)	0.218	2.27E+04	1E-05
Di-n-butylphthalate	0.0622	6.84E+04	9E-07
Fluoranthene	0.3	2.44E+04	1E-05
Fluorene	0.127	2.44E+04	5E-06
Lead	35.07	8.00E+02	4E-02
Mercury	0.207	3.1E+02[c]	7E-04
Methylnaphthalene[2-]	0.052	4.1E+03[c]	1E-05
Molybdenum	0.811	5.68E+03	1E-04
Nitrate	6.334	1.82E+06	4E-06
Perchlorate	0.00124	7.95E+02	2E-06
Phenanthrene	0.682	2.05E+04	3E-05
Pyrene	0.322	1.83E+04	2E-05
Selenium	1.29	5.68E+03	2E-04
Silver	0.384	5.68E+03	7E-05
Toluene	0.0154	5.79E+04	3E-07
Uranium	8.677	3.41E+03	3E-03
Zinc	63.52	3.41E+05	2E-04
		Hazard Index	**0.05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-107
Industrial Carcinogenic
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.32	2.34E+01	1.4E-07
Benzo(a)pyrene	0.273	2.34E+00	1.2E-06
Benzo(b)fluoranthene	0.582	2.34E+01	2.5E-07
Benzo(k)fluoranthene	0.0786	2.34E+02	3.4E-09
Chrysene	0.293	2.34E+03	1.3E-09
Naphthalene	0.104	2.52E+02	4.1E-09
Trichloroethene	0.00748	2.53E+02	3.0E-10
Total Excess Cancer Risk			**2E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-108
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.182	180	0.1
Cesium-137	0.63	23	0.4
Plutonium-238	0.329	240	0.02
Plutonium-239/240	35.34	210	2.5
Strontium-90	0.907	1900	0.007
Tritium	0.0199	4.4E+05	7E-07
Uranium-234	4.777	1500	0.05
Uranium-235/236	0.177	87	0.03
Uranium-238	2.724	430	0.1
Total Dose			**3**

* SALs from LANL (2009, 107655).

Table H-4.2-109
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(e)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	4.89E-06	0.01	4.9E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.17E-06	0.01	1.2E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1.96E-07	0.1	2.0E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1.79E-07	0.1	1.8E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	4.31E-05	0.0003	1.3E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	2.67E-06	0.0003	8.0E-10
Pentachlorodibenzofuran[2,3,4,7,8-]	3.33E-07	0.3	1.0E-07
2,3,7,8-TCDD Equivalent			**2.1E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-110
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0843	1.86E+04	5E-06
Acenaphthylene	0.0261	6.68E+03[b]	4E-06
Acetone	0.00904	2.63E+05	3E-08
Anthracene	0.0251	6.68E+04	4E-07
Antimony	0.39	1.24E+02	3E-03
Barium	73.8	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.125	6.68E+03[b]	2E-05
Bis(2-ethylhexyl)phthalate	0.383	4.76E+03	8E-05
Cadmium	1.269	3.09E+02	4E-03
Chromium	8.602	4.49E+02[c]	2E-02
Copper	18.46	1.24E+04	1E-03
Cyanide (total)	1.709	6.19E+03	3E-04
Di-n-butylphthalate	0.137	2.38E+04	6E-06
Fluoranthene	0.0934	8.91E+03	1E-05
Fluorene	0.127	8.91E+03	1E-05
Isopropyltoluene[4-]	0.00667	1.03E+04[d]	6E-07
Lead	22.25	8.00E+02	3E-02
Mercury	0.453	9.29E+01[e]	5E-03
Methylene chloride	0.00251	1.06E+04	2E-07
Methylnaphthalene[2-]	0.052	1.24E+03[e]	4E-05
Molybdenum	1.101	1.55E+03	7E-04
Naphthalene	0.104	7.02E+02	1E-04
Nitrate	3.426	4.96E+05	7E-06
Perchlorate	0.00115	2.17E+02	5E-06
Phenanthrene	0.0637	7.15E+03	9E-06
Pyrene	0.0997	6.68E+03	1E-05
Selenium	1.066	1.55E+03	7E-04
Silver	0.305	1.55E+03	2E-04
2,3,7,8-TCDD equivalent	2.10E-07	2.84E-04	7E-04
Toluene	0.00402	2.11E+04	2E-07
Trimethylbenzene[1,2,4-]	0.00034	6.88E+02[e]	5E-07
Uranium	7.792	9.29E+02	8E-03
Xylene[1,2-]	0.00157	2.75E+04	6E-08
Xylene[1,3-]+xylene[1,4-]	0.00411	3.13E+03[f]	1E-06
Zinc	55.3	9.29E+04	6E-04
		Hazard Index	**0.09**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-111
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.128	2.13E+02	6E-09
Benzo(a)pyrene	0.406	2.13E+01	2E-07
Benzo(b)fluoranthene	0.202	2.13E+02	1E-08
Benzo(k)fluoranthene	0.0786	2.06E+03	4E-10
Chloroaniline[4-]	0.407	1.08E+03[b]	4E-09
Chrysene	0.0601	2.06E+04	3E-11
Dichlorobenzene[1,4-]	0.000635	3.78E+03	2E-12
Ethylbenzene	0.000663	6.63E+03	1E-12
Indeno(1,2,3-cd)pyrene	0.168	2.13E+02	8E-09
Trichloroethene	0.00486	4.60E+03	1E-11
		Total Excess Cancer Risk	**2E-07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table H-4.2-112
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.402	34	0.2
Cesium-137	0.525	18	0.4
Plutonium-238	0.329	40	0.1
Plutonium-239/240	11.29	36	5
Strontium-90	0.907	800	0.02
Tritium	0.0176	3.2E+05	8E-07
Uranium-234	2.56	220	0
Uranium-235/236	0.137	43	0.05
Uranium-238	1.717	160	0.2
		Total Dose	**6**

* SALs from LANL (2009, 107655).

Table H-4.2-113
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0843	3.44E+03	3E-05
Acenaphthylene	0.0261	1.72E+03[b]	2E-05
Acetone	0.00904	6.75E+04	1E-07
Anthracene	0.0251	1.72E+04	2E-06
Antimony	0.39	3.13E+01	1E-02
Barium	73.8	1.56E+04	5E-03
Benzo(g,h,i)perylene	0.125	1.72E+03[b]	7E-05
Cadmium	1.269	7.79E+01	2E-02
Chromium	8.602	2.19E+02[c]	4E-02
Copper	18.46	3.13E+03	6E-03
Cyanide (total)	1.709	1.56E+03	1E-03
Di-n-butylphthalate	0.137	6.11E+03	2E-05
Fluoranthene	0.0934	2.29E+03	4E-05
Fluorene	0.127	2.29E+03	6E-05
Isopropyltoluene[4-]	0.00667	3.21E+03[d]	2E-06
Lead	22.25	4.00E+02	6E-02
Mercury	0.453	2.3E+01[e]	2E-02
Methylnaphthalene[2-]	0.052	3.1E+02[e]	2E-04
Molybdenum	1.101	3.91E+02	3E-03
Nitrate	3.426	1.25E+05	3E-05
Perchlorate	0.00115	5.48E+01	2E-05
Phenanthrene	0.0637	1.83E+03	4E-05
Pyrene	0.0997	1.72E+03	6E-05
Selenium	1.066	3.91E+02	3E-03
Silver	0.305	3.91E+02	8E-04
Toluene	0.00402	5.57E+03	7E-07
Trimethylbenzene[1,2,4-]	0.00034	6.2E+01[e]	6E-06
Uranium	7.792	2.35E+02	3E-02
Xylene[1,2-]	0.00157	9.55E+03	2E-07
Xylene[1,3-]+xylene[1,4-]	0.00411	1.09E+03[f]	4E-06
Zinc	55.3	2.35E+04	2E-03
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

[e] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-114
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.128	6.21E+00	2.1E-07
Benzo(a)pyrene	0.406	6.21E-01	6.5E-06
Benzo(b)fluoranthene	0.202	6.21E+00	3.3E-07
Benzo(k)fluoranthene	0.0786	6.21E+01	1.3E-08
Bis(2-ethylhexyl)phthalate	0.383	3.47E+02	1.1E-08
Chloroaniline[4-]	0.407	2.4E+01[b]	1.7E-07
Chrysene	0.000635	6.21E+02	1.0E-11
Dichlorobenzene[1,4-]	0.000663	3.22E+01	2.1E-10
Ethylbenzene	0.168	6.97E+01	2.4E-08
Indeno(1,2,3-cd)pyrene	0.00251	6.21E+00	4.0E-09
Methylene chloride	0.052	1.99E+02	2.6E-09
Naphthalene	0.00486	4.50E+01	1.1E-09
2,3,7,8-TCDD equivalent	2.1E-07	4.50E-05	4.7E-08
Trichloroethene	0.00486	4.57E+01	1.1E-09
		Total Excess Cancer Risk	**7E-06**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-115
Residential Radionuclide
Screening Evaluation for SWMU 21-024(e)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.402	30	0.2
Cesium-137	0.525	5.6	1.4
Plutonium-238	0.329	37	0.1
Plutonium-239/240	11.29	33	5.1
Strontium-90	0.907	5.7	2.4
Tritium	0.0176	750	0.0004
Uranium-234	2.56	170	0.2
Uranium-235/236	0.137	17	0.1
Uranium-238	1.717	87	0.3
		Total Dose	**10**

* SALs from LANL (2009, 107655).

Table H-4.2-116
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0369	3.67E+04	1E-06
Acetone	0.0846	8.51E+05	1E-07
Aluminum	7764	1.13E+06	7E-03
Anthracene	0.0551	1.83E+05	3E-07
Barium	74.18	2.24E+05	3E-04
Benzo(g,h,i)perylene	0.127	1.83E+04[b]	7E-06
Cadmium	0.333	1.12E+03	3E-04
Chromium	9.608	2.92E+03[c]	3E-03
Cobalt	2.815	3.0E+02[d]	9E-03
Copper	8.77	4.54E+04	2E-04
Cyanide (total)	0.4	2.27E+04	2E-05
Di-n-butylphthalate	0.327	6.84E+04	5E-06
Fluoranthene	0.0834	2.44E+04	3E-06
Fluorene	0.041	2.44E+04	2E-06
Iron	9526	7.95E+05	1E-02
Isopropyltoluene[4-]	0.00038	1.49E+04[e]	3E-08
Lead	20.64	8.00E+02	3E-02
Mercury	0.383	3.1E+02[d]	1E-03
Methylnaphthalene[2-]	0.029	4.1E+03[d]	7E-06
Nickel	5.439	2.27E+04	2E-04
Nitrate	1.856	1.82E+06	1E-06
Perchlorate	0.000745	7.95E+02	9E-07
Phenanthrene	0.0637	2.05E+04	3E-06
Pyrene	0.102	1.83E+04	6E-06
Selenium	0.976	5.68E+03	2E-04
Toluene	0.00101	5.79E+04	2E-08
Uranium	3.023	3.41E+03	9E-04
Zinc	65.97	3.41E+05	2E-04
		Hazard Index	**0.06**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-117
Industrial Carcinogenic Screening Evaluation for SWMU 21-024(g)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Arsenic	3.377	1.77E+01	2E-06
Benzo(a)anthracene	0.069	2.34E+01	3E-08
Benzo(a)pyrene	0.222	2.34E+00	1E-06
Benzo(b)fluoranthene	0.105	2.34E+01	5E-08
Benzo(k)fluoranthene	0.0446	2.34E+02	2E-09
Bis(2-ethylhexyl)phthalate	0.11	1.37E+03	8E-10
Chrysene	0.0578	2.34E+03	3E-10
Indeno(1,2,3-cd)pyrene	0.104	2.34E+01	4E-08
Naphthalene	0.0435	2.52E+02	2E-09
Total Excess Cancer Risk			**3E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-118
Industrial Radionuclide Screening Evaluation for SWMU 21-024(g)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0601	180	0.005
Cesium-137	0.848	23	0.6
Plutonium-238	0.0247	240	0.002
Plutonium-239/240	1.814	210	0.1
Tritium	0.0412	4.4E+05	1E-06
Uranium-234	1.538	1500	0.02
Uranium-235/236	0.0939	87	0.02
Uranium-238	1.497	430	0.05
Total Dose			**0.8**

* SALs from LANL (2009, 107655).

Table H-4.2-119
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(g)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.3E-06	0.01	1.3E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	5.46E-07	0.01	5.5E-09
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	8.79E-06	0.0003	2.6E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	7.14E-07	0.0003	2.1E-10
2,3,7,8-TCDD Equivalent			2.1E-08

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-120
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0369	1.86E+04	2.0E-06
Acenaphthylene	0.0265	6.68E+03[b]	4.0E-06
Acetone	0.00997	2.63E+05	3.8E-08
Aluminum	5822	4.07E+04	1.4E-01
Anthracene	0.0434	6.68E+04	6.5E-07
Aroclor-1254	0.0025	4.36E+00	5.7E-04
Arsenic	3.11	6.54E+01	4.8E-02
Barium	53.89	4.35E+03	1.2E-02
Benzo(g,h,i)perylene	2.49	6.68E+03[b]	3.7E-04
Benzoic acid	0.224	9.52E+05[c]	2.4E-07
Bis(2-ethylhexyl)phthalate	0.115	4.76E+03	2.4E-05
Cadmium	0.364	3.09E+02	1.2E-03
Chromium	12.46	4.49E+02[d]	2.8E-02
Cobalt	1.928	3.49E+01[c]	5.5E-02
Copper	5.709	1.24E+04	4.6E-04
Cyanide (total)	0.225	6.19E+03	3.6E-05
Di-n-butylphthalate	0.327	2.38E+04	1.4E-05
Fluoranthene	0.0891	8.91E+03	1.0E-05
Fluorene	0.041	8.91E+03	4.6E-06
Iron	8653	2.17E+05	4.0E-02
Isopropyltoluene[4-]	0.00205	1.03E+04[e]	2.0E-07
Lead	17.06	8.00E+02	2.1E-02
Mercury	0.153	9.29E+01[c]	1.6E-03
Methylnaphthalene[2-]	0.029	1.24E+03[c]	2.3E-05
Naphthalene	0.0435	7.02E+02	6.2E-05
Nickel	4.754	6.19E+03	7.7E-04
Nitrate	1.313	4.96E+05	2.6E-06
Perchlorate	0.00248	2.17E+02	1.1E-05
Phenanthrene	0.0434	7.15E+03	6.1E-06
Pyrene	0.0824	6.68E+03	1.2E-05
Selenium	0.967	1.55E+03	6.2E-04
2,3,7,8-TCDD equivalent	2.1E-08	2.84E-04	7.4E-05
Toluene	0.00095	2.11E+04	4.5E-08
Uranium	2.706	9.29E+02	2.9E-03
Xylene[1,3-]+xylene[1,4-]	3.19E-04	3.13E+03[f]	1.0E-07
Zinc	61.32	9.29E+04	6.6E-04
		Hazard Index	**0.4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] Chromium VI SSL used.
[e] Isopropylbenzene SSL used as surrogate based on structural similarity.
[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-121
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0022	7.58E+01	3E-10
Benzo(a)anthracene	0.0915	2.13E+02	4E-09
Benzo(a)pyrene	0.105	2.13E+01	5E-08
Benzo(b)fluoranthene	0.163	2.13E+02	8E-09
Benzo(k)fluoranthene	0.0446	2.06E+03	2E-10
Chloroform	2.33E-04	6.71E+02	4E-12
Chrysene	0.0534	2.06E+04	3E-11
Ethylbenzene	2.65E-04	6.63E+03	4E-13
Indeno(1,2,3-cd)pyrene	1.7	2.13E+02	8E-08
Total Excess Cancer Risk			**1E-07**

* SSLs from NMED (2009, 108070).

Table H-4.2-122
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0514	34	0.02
Cesium-137	0.327	18	0.3
Plutonium-238	0.0241	40	0.009
Plutonium-239/240	0.867	36	0.4
Tritium	0.0331	3.2E+05	2E-06
Uranium-234	1.345	220	0.09
Uranium-235/236	0.0871	43	0.03
Uranium-238	1.342	160	0.1
Total Dose			**0.9**

* SALs from LANL (2009, 107655).

Table H-4.2-123
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0369	3.44E+03	1E-05
Acenaphthylene	0.0265	1.72E+03[b]	2E-05
Acetone	0.00997	6.75E+04	2E-07
Aluminum	5822	7.81E+04	8E-02
Anthracene	0.0434	1.72E+04	3E-06
Aroclor-1254	0.0025	1.12E+00	2E-03
Barium	53.89	1.56E+04	4E-03
Benzo(g,h,i)perylene	2.49	1.72E+03[b]	2E-03
Benzoic acid	0.224	2.4E+05[c]	9E-07
Cadmium	0.364	7.79E+01	5E-03
Chromium	12.46	2.19E+02[d]	6E-02
Cobalt	1.928	2.3E+01[c]	8E-02
Copper	5.709	3.13E+03	2E-03
Cyanide (total)	0.225	1.56E+03	1E-04
Di-n-butylphthalate	0.327	6.11E+03	5E-05
Fluoranthene	0.0891	2.29E+03	4E-05
Fluorene	0.041	2.29E+03	2E-05
Iron	8653	5.48E+04	2E-01
Isopropyltoluene[4-]	0.00205	3.21E+03[e]	6E-07
Lead	17.06	4.00E+02	4E-02
Mercury	0.153	2.3E+01[c]	7E-03
Methylnaphthalene[2-]	0.029	3.1E+02[c]	1E-04
Nickel	4.754	1.56E+03	3E-03
Nitrate	1.313	1.25E+05	1E-05
Perchlorate	0.00248	5.48E+01	5E-05
Phenanthrene	0.0434	1.83E+03	2E-05
Pyrene	0.0824	1.72E+03	5E-05
Selenium	0.967	3.91E+02	3E-03
Toluene	0.00094573	5.57E+03	2E-07
Uranium	2.706	2.35E+02	1E-02
Xylene[1,3-]+xylene[1,4-]	3.19E-04	1.09E+03[f]	3E-07
Zinc	61.32	2.35E+04	3E-03
		Hazard Index	**0.5**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-124
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0022	2.22E+00	1E-08
Arsenic	3.106	3.90E+00	8E-06
Benzo(a)anthracene	0.0915	6.21E+00	2E-07
Benzo(a)pyrene	0.105	6.21E-01	2E-06
Benzo(b)fluoranthene	0.163	6.21E+00	3E-07
Benzo(k)fluoranthene	0.0446	6.21E+01	7E-09
Bis(2-ethylhexyl)phthalate	0.115	3.47E+02	3E-09
Chloroform	2.33E-04	5.72E+00	4E-10
Chrysene	0.0534	6.21E+02	9E-10
Ethylbenzene	2.65E-04	6.97E+01	4E-11
Indeno(1,2,3-cd)pyrene	1.7	6.21E+00	3E-06
Naphthalene	0.0435	4.50E+01	1E-08
2,3,7,8-TCDD equivalent	2.1E-08	4.50E-05	5E-09
		Total Excess Cancer Risk	**1E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-125
Residential Radionuclide
Screening Evaluation for SWMU 21-024(g)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0514	30	0.03
Cesium-137	0.327	5.6	0.9
Plutonium-238	0.0241	37	0.01
Plutonium-239/240	0.867	33	0.4
Tritium	0.0331	750	0.0007
Uranium-234	1.345	170	0.1
Uranium-235/236	0.0871	17	0.08
Uranium-238	1.342	87	0.2
		Total Dose	**2**

* SALs from LANL (2009, 107655).

Table H-4.2-126
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Anthracene	0.0108	1.83E+05	6E-08
Antimony	0.15	4.54E+02	3E-04
Barium	76.5	2.24E+05	3E-04
Cadmium	0.364	1.12E+03	3E-04
Chromium	7.824	2.92E+03[b]	3E-03
Copper	17.7	4.54E+04	4E-04
Cyanide (total)	0.4	2.27E+04	2E-05
Fluoranthene	0.0308	2.44E+04	1E-06
Lead	18.42	8.00E+02	2E-02
Mercury	0.166	3.1E+02[c]	5E-04
Molybdenum	0.72	5.68E+03	1E-04
Nickel	5.901	2.27E+04	3E-04
Nitrate	1.404	1.82E+06	8E-07
Perchlorate	0.00258	7.95E+02	3E-06
Phenanthrene	0.0332	2.05E+04	2E-06
Pyrene	0.035	1.83E+04	2E-06
Selenium	1.64	5.68E+03	3E-04
Silver	0.144	5.68E+03	3E-05
Vanadium	15.24	5.68E+03	3E-03
Zinc	162.8	3.41E+05	5E-04
		Hazard Index	**0.03**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Chromium VI SSL used.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-127
Industrial Carcinogenic Screening Evaluation for SWMU 21-024(h)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Arsenic	2.855	1.77E+01	2E-06
Benzo(b)fluoranthene	0.157	2.34E+01	7E-08
Benzo(k)fluoranthene	0.0458	2.34E+02	2E-09
Bis(2-ethylhexyl)phthalate	1.4	1.37E+03	1E-08
Chrysene	0.0179	2.34E+03	8E-11
		Total Excess Cancer Risk	**2E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-128
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.156	180	0.01
Cesium-137	0.487	23	0.3
Plutonium-238	0.0404	240	0.003
Plutonium-239/240	2.355	210	0.2
Tritium	0.381	4.4E+05	1E-05
Uranium-234	1.396	1500	0.01
Uranium-235/236	0.0926	87	0.02
Uranium-238	1.229	430	0.04
		Total Dose	**0.6**

* SALs from LANL (2009, 107655).

Table H-4.2-129
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(h)

COPC	EPC (mg/kg0	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.8E-06	0.01	1.8E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	6.54E-07	0.01	6.5E-09
Hexachlorodibenzofuran[1,2,3,6,7,8-]	6.33E-08	0.1	6.3E-09
Hexachlorodibenzofuran[2,3,4,6,7,8-]	8.77E-08	0.1	8.8E-09
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	1.23E-05	0.0003	3.7E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	9.73E-07	0.0003	2.9E-10
		2,3,7,8-TCDD Equivalent	**4.4E-08**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-130
Construction Worker Noncarcinogenic Screening Evaluation for SWMU 21-024(h)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0247	1.86E+04	1E-06
Acenaphthylene	0.0135	6.68E+03[b]	2E-06
Acetone	0.00497	2.63E+05	2E-08
Anthracene	0.0282	6.68E+04	4E-07
Antimony	0.915	1.24E+02	7E-03
Arsenic	3.212	6.54E+01	5E-02
Barium	51.79	4.35E+03	1E-02
Benzo(g,h,i)perylene	0.135	6.68E+03[b]	2E-05
Benzoic acid	0.613	9.52E+05[c]	6E-07
Bis(2-ethylhexyl)phthalate	0.179	4.76E+03	4E-05
Cadmium	0.535	3.09E+02	2E-03
Chromium	14.71	4.49E+02[d]	3E-02
Copper	94.26	1.24E+04	8E-03
Cyanide (total)	0.39	6.19E+03	6E-05
Di-n-butylphthalate	0.222	2.38E+04	9E-06
Fluoranthene	0.0437	8.91E+03	5E-06
Fluorene	0.0152	8.91E+03	2E-06
Isopropyltoluene[4-]	0.000586	1.03E+04[e]	6E-08
Lead	54.53	8.00E+02	7E-02
Mercury	5.065	9.29E+01[c]	5E-02
Molybdenum	0.72	1.55E+03	5E-04
Naphthalene	0.015	7.02E+02	2E-05
Nickel	4.458	6.19E+03	7E-04
Nitrate	1.463	4.96E+05	3E-06
Perchlorate	0.00169	2.17E+02	8E-06
Phenanthrene	0.0336	7.15E+03	5E-06
Pyrene	0.0459	6.68E+03	7E-06
Selenium	1.19	1.55E+03	8E-04
Silver	2.133	1.55E+03	2E-03
2,3,7,8-TCDD equivalent	4.4E-08	2.84E-04	2E-04
Toluene	0.0007639	2.11E+04	4E-08
Trimethylbenzene[1,2,4-]	0.00035	6.88E+02[c]	5E-07
Trimethylbenzene[1,3,5-]	0.000252	3.10E+03[c]	8E-08
Vanadium	10.7	1.55E+03	7E-03
Xylene[1,2-]	0.000278	2.75E+04	1E-08
Xylene[1,3-]+xylene[1,4-]	0.000547	3.13E+03[f]	2E-07
Zinc	98.89	9.29E+04	1E-03
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] Chromium VI SSL used.
[e] Isopropylbenzene SSL used as surrogate based on structural similarity.
[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-131
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.0353	2.13E+02	2E-09
Benzo(a)pyrene	0.125	2.13E+01	6E-08
Benzo(b)fluoranthene	0.132	2.13E+02	6E-09
Benzo(k)fluoranthene	0.0458	2.06E+03	2E-10
Chloroform	0.000246	6.71E+02	4E-12
Chrysene	0.0323	2.06E+04	2E-11
Dichlorobenzene[1,4-]	0.000396	3.78E+03	1E-12
Indeno(1,2,3-cd)pyrene	0.104	2.13E+02	5E-09
Tetrachloroethene	0.000249	3.38E+02	7E-12
Total Excess Cancer Risk			**7E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-132
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0773	34	0.03
Cesium-137	0.206	18	0.2
Plutonium-238	0.0367	40	0.01
Plutonium-239/240	1.353	36	0.6
Tritium	2.299	3.2E+05	0.0001
Uranium-234	1.294	220	0.09
Uranium-235/236	0.0838	43	0.03
Uranium-238	1.219	160	0.1
Total Dose			**1**

* SALs from LANL (2009, 107655).

Table H-4.2-133
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0247	3.44E+03	7E-06
Acenaphthylene	0.0135	1.72E+03[b]	8E-06
Acetone	0.00497	6.75E+04	7E-08
Anthracene	0.0282	1.72E+04	2E-06
Antimony	0.915	3.13E+01	3E-02
Barium	51.79	1.56E+04	3E-03
Benzo(g,h,i)perylene	0.135	1.72E+03[b]	8E-05
Benzoic acid	0.613	2.4E+05[c]	3E-06
Cadmium	0.535	7.79E+01	7E-03
Chromium	14.71	2.19E+02[d]	7E-02
Copper	94.26	3.13E+03	3E-02
Cyanide (total)	0.39	1.56E+03	2E-04
Di-n-butylphthalate	0.222	6.11E+03	4E-05
Fluoranthene	0.0437	2.29E+03	2E-05
Fluorene	0.0152	2.29E+03	7E-06
Isopropyltoluene[4-]	0.000586	3.21E+03[e]	2E-07
Lead	54.53	4.00E+02	1E-01
Mercury	5.065	2.3E+01[c]	2E-01
Molybdenum	0.72	3.91E+02	2E-03
Nickel	4.458	1.56E+03	3E-03
Nitrate	1.463	1.25E+05	1E-05
Perchlorate	0.00169	5.48E+01	3E-05
Phenanthrene	0.0336	1.83E+03	2E-05
Pyrene	0.0459	1.72E+03	3E-05
Selenium	1.19	3.91E+02	3E-03
Silver	2.133	3.91E+02	5E-03
Toluene	0.0007639	5.57E+03	1E-07
Trimethylbenzene[1,2,4-]	0.00035	6.2E+01[c]	6E-06
Trimethylbenzene[1,3,5-]	0.000252	7.8E+02[c]	3E-07
Vanadium	10.7	3.91E+02	3E-02
Xylene[1,2-]	0.000278	9.55E+03	3E-08
Xylene[1,3-]+xylene[1,4-]	0.000547	1.09E+03[f]	5E-07
Zinc	98.89	2.35E+04	4E-03
		Hazard Index	**0.5**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-134
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Arsenic	3.212	3.90E+00	8E-06
Benzo(a)anthracene	0.0353	6.21E+00	6E-08
Benzo(a)pyrene	0.125	6.21E-01	2E-06
Benzo(b)fluoranthene	0.132	6.21E+00	2E-07
Benzo(k)fluoranthene	0.0458	6.21E+01	7E-09
Bis(2-ethylhexyl)phthalate	0.179	3.47E+02	5E-09
Chloroform	0.000246	5.72E+00	4E-10
Chrysene	0.0323	6.21E+02	5E-10
Dichlorobenzene[1,4-]	0.000396	3.22E+01	1E-10
Indeno(1,2,3-cd)pyrene	0.104	6.21E+00	2E-07
Naphthalene	0.015	4.50E+01	3E-09
2,3,7,8-TCDD equivalent	4.4E-08	4.50E-05	1E-08
Tetrachloroethene	0.000249	6.99E+00	4E-10
Total Excess Cancer Risk			**1E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-135
Residential Radionuclide
Screening Evaluation for SWMU 21-024(h)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0773	30	0.04
Cesium-137	0.206	5.6	0.6
Plutonium-238	0.0367	37	0.01
Plutonium-239/240	1.353	33	0.6
Tritium	2.299	750	0.05
Uranium-234	1.294	170	0.1
Uranium-235/236	0.0838	17	0.07
Uranium-238	1.219	87	0.2
Total Dose			**2**

* SALs from LANL (2009, 107655).

Table H-4.2-136
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.044	3.67E+04	1E-06
Acetone	0.2	8.51E+05	2E-07
Aluminum	9581	1.13E+06	8E-03
Anthracene	0.045	1.83E+05	2E-07
Antimony	2.04	4.54E+02	4E-03
Barium	123.7	2.24E+05	6E-04
Benzoic acid	0.18	2.5E+06[b]	7E-08
Butanone[2-]	0.056	3.69E+05	2E-07
Chromium	14.64	2.92E+03[c]	5E-03
Copper	8.629	4.54E+04	2E-04
Di-n-butylphthalate	0.0432	6.84E+04	6E-07
Fluoranthene	0.57	2.44E+04	2E-05
Lead	50.61	8.00E+02	6E-02
Mercury	5.156	3.1E+02[b]	2E-02
Perchlorate	0.0532	7.95E+02	7E-05
Phenanthrene	0.66	2.05E+04	3E-05
Pyrene	0.52	1.83E+04	3E-05
Selenium	0.493	5.68E+03	9E-05
Toluene	0.0022	5.79E+04	4E-08
Trimethylbenzene[1,2,4-]	0.0024	2.6E+02[b]	9E-06
Zinc	123.9	3.41E+05	4E-04
		Hazard Index	**0.1**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

Table H-4.2-137
Industrial Carcinogenic
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1254	0.256	8.26E+00	3E-07
Aroclor-1260	0.221	8.26E+00	3E-07
Arsenic	4.112	1.77E+01	2E-06
Benzo(a)anthracene	0.082	2.34E+01	4E-08
Benzo(a)pyrene	0.074	2.34E+00	3E-07
Benzo(b)fluoranthene	0.078	2.34E+01	3E-08
Benzo(k)fluoranthene	0.078	2.34E+02	3E-09
Bis(2-ethylhexyl)phthalate	0.055	1.37E+03	4E-10
Chrysene	0.089	2.34E+03	4E-10
		Total Excess Cancer Risk	**3E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-138
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0616	1.80E+02	0.01
Cesium-137	0.311	2.30E+01	0.2
Plutonium-239/240	1.791	2.10E+02	0.1
Thorium-228	1.475	9.00E+00	2.5
Thorium-230	1.069	5.00E+00	3.2
Tritium	0.742	4.40E+05	3E-05
Uranium-234	2.995	1.50E+03	0.03
Uranium-235/236	0.185	8.70E+01	0.03
Uranium-238	1.379	4.30E+02	0.05
		Total Dose	**6**

* SALs from LANL (2009, 107655).

Table H-4.2-139
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.044	1.86E+04	2E-06
Acetone	0.0405	2.63E+05	2E-07
Aluminum	7493	4.07E+04	2E-01
Anthracene	0.045	6.68E+04	7E-07
Antimony	1	1.24E+02	8E-03
Aroclor-1254	0.125	4.36E+00	3E-02
Arsenic	3.325	6.54E+01	5E-02
Barium	92.59	4.35E+03	2E-02
Benzoic acid	0.18	9.52E+05[b]	2E-07
Bis(2-ethylhexyl)phthalate	0.11	4.76E+03	2E-05
Bromomethane	0.0034	6.71E+01	5E-05
Butanone[2-]	0.0119	1.48E+05	8E-08
Chromium	11.93	4.49E+02[c]	3E-02
Copper	7.711	1.24E+04	6E-04
DDT[4,4'-]	0.0028	1.42E+02	2E-05
Di-n-butylphthalate	0.0432	2.38E+04	2E-06
Fluoranthene	0.57	8.91E+03	6E-05
Isopropylbenzene	0.0025	1.03E+04	2E-07
Lead	33.45	8.00E+02	4E-02
Lithium	14.8	6.19E+02[b]	2E-02
Mercury	3.068	9.29E+01[b]	3E-02
Nitrate	2.83	4.96E+05	6E-06
Perchlorate	0.0532	2.17E+02	2E-04
Phenanthrene	0.66	7.15E+03	9E-05
Pyrene	0.52	6.68E+03	8E-05
Selenium	1.253	1.55E+03	8E-04
Strontium	262	1.86E+05	1E-03
Toluene	0.006	2.11E+04	3E-07
Trichlorofluoromethane	0.0018	5.82E+03	3E-07
Trimethylbenzene[1,2,4-]	0.003	6.88E+02[b]	4E-06
Zinc	82.15	9.29E+04	9E-04
		Hazard Index	**0.4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[c] Chromium VI SSL used.

Table H-4.2-140
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.201	7.58E+01	3E-08
Benzo(a)anthracene	0.082	2.13E+02	4E-09
Benzo(a)pyrene	0.074	2.13E+01	3E-08
Benzo(b)fluoranthene	0.078	2.13E+02	4E-09
Benzo(k)fluoranthene	0.078	2.06E+03	4E-10
Chrysene	0.089	2.06E+04	4E-11
Total Excess Cancer Risk			**7E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-141
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0616	3.40E+01	0.03
Cesium-137	0.197	1.80E+01	0.2
Plutonium-239/240	0.419	3.60E+01	0.2
Thorium-228	1.559	6.80E+00	3.4
Thorium-230	1.168	5.00E+00	3.5
Tritium	572.1	3.20E+05	0.03
Uranium-234	1.999	2.20E+02	0.1
Uranium-235/236	0.0751	4.30E+01	0.03
Uranium-238	1.148	1.60E+02	0.1
Total Dose			**8**

* SALs from LANL (2009, 107655).

Table H-4.2-142
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.044	3.44E+03	1E-05
Acetone	0.0405	6.75E+04	6E-07
Aluminum	7493	7.81E+04	1E-01
Anthracene	0.045	1.72E+04	3E-06
Antimony	1	3.13E+01	3E-02
Aroclor-1254	0.125	1.12E+00	1E-01
Barium	92.59	1.56E+04	6E-03
Benzoic acid	0.18	2.4E+05[b]	8E-07
Bromomethane	0.0034	2.23E+01	2E-04
Butanone[2-]	0.0119	3.96E+04	3E-07
Chromium	11.93	2.19E+02[c]	5E-02
Copper	7.711	3.13E+03	2E-03
Di-n-butylphthalate	0.0432	6.11E+03	7E-06
Fluoranthene	0.57	2.29E+03	2E-04
Isopropylbenzene	0.0025	3.21E+03	8E-07
Lead	33.45	4.00E+02	8E-02
Lithium	14.8	1.6E+02[b]	9E-02
Mercury	3.068	2.3E+01[b]	1E-01
Nitrate	2.83	1.25E+05	2E-05
Perchlorate	0.0532	5.48E+01	1E-03
Phenanthrene	0.66	1.83E+03	4E-04
Pyrene	0.52	1.72E+03	3E-04
Selenium	1.253	3.91E+02	3E-03
Strontium	262	4.69E+04	6E-03
Toluene	0.006	5.57E+03	1E-06
Trichlorofluoromethane	0.0018	2.01E+03	9E-07
Trimethylbenzene[1,2,4-]	0.003	6.20E+01[b]	5E-05
Zinc	82.15	2.35E+04	3E-03
		Hazard Index	**0.6**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] Chromium VI SSL used.

Table H-4.2-143
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.201	2.22E+00	9E-07
Arsenic	3.325	3.90E+00	9E-06
Benzo(a)anthracene	0.082	6.21E+00	1E-07
Benzo(a)pyrene	0.074	6.21E-01	1E-06
Benzo(b)fluoranthene	0.078	6.21E+00	1E-07
Benzo(k)fluoranthene	0.078	6.21E+01	1E-08
Bis(2-ethylhexyl)phthalate	0.11	3.47E+02	3E-09
Chrysene	0.089	6.21E+02	1E-09
DDT[4,4'-]	0.0028	1.72E+01	2E-09
Total Excess Cancer Risk			**1E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-144
Residential Radionuclide
Screening Evaluation for SWMU 21-024(i)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0616	30	0.03
Cesium-137	0.197	5.6	0.5
Plutonium-239/240	0.419	33	0.2
Thorium-228	1.559	2.3	10.2
Thorium-230	1.168	5	3.5
Tritium	572.1	750	11.4
Uranium-234	1.999	170	0.2
Uranium-235/236	0.0751	17	0.07
Uranium-238	1.148	87	0.2
Total Dose			**26**

* SALs from LANL (2009, 107655).

Table H-4.2-145
Industrial Noncarcinogenic Screening Evaluation for SWMU 21-024(j)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0479	3.67E+04	1.3E-06
Anthracene	0.0738	1.83E+05	4.0E-07
Barium	65.43	2.24E+05	2.9E-04
Benzo(g,h,i)perylene	0.109	1.83E+04[b]	6.0E-06
Chromium	4.571	2.92E+03[c]	1.6E-03
Copper	7.436	4.54E+04	1.6E-04
Fluoranthene	0.328	2.44E+04	1.3E-05
Fluorene	0.0363	2.44E+04	1.5E-06
Lead	20.23	8.00E+02	2.5E-02
Manganese	292.9	1.45E+05	2.0E-03
Nickel	4.777	2.27E+04	2.1E-04
Nitrate	1.758	1.82E+06	9.7E-07
Perchlorate	0.000861	7.95E+02	1.1E-06
Phenanthrene	0.246	2.05E+04	1.2E-05
Pyrene	0.297	1.83E+04	1.6E-05
Selenium	0.831	5.68E+03	1.5E-04
Zinc	685	3.41E+05	2.0E-03
		Hazard Index	**0.03**

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

Table H-4.2-146
Industrial Carcinogenic Screening Evaluation for SWMU 21-024(j)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1254	0.0368	8.26E+00	4.5E-08
Aroclor-1260	0.0238	8.26E+00	2.9E-08
Arsenic	2.334	1.77E+01	1.3E-06
Benzo(a)anthracene	0.15	2.34E+01	6.4E-08
Benzo(a)pyrene	0.0166	2.34E+00	7.1E-08
Benzo(b)fluoranthene	0.215	2.34E+01	9.2E-08
Chrysene	0.0691	2.34E+03	3.0E-10
Indeno(1,2,3-cd)pyrene	0.0867	2.34E+01	3.7E-08
Naphthalene	0.0102	2.52E+02	4.0E-10
		Total Excess Cancer Risk	**2E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-147
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(j)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0906	180	0.008
Cesium-137	0.756	23	0.5
Plutonium-239/240	0.222	210	0.02
Tritium	0.0333	4.4E+05	1E-06
Uranium-234	3.86	1500	0.04
Uranium-235/236	0.0973	87	0.02
		Total Dose	**0.6**

* SALs from LANL (2009, 107655).

Table H-4.2-148
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(j)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.08E-05	0.01	1.1E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	4.43E-06	0.01	4.4E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	6E-07	0.1	6.0E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	4.26E-07	0.1	4.3E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	8.86E-07	0.1	8.9E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.07E-07	0.1	2.1E-08
Hexachlorodibenzofuran[1,2,3,7,8,9-]	1.75E-07	0.1	1.8E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.29E-07	0.1	2.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	8.51E-05	0.0003	2.6E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	1.03E-05	0.0003	3.1E-09
Pentachlorodibenzodioxin[1,2,3,7,8-]	1.59E-07	1	1.6E-07
Pentachlorodibenzofuran[1,2,3,7,8-]	4.63E-07	0.03	1.4E-08
Pentachlorodibenzofuran[2,3,4,7,8-]	3.5E-07	0.3	1.1E-07
Tetrachlorodibenzofuran[2,3,7,8-]	4.76E-07	0.1	4.8E-08
		2,3,7,8-TCDD Equivalent	**7.7E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-149
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-024(j)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0479	1.86E+04	3E-06
Acetone	0.0146	2.63E+05	6E-08
Anthracene	0.0738	6.68E+04	1E-06
Aroclor-1254	0.562	4.36E+00	1E-01
Arsenic	3.262	6.54E+01	5E-02
Barium	68.04	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.109	6.68E+03[b]	2E-05
Bis(2-ethylhexyl)phthalate	0.0878	4.76E+03	2E-05
Chromium	6.752	4.49E+02[c]	2E-02
Copper	5.321	1.24E+04	4E-04
Fluoranthene	0.064	8.91E+03	7E-06
Fluorene	0.0363	8.91E+03	4E-06
Isopropyltoluene[4-]	0.00762	1.03E+04[d]	7E-07
Lead	16.72	8.00E+02	2E-02
Manganese	328.2	4.63E+02	7E-01
Methylene chloride	0.00352	1.06E+04	3E-07
Naphthalene	0.0122	7.02E+02	2E-05
Nickel	5.183	6.19E+03	8E-04
Nitrate	1.681	4.96E+05	3E-06
Perchlorate	0.00215	2.17E+02	1E-05
Phenanthrene	0.0485	7.15E+03	7E-06
Pyrene	0.0564	6.68E+03	8E-06
Selenium	6.909	1.55E+03	4E-03
2,3,7,8-TCDD equivalent	7.7E-07	2.84E-04	3E-03
Toluene	0.00177	2.11E+04	8E-08
Zinc	157.7	9.29E+04	2E-03
		Hazard Index	**0.9**

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-150
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(j)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0755	7.58E+01	1E-08
Benzo(a)anthracene	0.15	2.13E+02	7E-09
Benzo(a)pyrene	0.102	2.13E+01	5E-08
Benzo(b)fluoranthene	0.0461	2.13E+02	2E-09
Chloroform	0.000281	6.71E+02	4E-12
Chrysene	0.0329	2.06E+04	2E-11
Indeno(1,2,3-cd)pyrene	0.0867	2.13E+02	4E-09
Total Excess Cancer Risk			**7E-08**

* SSLs from NMED (2009, 108070).

Table H-4.2-151
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-024(j)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0637	34	0.03
Cesium-137	0.288	18	0.24
Plutonium-239/240	0.0845	36	0.04
Tritium	0.153	3.2E+05	7E-06
Uranium-234	6.239	220	0.43
Uranium-235/236	0.0973	43	0.03
Total Dose			**0.8**

* SALs from LANL (2009, 107655).

Table H-4.2-152
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(j)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0479	3.44E+03	1E-05
Acetone	0.0146	6.75E+04	2E-07
Anthracene	0.0738	1.72E+04	4E-06
Aroclor-1254	0.562	1.12E+00	5E-01
Barium	68.04	1.56E+04	4E-03
Benzo(g,h,i)perylene	0.109	1.72E+03[b]	6E-05
Chromium	6.752	2.19E+02[c]	3E-02
Copper	5.321	3.13E+03	2E-03
Fluoranthene	0.064	2.29E+03	3E-05
Fluorene	0.0363	2.29E+03	2E-05
Isopropyltoluene[4-]	0.00762	3.21E+03[d]	2E-06
Lead	16.72	4.00E+02	4E-02
Manganese	328.2	1.07E+04	3E-02
Nickel	5.183	1.56E+03	3E-03
Nitrate	1.681	1.25E+05	1E-05
Perchlorate	0.00215	5.48E+01	4E-05
Phenanthrene	0.0485	1.83E+03	3E-05
Pyrene	0.0564	1.72E+03	3E-05
Selenium	6.909	3.91E+02	2E-02
Toluene	0.00177	5.57E+03	3E-07
Zinc	157.7	2.35E+04	7E-03
		Hazard Index	**0.6**

[a] SSLs from NMED (2009, 108070).

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-153
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(j)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0755	2.22E+00	3E-07
Arsenic	3.262	3.90E+00	8E-06
Benzo(a)anthracene	0.15	6.21E+00	2E-07
Benzo(a)pyrene	0.102	6.21E-01	2E-06
Benzo(b)fluoranthene	0.0461	6.21E+00	7E-08
Bis(2-ethylhexyl)phthalate	0.0878	3.47E+02	3E-09
Chloroform	0.000281	5.72E+00	5E-10
Chrysene	0.0329	6.21E+02	5E-10
Indeno(1,2,3-cd)pyrene	0.0867	6.21E+00	1E-07
Methylene chloride	0.00352	1.99E+02	2E-10
Naphthalene	0.0122	4.50E+01	3E-09
2,3,7,8-TCDD equivalent	7.7E-07	4.50E-05	2E-07
Total Excess Cancer Risk			**1E-05**

* SSLs from NMED (2009, 108070).

Table H-4.2-154
Residential Radionuclide
Screening Evaluation for SWMU 21-024(j)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0637	30	0.03
Cesium-137	0.288	5.6	0.8
Plutonium-239/240	0.0845	33	0.04
Tritium	0.153	750	0.003
Uranium-234	6.239	170	0.6
Uranium-235/236	0.0973	17	0.09
Total Dose			**2**

* SALs from LANL (2009, 107655).

Table H-4.2-155
Industrial Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0488	3.67E+04	1E-06
Aluminum	9743	1.13E+06	9E-03
Anthracene	0.0783	1.83E+05	4E-07
Barium	102.6	2.24E+05	5E-04
Benzo(g,h,i)perylene	0.147	1.83E+04[b]	8E-06
Cadmium	0.449	1.12E+03	4E-04
Chromium	9.98	2.92E+03[c]	3E-03
Cobalt	3.616	3.0E+02[d]	1E-02
Copper	10.94	4.54E+04	2E-04
Fluoranthene	0.833	2.44E+04	3E-05
Fluorene	0.0419	2.44E+04	2E-06
Lead	22.45	8.00E+02	3E-02
Lithium	12.27	2.0E+03[d]	6E-03
Mercury	0.0487	3.1E+02[d]	2E-04
Nitrate	1.811	1.82E+06	1E-06
Perchlorate	0.00154	7.95E+02	2E-06
Phenanthrene	0.504	2.05E+04	2E-05
Pyrene	0.714	1.83E+04	4E-05
Selenium	1.022	5.68E+03	2E-04
Zinc	60.32	3.41E+05	2E-04
		Hazard Index	**0.06**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-156
Industrial Carcinogenic
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.234	2.34E+01	1E-07
Benzo(a)pyrene	0.199	2.34E+00	9E-07
Benzo(b)fluoranthene	0.385	2.34E+01	2E-07
Benzo(k)fluoranthene	0.12	2.34E+02	5E-09
Bis(2-ethylhexyl)phthalate	0.25	1.37E+03	2E-09
Chrysene	0.252	2.34E+03	1E-09
Indeno(1,2,3-cd)pyrene	0.143	2.34E+01	6E-08
Methylene chloride	0.00411	1.09E+03	4E-11
Total Excess Cancer Risk			**1E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-157
Industrial Radionuclide
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.197	180	0.02
Cesium-137	0.324	23	0.21
Plutonium-238	2.913	240	0.2
Plutonium-239/240	2.246	210	0.16
Tritium	0.0764	4.4E+05	3E-06
Uranium-234	2.403	1500	0.02
Uranium-235/236	0.122	87	0.02
Total Dose			**0.6**

* SALs from LANL (2009, 107655).

Table H-4.2-158
Construction Worker Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.155	1.86E+04	8.3E-06
Acenaphthylene	0.0122	6.68E+03[b]	1.8E-06
Acetone	0.35	2.63E+05	1.3E-06
Aluminum	10187	4.07E+04	2.5E-01
Anthracene	0.468	6.68E+04	7.0E-06
Barium	113.5	4.35E+03	2.6E-02
Benzo(g,h,i)perylene	0.287	6.68E+03[b]	4.3E-05
Bis(2-ethylhexyl)phthalate	0.25	4.76E+03	5.3E-05
Cadmium	0.315	3.09E+02	1.0E-03
Chromium	10.36	4.49E+02[c]	2.3E-02
Cobalt	3.674	3.49E+01[d]	1.1E-01
Copper	9.917	1.24E+04	8.0E-04
Dibenzofuran	0.224	2.38E+02[d]	9.4E-04
Fluoranthene	2.527	8.91E+03	2.8E-04
Fluorene	0.135	8.91E+03	1.5E-05
Isopropyltoluene[4-]	0.000463	1.03E+04[e]	4.5E-08
Lead	147.6	8.00E+02	1.8E-01
Lithium	11.2	6.19E+02[d]	1.8E-02
Mercury	0.0797	9.29E+01[d]	8.6E-04
Methylene chloride	0.00411	1.06E+04	3.9E-07
Methylnaphthalene[2-]	0.0444	1.24E+03[d]	3.6E-05
Naphthalene	0.112	7.02E+02	1.6E-04
Nitrate	1.494	4.96E+05	3.0E-06
Perchlorate	0.00168	2.17E+02	7.7E-06
Phenanthrene	2.023	7.15E+03	2.8E-04
Pyrene	2.013	6.68E+03	3.0E-04
Selenium	1.094	1.55E+03	7.1E-04
Toluene	0.00128	2.11E+04	6.1E-08
Xylene[1,3-]+xylene[1,4-]	0.000381	3.13E+03[f]	1.2E-07
Zinc	150.6	9.29E+04	1.6E-03
		Hazard Index	**0.6**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-159
Construction Worker Carcinogenic
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.98	2.13E+02	5E-08
Benzo(a)pyrene	0.673	2.13E+01	3E-07
Benzo(b)fluoranthene	1.314	2.13E+02	6E-08
Benzo(k)fluoranthene	0.234	2.06E+03	1E-09
Carbazole	0.12	1.08E+04[b]	1E-10
Chloroform	0.000215	6.71E+02	3E-12
Chrysene	0.802	2.06E+04	4E-10
Dichlorobenzene[1,4-]	0.000316	3.78E+03	8E-13
Indeno(1,2,3-cd)pyrene	0.399	2.13E+02	2E-08
Total Excess Cancer Risk			**4E-07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2007, 099314) and equation and parameters from NMED (2009, 108070).

Table H-4.2-160
Construction Worker Radionuclide
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.478	34	0.2
Cesium-137	0.165	18	0.1
Plutonium-238	0.543	40	0.2
Plutonium-239/240	14.19	36	6
Tritium	0.296	3.2E+05	1E-05
Uranium-234	1.108	220	0.08
Uranium-235/236	0.0905	43	0.03
Total Dose			**7**

* SALs from LANL (2009, 107655).

Table H-4.2-161
Residential Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.155	3.44E+03	4.5E-05
Acenaphthylene	0.0122	1.72E+03[b]	7.1E-06
Acetone	0.35	6.75E+04	5.2E-06
Aluminum	10187	7.81E+04	1.3E-01
Anthracene	0.468	1.72E+04	2.7E-05
Barium	113.5	1.56E+04	7.3E-03
Benzo(g,h,i)perylene	0.287	1.72E+03[b]	1.7E-04
Cadmium	0.315	7.79E+01	4.0E-03
Chromium	10.36	2.19E+02[c]	4.7E-02
Cobalt	3.674	2.3E+01[d]	1.6E-01
Copper	9.917	3.13E+03	3.2E-03
Dibenzofuran	0.224	7.8E+01[d]	2.9E-03
Fluoranthene	2.527	2.29E+03	1.1E-03
Fluorene	0.135	2.29E+03	5.9E-05
Isopropyltoluene[4-]	0.000463	3.21E+03[e]	1.4E-07
Lead	147.6	4.00E+02	3.7E-01
Lithium	11.2	1.6E+02[d]	7.0E-02
Mercury	0.0797	2.3E+01[d]	3.5E-03
Methylnaphthalene[2-]	0.0444	3.1E+02[d]	1.4E-04
Nitrate	1.494	1.25E+05	1.2E-05
Perchlorate	0.00168	5.48E+01	3.1E-05
Phenanthrene	2.023	1.83E+03	1.1E-03
Pyrene	2.013	1.72E+03	1.2E-03
Selenium	1.094	3.91E+02	2.8E-03
Toluene	0.00128	5.57E+03	2.3E-07
Xylene[1,3-]+xylene[1,4-]	0.000381	1.09E+03[f]	3.5E-07
Zinc	150.6	2.35E+04	6.4E-03
		Hazard Index	**0.8**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-162
Residential Carcinogenic
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.98	6.21E+00	1.6E-06
Benzo(a)pyrene	0.673	6.21E-01	1.1E-05
Benzo(b)fluoranthene	1.314	6.21E+00	2.1E-06
Benzo(k)fluoranthene	0.234	6.21E+01	3.8E-08
Bis(2-ethylhexyl)phthalate	0.25	3.47E+02	7.2E-09
Carbazole	0.12	2.4E+02[b]	5.0E-09
Chloroform	0.000215	5.72E+00	3.8E-10
Chrysene	0.802	6.21E+02	1.3E-08
Dichlorobenzene[1,4-]	0.000316	3.22E+01	9.8E-11
Indeno(1,2,3-cd)pyrene	0.399	6.21E+00	6.4E-07
Methylene chloride	0.00411	1.99E+02	2.1E-10
Naphthalene	0.112	4.50E+01	2.5E-08
		Total Excess Cancer Risk	**2E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA Region 6 SSL (EPA 2007, 099314).

Table H-4.2-163
Residential Radionuclide
Screening Evaluation for Consolidated Unit 21-024(l)-99

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.478	30	0.24
Cesium-137	0.165	5.6	0.44
Plutonium-238	0.543	37	0.22
Plutonium-239/240	14.19	33	6.45
Tritium	0.296	750	0.006
Uranium-234	1.108	170	0.1
Uranium-235/236	0.0905	17	0.08
		Total Dose	**8**

* SALs from LANL (2009, 107655).

Table H-4.2-164
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-024(o)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0877	3.67E+04	2.4E-06
Aluminum	11130	1.13E+06	9.8E-03
Anthracene	0.0988	1.83E+05	5.4E-07
Benzo(g,h,i)perylene	0.237	1.83E+04[b]	1.3E-05
Benzoic acid	0.589	2.5E+06[c]	2.4E-07
Chromium	9.287	2.92E+03[d]	3.2E-03
Cyanide (total)	0.445	2.27E+04	2.0E-05
Fluoranthene	0.507	2.44E+04	2.1E-05
Fluorene	0.0869	2.44E+04	3.6E-06
Lead	32.53	8.00E+02	4.1E-02
Methylnaphthalene[2-]	0.052	4.1E+03[c]	1.3E-05
Nitrate	26.85	1.82E+06	1.5E-05
Perchlorate	0.00107	7.95E+02	1.3E-06
Phenanthrene	0.424	2.05E+04	2.1E-05
Pyrene	0.529	1.83E+04	2.9E-05
Uranium	3.08	3.41E+03	9.0E-04
Zinc	107.9	3.41E+05	3.2E-04
		Hazard Index	**0.06**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

Table H-4.2-165
Industrial Carcinogenic Screening Evaluation for SWMU 21-024(o)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.269	2.34E+01	1E-07
Benzo(a)pyrene	0.281	2.34E+00	1E-06
Benzo(b)fluoranthene	0.601	2.34E+01	3E-07
Benzo(k)fluoranthene	0.775	2.34E+02	3E-08
Bis(2-ethylhexyl)phthalate	0.119	1.37E+03	9E-10
Chrysene	0.274	2.34E+03	1E-09
Hexachlorobenzene	0.0892	1.20E+01	7E-08
Naphthalene	0.104	2.52E+02	4E-09
		Total Excess Cancer Risk	**2E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-166
Industrial Radionuclide
Screening Evaluation for SWMU 21-024(o)

COPC	EPC (pCi/g)	Industrial SAL*(pCi/g)	Dose (mrem/yr)
Americium-241	0.0552	180	5E-03
Cesium-137	0.602	23	4E-01
Plutonium-238	0.0846	240	5E-03
Plutonium-239/240	2.321	210	2E-01
Tritium	0.0214	4.4E+05	7E-07
		Total Dose	**0.6**

* SALs from LANL (2009, 107655).

Table H-4.2-167
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-024(o)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	4.89E-06	0.01	4.9E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.17E-06	0.01	1.2E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	1.96E-07	0.1	2.0E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	1.79E-07	0.1	1.8E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	4.31E-05	0.0003	1.3E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	2.67E-06	0.0003	8.0E-10
Pentachlorodibenzofuran[2,3,4,7,8-]	3.33E-07	0.3	1.0E-07
		2,3,7,8-TCDD Equivalent	**2.1E-07**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-168
Construction Worker
Noncarcinogenic Screening Evaluation for SWMU 21-024(o)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0613	1.86E+04	3E-06
Acetone	0.00268	2.63E+05	1E-08
Aluminum	8786	4.07E+04	2E-01
Anthracene	0.0658	6.68E+04	1E-06
Benzo(g,h,i)perylene	0.237	6.68E+03[b]	4E-05
Benzoic acid	0.589	9.52E+06[c]	6E-07
Bis(2-ethylhexyl)phthalate	0.119	4.76E+03	3E-05
Chromium	9.946	4.49E+02[d]	2E-02
Cyanide (total)	0.274	6.19E+03	4E-05
Fluoranthene	0.282	8.91E+03	3E-05
Fluorene	0.0819	8.91E+03	9E-06
Lead	23.75	8.00E+02	3E-02
Methylnaphthalene[2-]	0.052	1.24E+03[c]	4E-05
Naphthalene	0.104	7.02E+02	1E-04
Nitrate	16.24	4.96E+05	3E-05
Perchlorate	0.00104	2.17E+02	5E-06
Phenanthrene	0.227	7.15E+03	3E-05
Pyrene	0.285	6.68E+03	4E-05
Selenium	0.599	1.55E+03	4E-04
2,3,7,8-TCDD equivalent	2.1E-07	2.84E-04	7E-04
Toluene	0.0034	2.11E+04	2E-07
Uranium	2.487	9.29E+02	3E-03
Zinc	96.77	9.29E+04	1E-03
		Hazard Index	**0.3**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

Table H-4.2-169
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-024(o)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.166	2.13E+02	8E-09
Benzo(a)pyrene	0.264	2.13E+01	1E-07
Benzo(b)fluoranthene	0.579	2.13E+02	3E-08
Benzo(k)fluoranthene	0.775	2.06E+03	4E-09
Chrysene	0.16	2.06E+04	8E-11
Hexachlorobenzene	0.0892	1.03E+02	9E-09
Total Excess Cancer Risk			**2E-07**

* SSLs from NMED (2009, 108070).

Table H-4.2-170
Construction Worker
Radionuclide Screening Evaluation for SWMU 21-024(o)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0465	34	0.02
Cesium-137	0.427	18	0.4
Plutonium-238	0.0846	40	0.03
Plutonium-239/240	1.819	36	0.8
Tritium	0.0138	3.2E+05	7E-07
Total Dose			**1**

* SALs from LANL (2009, 107655).

Table H-4.2-171
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-024(o)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0613	3.44E+03	2E-05
Acetone	0.00268	6.75E+04	4E-08
Aluminum	8786	7.81E+04	1E-01
Anthracene	0.0658	1.72E+04	4E-06
Benzo(g,h,i)perylene	0.237	1.72E+03[b]	1E-04
Benzoic acid	0.589	2.4E+05[c]	2E-06
Chromium	9.946	2.19E+02[d]	5E-02
Cyanide (total)	0.274	1.56E+03	2E-04
Fluoranthene	0.282	2.29E+03	1E-04
Fluorene	0.0819	2.29E+03	4E-05
Lead	23.75	4.00E+02	6E-02
Methylnaphthalene[2-]	0.052	3.1E+02[c]	2E-04
Nitrate	16.24	1.25E+05	1E-04
Perchlorate	0.00104	5.48E+01	2E-05
Phenanthrene	0.227	1.83E+03	1E-04
Pyrene	0.285	1.72E+03	2E-04
Selenium	0.599	3.91E+02	2E-03
Toluene	0.0034	5.57E+03	6E-07
Uranium	2.487	2.35E+02	1E-02
Zinc	96.77	2.35E+04	4E-03
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

Table H-4.2-172
Residential Carcinogenic
Screening Evaluation for SWMU 21-024(o)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Benzo(a)anthracene	0.166	6.21E+00	3E-07
Benzo(a)pyrene	0.264	6.21E-01	4E-06
Benzo(b)fluoranthene	0.579	6.21E+00	9E-07
Benzo(k)fluoranthene	0.775	6.21E+01	1E-07
Bis(2-ethylhexyl)phthalate	0.119	3.47E+02	3E-09
Chrysene	0.16	6.21E+02	3E-09
Hexachlorobenzene	0.0892	3.04E+00	3E-07
Naphthalene	0.104	4.50E+01	2E-08
2,3,7,8-TCDD equivalent	2.1E-07	4.50E-05	5E-08
		Total Excess Cancer Risk	**6E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-173
Residential Radionuclide
Screening Evaluation for SWMU 21-024(o)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.0465	30	0.02
Cesium-137	0.427	5.6	1
Plutonium-238	0.0846	37	0.03
Plutonium-239/240	1.819	33	0.8
Tritium	0.0138	750	3E-04
		Total Dose	**2**

* SALs from LANL (2009, 107655).

Table H-4.2-174
Industrial Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.24	3.67E+04	7E-06
Aluminum	4264	1.13E+06	4E-03
Anthracene	0.65	1.83E+05	4E-06
Antimony	0.317	4.54E+02	7E-04
Barium	290.9	2.24E+05	1E-03
Benzo(g,h,i)perylene	2.1	1.83E+04[b]	1E-04
Benzoic acid	0.501	2.5E+06[c]	2E-07
Cadmium	6.117	1.12E+03	5E-03
Chromium	90.62	2.92E+03[d]	3E-02
Copper	199.3	4.54E+04	4E-03
Cyanide (total)	2.7	2.27E+04	1E-04
Dibenzofuran	0.055	1.0E+03[c]	6E-05
Dimethylphenol[2,4-]	0.063	1.37E+04	5E-06
Di-n-butylphthalate	0.85	6.84E+04	1E-05
Di-n-octylphthalate	0.1	2.7E+04[e]	4E-06
Fluoranthene	4.279	2.44E+04	2E-04
Fluorene	0.17	2.44E+04	7E-06
Lead	90.61	8.00E+02	1E-01
Mercury	9.002	3.1E+02[c]	3E-02
Nickel	34.93	2.27E+04	2E-03
Nitrate	4.079	1.82E+06	2E-06
Perchlorate	0.000991	7.95E+02	1E-06
Phenanthrene	2.2	2.05E+04	1E-04
Pyrene	1.055	1.83E+04	6E-05
Selenium	0.677	5.68E+03	1E-04
Silver	26.19	5.68E+03	5E-03
Uranium	7.35	3.41E+03	2E-03
Zinc	555.4	3.41E+05	2E-03
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] EPA Region 6 SSL (EPA 2005, 091002).

Table H-4.2-175
Industrial Carcinogenic
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Excess Cancer Risk
Arsenic	4.395	1.77E+01	2E-06
Benzo(a)anthracene	5.9	2.34E+01	3E-06
Benzo(a)pyrene	4.4	2.34E+00	2E-05
Benzo(b)fluoranthene	1.078	2.34E+01	5E-07
Benzo(k)fluoranthene	4.6	2.34E+02	2E-07
Bis(2-ethylhexyl)phthalate	1.114	1.37E+03	8E-09
Butylbenzylphthalate	1.2	9.1E+03[b]	1E-09
Chrysene	1.14	2.34E+03	5E-09
Dibenz(a,h)anthracene	0.84	2.34E+00	4E-06
Dichlorobenzene[1,4-]	0.064	1.80E+02	4E-09
Indeno(1,2,3-cd)pyrene	2.2	2.34E+01	9E-07
		Total Excess Cancer Risk	**3E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-176
Industrial Radionuclide
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	27.73	180	2
Cesium-137	0.356	23	0.2
Plutonium-238	0.555	240	0.03
Plutonium-239/240	40.04	210	3
Tritium	2.878	4.4E+05	1E-04
Uranium-234	20.25	1500	0.2
Uranium-235/236	0.605	87	0.1
Uranium-238	1.906	430	0.07
		Total Dose	**6**

* SALs from LANL (2009, 107655).

Table H-4.2-177
Dioxin/Furan TEF Calculations for the Construction Worker and Residential Scenarios for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	1.58E-06	0.01	1.6E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	9.95E-06	0.0003	3.0E-09
2,3,7,8-TCDD Equivalent			**1.9E-08**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-178
Construction Worker Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.281	1.86E+04	2E-05
Aluminum	4696	4.07E+04	1E-01
Anthracene	0.65	6.68E+04	1E-05
Arsenic	2.744	6.54E+01	4E-02
Antimony	0.2	1.24E+02	2E-03
Aroclor-1254	0.0044	4.36E+00	1E-03
Barium	120.2	4.35E+03	3E-02
Benzo(g,h,i)perylene	0.2	6.68E+03[b]	3E-05
Benzoic acid	0.501	9.52E+05[c]	5E-07
Bis(2-ethylhexyl)phthalate	0.605	4.76E+03	1E-04
Cadmium	1.381	3.09E+02	4E-03
Chromium	34.34	4.49E+02[d]	8E-02
Copper	66.56	1.24E+04	5E-03
Cyanide (total)	2.7	6.19E+03	4E-04
Dibenzofuran	0.055	2.38E+02[c]	2E-04
Dimethylphenol[2,4-]	0.063	4.76E+03	1E-05
Di-n-butylphthalate	0.236	2.38E+04	1E-05
Di-n-octylphthalate	0.1	4.76E+03[e]	2E-05
Fluoranthene	0.518	8.91E+03	6E-05
Fluorene	0.17	8.91E+03	2E-05
Lead	50.7	8.00E+02	6E-02
Mercury	2.603	9.29E+01[c]	3E-02
Nickel	10.3	6.19E+03	2E-03
Nitrate	1.883	4.96E+05	4E-06
Perchlorate	0.00132	2.17E+02	6E-06
Phenanthrene	0.393	7.15E+03	6E-05
Pyrene	0.467	6.68E+03	7E-05
Selenium	0.557	1.55E+03	4E-04
Silver	7.698	1.55E+03	5E-03
2,3,7,8-TCDD equivalent	1.9E-08	2.84E-04	7E-05
Trimethylbenzene[1,2,4-]	0.00049	6.88E+02[c]	7E-07
Uranium	2.882	9.29E+02	3E-03
Xylene[1,3-]+xylene[1,4-]	0.000283	3.13E+03[f]	9E-08
Zinc	199.6	9.29E+04	2E-03
		Hazard Index	**0.4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).
[d] Chromium VI SSL used.
[e] Construction worker SSL calculated using toxicity value from EPA Region 6 (EPA 2005, 091002) and equation and parameters from NMED (2009, 108070).
[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-179
Construction Worker Carcinogenic
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0031	2.22E+00	1E-08
Benzo(a)anthracene	0.471	6.21E+00	8E-07
Benzo(a)pyrene	0.363	6.21E-01	6E-06
Benzo(b)fluoranthene	1.662	6.21E+00	3E-06
Benzo(k)fluoranthene	0.4	6.21E+01	6E-08
Butylbenzylphthalate	0.206	4.76E+04[b]	4E-11
Chloroform	0.000254	5.72E+00	4E-10
Chrysene	0.497	6.21E+02	8E-09
Dibenz(a,h)anthracene	0.84	6.21E-01	1E-05
Dichlorobenzene[1,4-]	0.064	3.22E+01	2E-08
Ethylbenzene	0.00043	6.97E+01	6E-11
Indeno(1,2,3-cd)pyrene	0.208	6.21E+00	3E-07
		Total Excess Cancer Risk	**2E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table H-4.2-180
Construction Worker Radionuclide
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	11.25	34	5
Cesium-137	0.192	18	0.2
Plutonium-238	0.817	40	0.3
Plutonium-239/240	16.52	36	7
Tritium	0.624	3.2E+05	3E-05
Uranium-234	4.987	220	0.3
Uranium-235/236	0.15	43	0.05
Uranium-238	1.027	160	0.1
		Total Dose	**13**

* SALs from LANL (2009, 107655).

Table H-4.2-181
Residential Noncarcinogenic
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.281	3.44E+03	8E-05
Aluminum	4696	7.81E+04	6E-02
Anthracene	0.65	1.72E+04	4E-05
Antimony	0.2	3.13E+01	6E-03
Aroclor-1254	0.0044	1.12E+00	4E-03
Barium	120.2	1.56E+04	8E-03
Benzo(g,h,i)perylene	0.2	1.72E+03[b]	1E-04
Benzoic acid	0.501	2.4E+05[c]	2E-06
Cadmium	1.381	7.79E+01	2E-02
Chromium	34.34	2.19E+02[d]	2E-01
Copper	66.56	3.13E+03	2E-02
Cyanide (total)	2.7	1.56E+03	2E-03
Dibenzofuran	0.055	7.8E+01[c]	7E-04
Dimethylphenol[2,4-]	0.063	1.22E+03	5E-05
Di-n-butylphthalate	0.236	6.11E+03	4E-05
Di-n-octylphthalate	0.1	2.4E+03[e]	4E-05
Fluoranthene	0.518	2.29E+03	2E-04
Fluorene	0.17	2.29E+03	7E-05
Lead	50.7	4.00E+02	1E-01
Mercury	2.603	2.3E+01[c]	1E-01
Nickel	10.3	1.56E+03	7E-03
Nitrate	1.883	1.25E+05	2E-05
Perchlorate	0.00132	5.48E+01	2E-05
Phenanthrene	0.393	1.83E+03	2E-04
Pyrene	0.467	1.72E+03	3E-04
Selenium	0.557	3.91E+02	1E-03
Silver	7.698	3.91E+02	2E-02
Trimethylbenzene[1,2,4-]	0.00049	6.2E+01[c]	8E-06
Uranium	2.882	2.35E+02	1E-02
Xylene[1,3-]+xylene[1,4-]	0.000283	1.09E+03[f]	3E-07
Zinc	199.6	2.35E+04	8E-03
		Hazard Index	**0.6**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] EPA Region 6 SSL (EPA 2005, 091002).

[f] Xylenes SSL used as surrogate based on structural similarity.

Table H-4.2-182
Residential Carcinogenic
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0031	2.22E+00	1E-08
Arsenic	2.744	3.90E+00	7E-06
Benzo(a)anthracene	0.471	6.21E+00	8E-07
Benzo(a)pyrene	0.363	6.21E-01	6E-06
Benzo(b)fluoranthene	1.662	6.21E+00	3E-06
Benzo(k)fluoranthene	0.4	6.21E+01	6E-08
Bis(2-ethylhexyl)phthalate	0.605	3.47E+02	2E-08
Butylbenzylphthalate	0.206	2.6E+03[b]	8E-10
Chloroform	0.000254	5.72E+00	4E-10
Chrysene	0.497	6.21E+02	8E-09
Dibenz(a,h)anthracene	0.84	6.21E-01	1E-05
Dichlorobenzene[1,4-]	0.064	3.22E+01	2E-08
Ethylbenzene	0.00043	6.97E+01	6E-11
Indeno(1,2,3-cd)pyrene	0.208	6.21E+00	3E-07
2,3,7,8-TCDD equivalent	1.9E-08	4.50E-05	4E-09
		Total Excess Cancer Risk	**3E-05**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-183
Residential Radionuclide
Screening Evaluation for Consolidated Unit 21-026(a)-99

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	11.25	30	5.6
Cesium-137	0.192	5.6	0.5
Plutonium-238	0.817	37	0.3
Plutonium-239/240	16.52	33	7.5
Tritium	0.624	750	0.01
Uranium-234	4.987	170	0.4
Uranium-235/236	0.15	17	0.1
Uranium-238	1.027	87	0.2
		Total Dose	**15**

* SALs from LANL (2009, 107655).

Table H-4.2-184
Dioxin/Furan TEF Calculations for the
Industrial Scenario for SWMU 21-027(a)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	8.37E-02	0.01	8.4E-04
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	4.99E-04	0.1	5.0E-05
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	3.04E-03	0.1	3.0E-04
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1.29E-03	0.1	1.3E-04
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	3.5E-01	0.0003	1.1E-04
Pentachlorodibenzodioxin[1,2,3,7,8-]	2.47E-04	1	2.5E-04
Tetrachlorodibenzodioxin[2,3,7,8-]	2.59E-05	1	2.6E-05
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.09E-02	0.01	1.1E-04
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	7.99E-04	0.01	8.0E-06
Hexachlorodibenzofuran[1,2,3,4,7,8-]	2.79E-04	0.1	2.8E-05
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.96E-04	0.1	3.0E-05
Hexachlorodibenzofuran[1,2,3,7,8,9-]	7.85E-05	0.1	7.9E-06
Hexachlorodibenzofuran[2,3,4,6,7,8-]	6.19E-04	0.1	6.2E-05
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	3.51E-02	0.0003	1.1E-05
Pentachlorodibenzofuran[1,2,3,7,8-]	3.03E-05	0.03	9.1E-07
Pentachlorodibenzofuran[2,3,4,7,8-]	8.49E-05	0.3	2.5E-05
Tetrachlorodibenzofuran[2,3,7,8-]	9.24E-06	0.1	9.2E-07
	2,3,7,8-TCDD Equivalent		**2.0E-03**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-185
Industrial Noncarcinogenic
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0557	3.67E+04	2E-06
Anthracene	0.0543	1.83E+05	3E-07
Antimony	0.299	4.54E+02	7E-04
Barium	72.73	2.24E+05	3E-04
Benzo(g,h,i)perylene	0.209	1.83E+04[b]	1E-05
Cadmium	1.891	1.12E+03	2E-03
Chromium	248.5	2.92E+03[c]	9E-02
Copper	78.07	4.54E+04	2E-03
Fluoranthene	1.197	2.44E+04	5E-05
Fluorene	0.0344	2.44E+04	1E-06
Lead	37.5	8.00E+02	5E-02
Lithium	11.01	2.0E+03[d]	6E-03
Mercury	0.26	3.1E+02[d]	8E-04
Nickel	4.844	2.27E+04	2E-04
Nitrate	10.07	1.82E+06	6E-06
Perchlorate	0.00364	7.95E+02	5E-06
Phenanthrene	0.441	2.05E+04	2E-05
Pyrene	1.1	1.83E+04	6E-05
Selenium	1.051	5.68E+03	2E-04
Strontium	28.68	6.81E+05	4E-05
Vanadium	11.96	5.68E+03	2E-03
Zinc	224.7	3.41E+05	7E-04
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-186
Industrial Carcinogenic
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1254	0.0518	8.26E+00	6E-08
Aroclor-1260	0.0284	8.26E+00	3E-08
Arsenic	3.44	1.77E+01	2E-06
Benzo(a)anthracene	0.355	2.34E+01	2E-07
Benzo(a)pyrene	0.819	2.34E+00	4E-06
Benzo(b)fluoranthene	0.64	2.34E+01	3E-07
Bis(2-ethylhexyl)phthalate	0.287	1.37E+03	2E-09
Chrysene	0.549	2.34E+03	2E-09
Indeno(1,2,3-cd)pyrene	0.318	2.34E+01	1E-07
2,3,7,8-TCDD equivalent	0.002	2.04E-04	1E-04
		Total Excess Cancer Risk	**1E-04**

* SSLs from NMED (2009, 108070).

Table H-4.2-187
Industrial Radionuclide
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	36.18	180	3
Cesium-137	0.952	23	0.6
Plutonium-238	19.02	240	1
Plutonium-239/240	92.22	210	7
Tritium	0.109	4.4E+05	4E-06
Uranium-234	32.57	1500	0.3
Uranium-235/236	1.66	87	0.3
Uranium-238	2.01	430	0.07
		Total Dose	**12**

* SALs from LANL (2009, 107655).

Table H-4.2-188
Dioxin/Furan TEF Calculations for the
Construction Worker and Residential Scenarios for SWMU 21-027(a)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	4.14E-02	0.01	4.1E-04
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	4.99E-04	0.1	5.0E-05
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	3.04E-03	0.1	3.0E-04
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1.29E-03	0.1	1.3E-04
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	3.01E-01	0.0003	9.0E-05
Pentachlorodibenzodioxin[1,2,3,7,8-]	2.47E-04	1	2.5E-04
Tetrachlorodibenzodioxin[2,3,7,8-]	1.82E-05	1	1.8E-05
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.09E-02	0.01	1.1E-04
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	7.99E-04	0.01	8.0E-06
Hexachlorodibenzofuran[1,2,3,4,7,8-]	2.79E-04	0.1	2.8E-05
Hexachlorodibenzofuran[1,2,3,6,7,8-]	2.96E-04	0.1	3.0E-05
Hexachlorodibenzofuran[1,2,3,7,8,9-]	7.85E-05	0.1	7.9E-06
Hexachlorodibenzofuran[2,3,4,6,7,8-]	6.19E-04	0.1	6.2E-05
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	3.51E-02	0.0003	1.1E-05
Pentachlorodibenzofuran[1,2,3,7,8-]	3.03E-05	0.03	9.1E-07
Pentachlorodibenzofuran[2,3,4,7,8-]	8.49E-05	0.3	2.5E-05
Tetrachlorodibenzofuran[2,3,7,8-]	2.64E-06	0.1	2.6E-07
	2,3,7,8-TCDD Equivalent		**1.5E-03**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-189
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0469	1.86E+04	3E-06
Acetone	0.0269	2.63E+05	1E-07
Anthracene	0.0345	6.68E+04	5E-07
Antimony	0.524	1.24E+02	4E-03
Arsenic	4.398	6.54E+01	7E-02
Aroclor-1254	0.0518	4.36E+00	1E-02
Barium	70.51	4.35E+03	2E-02
Benzo(g,h,i)perylene	0.136	6.68E+03[b]	2E-05
Butanone[2-]	0.00581	1.48E+05	4E-08
Bis(2-ethylhexyl)phthalate	0.287	4.76E+03	6E-05
Cadmium	1.383	3.09E+02	4E-03
Chromium	200.8	4.49E+02[c]	4E-01
Copper	29.85	1.24E+04	2E-03
Di-n-butylphthalate	0.12	2.38E+04	5E-06
Fluoranthene	0.316	8.91E+03	4E-05
Fluorene	0.0344	8.91E+03	4E-06
Lead	23.42	8.00E+02	3E-02
Lithium	9.411	6.19E+02[d]	2E-02
Mercury	0.279	9.29E+01[d]	3E-03
Naphthalene	0.0143	7.02E+02	2E-05
Nickel	6.021	6.19E+03	1E-03
Nitrate	3.692	4.96E+05	7E-06
Perchlorate	0.00176	2.17E+02	8E-06
Phenanthrene	0.135	7.15E+03	2E-05
Pyrene	0.307	6.68E+03	5E-05
Selenium	1.581	1.55E+03	1E-03
Strontium	20.29	1.86E+05	1E-04
2,3,7,8-TCDD equivalent	0.0015	2.84E-04	5E+00
Toluene	0.000648	2.11E+04	3E-08
Vanadium	13.67	1.55E+03	9E-03
Zinc	177.9	9.29E+04	2E-03
		Hazard Index	**6**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

Table H-4.2-190
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0284	7.58E+01	4E-09
Benzo(a)anthracene	0.129	2.13E+02	6E-09
Benzo(a)pyrene	0.392	2.13E+01	2E-07
Benzo(b)fluoranthene	0.248	2.13E+02	1E-08
Benzo(k)fluoranthene	0.244	2.06E+03	1E-09
Chrysene	0.15	2.06E+04	7E-11
Indeno(1,2,3-cd)pyrene	0.111	2.13E+02	5E-09
Tetrachloroethene	0.00559	3.38E+02	2E-10
Total Excess Cancer Risk			**2E-07**

* SSLs from NMED (2009, 108070).

Table H-4.2-191
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	10.25	34	5
Cesium-137	0.438	18	0.4
Plutonium-238	35.62	40	13
Plutonium-239/240	61.27	36	26
Tritium	0.384	3.2E+05	2E-05
Uranium-234	19.24	220	1
Uranium-235/236	0.843	43	0.3
Uranium-238	1.597	160	0.1
Total Dose			**46**

* SALs from LANL (2009, 107655).

Table H-4.2-192
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0469	3.44E+03	1E-05
Acetone	0.0269	6.75E+04	4E-07
Anthracene	0.0345	1.72E+04	2E-06
Antimony	0.524	3.13E+01	2E-02
Aroclor-1254	0.0518	1.12E+00	5E-02
Barium	70.51	1.56E+04	5E-03
Benzo(g,h,i)perylene	0.136	1.72E+03[b]	8E-05
Butanone[2-]	0.00581	3.96E+04	1E-07
Cadmium	1.383	7.79E+01	2E-02
Chromium	200.8	2.19E+02[c]	9E-01
Copper	29.85	3.13E+03	1E-02
Di-n-butylphthalate	0.12	6.11E+03	2E-05
Fluoranthene	0.316	2.29E+03	1E-04
Fluorene	0.0344	2.29E+03	2E-05
Lead	23.42	4.00E+02	6E-02
Lithium	9.411	1.6E+02[d]	6E-02
Mercury	0.279	2.3E+01[d]	1E-02
Nickel	6.021	1.56E+03	4E-03
Nitrate	3.692	1.25E+05	3E-05
Perchlorate	0.00176	5.48E+01	3E-05
Phenanthrene	0.135	1.83E+03	7E-05
Pyrene	0.307	1.72E+03	2E-04
Selenium	1.581	3.91E+02	4E-03
Strontium	20.29	4.69E+04	4E-04
Toluene	0.000648	5.57E+03	1E-07
Vanadium	13.67	3.91E+02	4E-02
Zinc	177.9	2.35E+04	8E-03
		Hazard Index	**1**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Chromium VI SSL used.

[d] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

Table H-4.2-193
Residential Carcinogenic
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Arsenic	4.398	3.90E+00	1.13E-05
Aroclor-1260	0.0284	2.22E+00	1.28E-07
Benzo(a)anthracene	0.129	6.21E+00	2.08E-07
Benzo(a)pyrene	0.392	6.21E-01	6.31E-06
Benzo(b)fluoranthene	0.248	6.21E+00	3.99E-07
Benzo(k)fluoranthene	0.244	6.21E+01	3.93E-08
Bis(2-ethylhexyl)phthalate	0.287	3.47E+02	8.27E-09
Chrysene	0.15	6.21E+02	2.42E-09
Indeno(1,2,3-cd)pyrene	0.111	6.21E+00	1.79E-07
Naphthalene	0.0143	4.50E+01	3.18E-09
Tetrachloroethene	0.00559	6.99E+00	8.00E-09
2,3,7,8-TCDD equivalent	0.0015	4.50E-05	3.33E-04
		Total Excess Cancer Risk	**4E-04**

* SSLs from NMED (2009, 108070).

Table H-4.2-194
Residential Radionuclide
Screening Evaluation for SWMU 21-027(a)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	10.25	30	5
Cesium-137	0.438	5.6	1
Plutonium-238	35.62	37	14
Plutonium-239/240	61.27	33	28
Tritium	0.384	750	0.008
Uranium-234	19.24	170	2
Uranium-235/236	0.843	17	0.7
Uranium-238	1.597	87	0.3
		Total Dose	**51**

* SALs from LANL (2009, 107655).

Table H-4.2-195
Dioxin/Furan TEF Calculations for the Industrial,
Construction Worker, and Residential Scenarios for SWMU 21-027(c)

COPC	EPC (mg/kg)	TEF*	Toxic Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	5.16E-06	0.01	5.2E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.2E-06	0.01	1.2E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1.91E-07	0.1	1.9E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	4.96E-05	0.0003	1.5E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	2.18E-06	0.0003	6.5E-10
2,3,7,8-TCDD Equivalent			**9.9E-08**

* TEF values from http://www.who.int/ipcs/assessment/tef_update/en/index.html.

Table H-4.2-196
Industrial Noncarcinogenic Screening Evaluation for SWMU 21-027(c)

COPC	EPC (mg/kg)	Industrial SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.565	3.67E+04	2E-05
Anthracene	0.949	1.83E+05	5E-06
Barium	78.59	2.24E+05	4E-04
Benzo(g,h,i)perylene	1.12	1.83E+04[b]	6E-05
Benzoic acid	0.306	2.5E+06[c]	1E-07
Chromium	8.767	2.92E+03[d]	3E-03
Cobalt	2.701	3.0E+02[c]	9E-03
Copper	8.866	4.54E+04	2E-04
Dibenzofuran	0.25	1.0E+03[c]	3E-04
Di-n-butylphthalate	0.506	6.84E+04	7E-06
Fluoranthene	2.385	2.44E+04	1E-04
Fluorene	0.48	2.44E+04	2E-05
Lead	46.26	8.00E+02	6E-02
Mercury	0.0529	3.1E+02[c]	2E-04
Methylnaphthalene[2-]	0.0794	4.1E+03[c]	2E-05
Nitrate	1.376	1.82E+06	8E-07
Perchlorate	0.00155	7.95E+02	2E-06
Phenanthrene	1.165	2.05E+04	6E-05
Pyrene	4.081	1.83E+04	2E-04
Selenium	0.819	5.68E+03	1E-04
Uranium	1.167	3.41E+03	3E-04
Zinc	61.03	3.41E+05	2E-04
Hazard Index			**0.07**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.
[b] Pyrene SSL used as surrogate based on structural similarity.
[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).
[d] Chromium VI SSL used.

Table H-4.2-197
Industrial Carcinogenic Screening Evaluation for SWMU 21-027(c)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0016	8.26E+00	1.9E-09
Benzo(a)anthracene	3.08	2.34E+01	1.3E-06
Benzo(a)pyrene	0.584	2.34E+00	2.5E-06
Benzo(b)fluoranthene	2.365	2.34E+01	1.0E-06
Benzo(k)fluoranthene	0.0212	2.34E+02	9.1E-10
Bis(2-ethylhexyl)phthalate	48.8	1.37E+03	3.6E-07
Chrysene	0.781	2.34E+03	3.3E-09
Indeno(1,2,3-cd)pyrene	1.11	2.34E+01	4.7E-07
Naphthalene	0.223	2.52E+02	8.8E-09
2,3,7,8-TCDD equivalent	9.9E-08	2.04E-04	4.9E-09
		Total Excess Cancer Risk	**6E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-198
Industrial Radionuclide
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	1.158	180	0.1
Cesium-134	0.141	9.7	0.2
Cesium-137	0.394	23	0.3
Plutonium-238	0.113	240	0.01
Plutonium-239/240	9.59	210	0.7
Strontium-90	2.97	1900	0.02
Tritium	0.0325	4.4E+05	0.000001
Uranium-234	1.617	1500	0.02
		Total Dose	**1**

* SALs from LANL (2009, 107655).

Table H-4.2-199
Construction Worker Noncarcinogenic
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (mg/kg)	Construction Worker SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0791	1.86E+04	4E-06
Acenaphthylene	0.0206	6.68E+03[b]	3E-06
Acetone	0.0112	2.63E+05	4E-08
Anthracene	0.103	6.68E+04	2E-06
Barium	138	4.35E+03	3E-02
Benzo(g,h,i)perylene	1.12	6.68E+03[b]	2E-04
Benzoic acid	0.306	9.52E+05[c]	3E-07
Bis(2-ethylhexyl)phthalate	15.81	4.76E+03	3E-03
Chromium	11.56	4.49E+02[d]	3E-02
Cobalt	3.656	3.49E+01[c]	1E-01
Copper	10.97	1.24E+04	9E-04
Dibenzofuran	0.25	2.38E+02[c]	1E-03
Di-n-butylphthalate	0.124	2.38E+04	5E-06
Fluoranthene	0.631	8.91E+03	7E-05
Fluorene	0.0734	8.91E+03	8E-06
Isopropyltoluene[4-]	0.00162	1.03E+04[e]	2E-07
Lead	42.92	8.00E+02	5E-02
Mercury	0.233	9.29E+01[c]	3E-03
Methylene chloride	0.00699	1.06E+04	7E-07
Methylnaphthalene[2-]	0.0794	1.24E+03[c]	6E-05
Naphthalene	0.223	7.02E+02	3E-04
Nitrate	1.077	4.96E+05	2E-06
Perchlorate	0.00155	2.17E+02	7E-06
Phenanthrene	0.473	7.15E+03	7E-05
Pyrene	1.075	6.68E+03	2E-04
Selenium	0.914	1.55E+03	6E-04
2,3,7,8-TCDD equivalent	9.9E-08	2.84E-04	3E-04
Toluene	0.00158	2.11E+04	7E-08
Uranium	1.221	9.29E+02	1E-03
Zinc	62.03	9.29E+04	7E-04
		Hazard Index	**0.2**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] Construction worker SSL calculated using toxicity value from EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) and equation and parameters from NMED (2009, 108070).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-200
Construction Worker Carcinogenic
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (mg/kg)	Construction Worker SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0016	7.58E+01	2E-10
Benzo(a)anthracene	0.532	2.13E+02	2E-08
Benzo(a)pyrene	0.3	2.13E+01	1E-07
Benzo(b)fluoranthene	0.631	2.13E+02	3E-08
Benzo(k)fluoranthene	0.228	2.06E+03	1E-09
Chrysene	0.344	2.06E+04	2E-10
Dichlorobenzene[1,4-]	0.000461	3.78E+03	1E-12
Indeno(1,2,3-cd)pyrene	0.17	2.13E+02	8E-09
Trichloroethene	0.00188	4.60E+03	4E-12
Total Excess Cancer Risk			**2E-07**

* SSLs from NMED (2009, 108070).

Table H-4.2-201
Construction Worker Radionuclide
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (pCi/g)	Construction Worker SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.648	34	0.3
Cesium-134	0.141	7.7	0.3
Cesium-137	0.248	18	0.2
Plutonium-238	0.0772	40	0.03
Plutonium-239/240	8.567	36	4
Strontium-90	2.97	800	0.1
Tritium	0.0244	3.2E+05	0.000001
Uranium-234	1.373	220	0.1
Total Dose			**5**

* SALs from LANL (2009, 107655).

Table H-4.2-202
Residential Noncarcinogenic
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (mg/kg)	Residential SSL[a] (mg/kg)	Hazard Quotient
Acenaphthene	0.0791	3.44E+03	2E-05
Acenaphthylene	0.0206	1.72E+03[b]	1E-05
Acetone	0.0112	6.75E+04	2E-07
Anthracene	0.103	1.72E+04	6E-06
Barium	138	1.56E+04	9E-03
Benzo(g,h,i)perylene	1.12	1.72E+03[b]	7E-04
Benzoic acid	0.306	2.4E+05[c]	1E-06
Chromium	11.56	2.19E+02[d]	5E-02
Cobalt	3.656	2.3E+01[c]	2E-01
Copper	10.97	3.13E+03	4E-03
Dibenzofuran	0.25	7.8E+01[c]	3E-03
Di-n-butylphthalate	0.124	6.11E+03	2E-05
Fluoranthene	0.631	2.29E+03	3E-04
Fluorene	0.0734	2.29E+03	3E-05
Isopropyltoluene[4-]	0.00162	3.21E+03[e]	5E-07
Lead	42.92	4.00E+02	1E-01
Mercury	0.233	2.3E+01[c]	1E-02
Methylnaphthalene[2-]	0.0794	3.1E+02[c]	3E-04
Nitrate	1.077	1.25E+05	9E-06
Perchlorate	0.00155	5.48E+01	3E-05
Phenanthrene	0.473	1.83E+03	3E-04
Pyrene	1.075	1.72E+03	6E-04
Selenium	0.914	3.91E+02	2E-03
Toluene	0.00158	5.57E+03	3E-07
Uranium	1.221	2.35E+02	5E-03
Zinc	62.03	2.35E+04	3E-03
		Hazard Index	**0.4**

[a] SSLs from NMED (2009, 108070) unless otherwise noted.

[b] Pyrene SSL used as surrogate based on structural similarity.

[c] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[d] Chromium VI SSL used.

[e] Isopropylbenzene SSL used as surrogate based on structural similarity.

Table H-4.2-203
Residential Carcinogenic
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Excess Cancer Risk
Aroclor-1260	0.0016	2.22E+00	7E-09
Benzo(a)anthracene	0.532	6.21E+00	9E-07
Benzo(a)pyrene	0.3	6.21E-01	5E-06
Benzo(b)fluoranthene	0.631	6.21E+00	1E-06
Benzo(k)fluoranthene	0.228	6.21E+01	4E-08
Bis(2-ethylhexyl)phthalate	15.81	3.47E+02	5E-07
Chrysene	0.344	6.21E+02	6E-09
Dichlorobenzene[1,4-]	0.000461	3.22E+01	1E-10
Indeno(1,2,3-cd)pyrene	0.17	6.21E+00	3E-07
Methylene chloride	0.00699	1.99E+02	4E-10
Naphthalene	0.223	4.50E+01	5E-08
2,3,7,8-TCDD equivalent	9.9E-08	4.50E-05	2E-08
Trichloroethene	0.00188	4.57E+01	4E-10
		Total Excess Cancer Risk	**8E-06**

* SSLs from NMED (2009, 108070).

Table H-4.2-204
Residential Radionuclide
Screening Evaluation for SWMU 21-027(c)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.648	30	0.3
Cesium-134	0.141	2.4	0.9
Cesium-137	0.248	5.6	0.7
Plutonium-238	0.0772	37	0.03
Plutonium-239/240	8.567	33	4
Strontium-90	2.97	5.7	8
Tritium	0.0244	750	0.0005
Uranium-234	1.373	170	0.1
		Total Dose	**14**

* SALs from LANL (2009, 107655).

Table H-5.3-1
Ecological Screening Levels for Terrestrial Receptors

COPC	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil-dwelling invertebrate)	Plant (terrestrial autotroph - producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)											
Aluminum	na	na	na	na	na	na	na	na	na	na	na
Antimony	na	na	na	na	na	0.48	2.9	78	0.05	0.26	45
Arsenic	160	1100	42	18	26	32	160	6.8	18	15	810
Barium	11000	37000	820	1000	930	1800	3300	330	110	1300	41000
Beryllium	na	na	na	na	na	56	170	40	2.5	18	420
Cadmium	2	580	4.4	0.29	0.54	0.51	9.9	140	32	0.27	510
Calcium	na	na	na	na	na	na	na	na	na	na	na
Chromium	2200	5400	280	190	220	860	3200	0.34	0.35	280	7200
Cobalt	930	3500	170	96	120	400	1800	na	13	160	5400
Copper	110	1600	38	15	22	64	270	80	70	38	3800
Cyanide (total)	0.47	0.58	0.1	0.1	0.1	340	740	na	na	310	2200
Iron	na	na	na	na	na	na	na	na	na	na	na
Lead	120	810	21	14	16	120	370	1700	120	72	3700
Lithium	na	na	na	na	na	100	250	na	2	38	880
Manganese	35000	90000	1400	3100	1900	1400	2000	450	220	1500	41000
Mercury	0.082	0.28	0.07	0.013	0.022	3	22	0.05	34	1.7	46
Molybdenum	130	1700	19	17	18	na	na	na	2	na	na
Nickel	160	2900	160	21	38	20	500	280	38	9.7	1200

Table H-5.3-1 (continued)

COPC	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil-dwelling invertebrate)	Plant (terrestrial autotroph - producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Nitrate	na	na	na	na	na	na	na	na	na	na	na
Perchlorate	na	na	na	na	na	na	na	na	na	na	na
Selenium	5.6	97	1	0.75	0.87	0.83	2.1	4.1	0.52	0.66	84
Silver	19	840	11	2.6	4.3	24	150	na	560	14	4100
Strontium	na	na	na	na	na	96	110	na	na	660	19000
Thallium	6.6	75	9.2	0.9	1.6	0.068	2.8	na	0.1	0.032	2.8
Uranium	21000	39000	1900	1600	1700	750	2000	na	25	220	4800
Vanadium	84	170	8.9	6.7	7.6	480	1500	na	0.025	140	3300
Zinc	320	2400	350	48	85	170	1800	120	160	98	6000
Organic Chemicals (mg/kg)											
Acenaphthene	na	na	na	na	na	160	490	na	0.25	120	6200
Acenaphthylene	na	na	na	na	na	160	500	na	na	120	5200
Acetone	1200	30000	7.5	170	14	1.2	1.4	na	na	15	2900
Anthracene	na	na	na	na	na	310	1100	na	6.8	210	5800
Aroclor-1242	0.26	1.4	1	0.041	0.079	0.76	30	na	na	0.38	16
Aroclor-1254	0.17	0.22	1.3	0.041	0.08	0.88	52	na	160	0.44	0.15
Aroclor-1260	3.7	4.6	46	0.88	1.7	20	3000	na	na	10	0.14
Benzo(a)anthracene	na	na	na	na	na	3.4	6.2	na	18	3	32
Benzo(a)pyrene	na	na	na	na	na	85	280	na	na	53	380
Benzo(b)fluoranthene	na	na	na	na	na	52	130	na	18	38	250
Benzo(g,h,i)perylene	na	na	na	na	na	47	540	na	na	24	94

Table H-5.3-1 (continued)

COPC	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil-dwelling invertebrate)	Plant (terrestrial autotroph - producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Benzo(k)fluoranthene	na	na	na	na	na	100	350	na	na	62	400
Benzoic acid	na	na	na	na	na	1.3	4.2	na	na	1	350
Bis(2-ethylhexyl)phthalate	0.045	0.033	20	0.02	0.04	1.1	2700	na	na	0.59	1.2
Bromomethane	na	na	na	na	na	na	na	na	na	na	na
Butanone[2-]	na	na	na	na	na	360	420	na	na	2600	420000
Butylbenzylphthalate	na	na	na	na	na	160	2300	na	na	90	1900
Carbazole	na	na	na	na	na	na	na	na	na	na	na
Chloroaniline[4-]	na	na	na	na	na	na	na	1.8	1	na	na
Chloroform	na	na	na	na	na	8	17	na	na	8.2	2300
Chrysene	na	na	na	na	na	3.1	6.5	na	na	2.4	25
DDT[4,4'-]	1.2	1.2	28	0.36	0.72	0.089	12	na	4.1	0.044	0.19
Dibenzo(a,h)anthracene	na	na	na	na	na	22	95	na	na	12	54
Dibenzofuran	na	na	na	na	na	na	na	na	6.1	na	na
Dichlorobenzene[1,2-]	na	na	na	na	na	1.5	11	na	na	0.92	73
Dichlorobenzene[1,3-]	na	na	na	na	na	1.3	12	na	na	0.73	54
Dichlorobenzene[1,4-]	na	na	na	na	na	1.5	11	1.2	na	0.88	72
Dichloroethene[1,1-]	na	na	na	na	na	14	40	na	na	11	2900
Dimethyl phthalate	na	na	na	na	na	46	67	10	na	97	24000
Dimethylphenol[2,4-]	na	na	na	na	na	38	43	1.8	0.79	550	17000
Di-n-butylphthalate	0.068	0.24	0.39	0.011	0.021	370	16000	na	160	180	5000
Dinitrotoluene[2,4-]	na	na	na	na	na	0.52	0.62	na	na	2.7	150

Table H-5.3-1 (continued)

COPC	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil-dwelling invertebrate)	Plant (terrestrial autotroph - producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Di-n-octylphthalate	na	na	na	na	na	2.2	16000	na	na	1.1	16
Ethylbenzene	na	na	na	na	na	24	35	na	na	47	7600
Fluoranthene	na	na	na	na	na	38	260	10	na	22	360
Fluorene	na	na	na	na	na	340	1100	3.7	na	250	9300
Hexachlorobenzene	0.56	82	100	0.079	0.15	0.4	1400	10	10	0.2	250
Indeno(1,2,3-cd)pyrene	na	na	na	na	na	110	590	na	na	62	270
Isopropylbenzene	na	na	na	na	na	24	35	na	na	47	7600
Isopropyltoluene[4-]	na	na	na	na	na	25	61	na	200	23	3100
Methyl-2-pentanone[4-]	na	na	na	na	na	9.8	15	na	na	15	6600
Methylene chloride	na	na	na	na	na	2.6	3.4	na	1600	9	1700
Methylnaphthalene[2-]	na	na	na	na	na	3.8	16	na	na	2.5	130
Naphthalene	100	590	3.4	16	5.7	9.7	12	na	1	27	1200
Pentachlorophenol	2	5	31	0.36	0.72	1.6	170	31	5	0.81	13
Phenanthrene	na	na	na	na	na	15	59	5.5	na	10	290
Pyrene	na	na	na	na	na	32	110	10	na	22	360
Styrene	na	na	na	na	na	na	na	1.2	300	na	na
TCDD[2,3,7,8-]	na	na	na	na	na	0.00000058	0.000048	5	na	0.00000029	0.0000012
Tetrachloroethene	na	na	na	na	na	0.36	8.8	na	10	0.18	31
Toluene	na	na	na	na	na	25	61	na	200	23	3100
Trichloro-1,2,2-trifluoroethane[1,1,2-]	na	na	na	na	na	na	na	na	na	na	na
Trichloroethene	na	na	na	na	na	55	170	na	na	42	6400

Table H-5.3-1 (continued)

COPC	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil-dwelling invertebrate)	Plant (terrestrial autotroph - producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Trichlorofluoromethane	na	na	na	na	na	na	na	na	na	na	na
Trimethylbenzene[1,2,4-]	na	na	na	na	na	24	35	na	na	47	7600
Trimethylbenzene[1,3,5-]	na	na	na	na	na	24	35	na	na	47	7600
Xylene (total)	280	3200	90	41	56	2	7	na	100	1.4	130
Xylene[1,2-]	280	3200	90	41	56	2	7	na	100	1.4	130
Xylene[1,3-]+Xylene[1,4-]	280	3200	90	41	56	2	7	na	100	1.4	130
Radionuclides (pCi/g)											
Americium-241	35000	62000	13000	4000	4000	32000	32000	44	21000	31000	26000
Cesium-137	3700	2900	4200	3800	3700	2400	2300	1700	2300	2400	680
Plutonium-238	32000	130000	8300	2000	2100	110000	120000	44	110000	92000	30000
Plutonium-239/240	34000	160000	8600	2100	2100	150000	170000	47	160000	110000	33000
Strontium-90	2400	1900	600	1500	930	1700	1300	1200	1300	1700	560
Tritium	630000	580000	300000	600000	440000	330000	230000	48000	36000	340000	190000
Uranium 235/236	10000	10000	9000	6400	6400	5100	5100	55	4000	5100	4800
Uranium-234	120000	190000	48000	14000	14000	91000	96000	51	14000	94000	45000
Uranium-235/236	10000	10000	9000	6400	6400	5100	5100	55	4000	5100	4800

Note: Units are mg/kg, except for radionuclides, which are pCi/g.

* na = Not available.

Table H-5.3-2
Dioxin/Furan TEF Calculations for Ecological Receptors for AOC 21-002(b)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0000026	0.01	2.6E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000011	0.01	1.1E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000020	0.1	2.0E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000012	0.1	1.2E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.000000094	0.1	9.4E-09
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000025	0.0003	7.5E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000028	0.0003	8.4E-10
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.000000085	1	8.5E-08
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000020	0.3	6.0E-08
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000047	0.1	4.7E-08
2,3,7,8-TCDD Equivalent			**2.8E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-3
Minimum ESL Comparison for AOC 21-002(b)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Arsenic	3.8	6.8	Earthworm	**0.56**
Barium	93	110	Plant	**0.85**
Cadmium	0.40	0.27	Montane shrew	**1.5**
Chromium	15	2.3	Earthworm	**6.5**
Cyanide (total)	0.40	0.1	American robin (herbivore)	**4.0**
Lead	132	14	American robin (insectivore)	**9.4**
Selenium	4.7	0.52	Plant	**9.0**
Silver	0.35	2.6	American robin (insectivore)	0.13
Zinc	102	48	American robin (insectivore)	**2.1**
Organic Chemicals (mg/kg)				
Acetone	0.012	1.2	Deer mouse	0.010
Anthracene	0.015	6.8	Plant	0.0022
Aroclor-1254	0.042	0.041	American robin (insectivore)	**1.0**
Aroclor-1260	0.017	0.14	Red fox	0.12
Benzo(a)anthracene	0.065	3	Montane shrew	0.022
Benzo(a)pyrene	0.081	53	Montane shrew	0.0015
Benzo(b)fluoranthene	0.17	18	Plant	0.0094
Benzo(g,h,i)perylene	0.17	24	Montane shrew	0.0071
Benzo(k)fluoranthene	0.41	62	Montane shrew	0.0066
Bis(2-ethylhexyl)phthalate	2.0	0.02	American robin (insectivore)	**100**
Chrysene	0.060	2.4	Montane shrew	0.025
Dimethyl phthalate	0.12	10	Earthworm	0.012
Di-n-butylphthalate	0.47	0.011	American robin (insectivore)	**43**
Fluoranthene	0.051	10	Earthworm	0.0051
Indeno(1,2,3-cd)pyrene	0.17	62	Montane shrew	0.0027
Methyl-2-pentanone[4-]	0.0017	9.8	Deer mouse	0.00017
Methylene chloride	0.0055	2.6	Deer mouse	0.0021
Phenanthrene	0.037	5.5	Earthworm	0.0067
Pyrene	0.049	10	Earthworm	0.0049
2,3,7,8-TCDD	0.00000028	0.00000029	Montane shrew	**0.97**
Radionuclides (pCi/g)				
Americium-241	0.055	44	Earthworm	0.0013
Plutonium-238	0.038	44	Earthworm	0.00086
Plutonium-239/240	0.85	47	Earthworm	0.018
Tritium	0.020	36000	Plant	0.00000056

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-4
Hazard Index Analysis for AOC 21-002(b)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Arsenic	3.8	0.024	0.0035	0.091	0.21	0.15	0.12	0.024	**0.56**	0.21	0.25	0.0047
Barium	93	0.0084	0.0025	0.11	0.093	0.099	0.051	0.028	0.28	**0.85**	0.071	0.0023
Cadmium	0.40	0.20	0.00069	0.092	**1.4**	**0.75**	**0.79**	0.041	0.0029	0.013	**1.5**	0.00079
Chromium	15	0.0019	0.00040	0.0078	0.018	0.014	0.0078	0.0011	**6.5**	**6.2**	0.020	0.00050
Cyanide (total)	0.40	**0.85**	**0.69**	**4.0**	**4.0**	**4.0**	0.0012	0.00054	na*	na	0.0013	0.00018
Lead	132	**1.1**	0.16	**6.3**	**9.4**	**8.3**	**1.1**	**0.36**	0.078	**1.1**	**1.8**	0.036
Selenium	4.7	**0.84**	0.048	**4.7**	**6.3**	**5.4**	**5.7**	**2.2**	**1.1**	**9.0**	**7.1**	0.056
Zinc	102	**0.32**	0.043	0.29	**2.1**	**1.2**	**0.60**	0.057	**0.85**	**0.64**	**1.0**	0.017
Organic Chemicals (mg/kg)												
Aroclor-1254	0.042	0.25	0.19	0.032	**1.0**	**0.52**	0.048	0.00080	na	0.00026	0.095	0.28
Bis(2-ethylhexyl)phthalate	2.0	**44**	**60**	0.100	**100**	**50**	**1.8**	0.00074	na	na	**3.4**	**1.7**
Di-n-butylphthalate	0.47	**6.9**	**2.0**	**1.2**	**43**	**22**	0.0013	0.000029	na	0.0029	0.0026	0.000094
2,3,7,8-TCDD equivalent	0.00000028	na	na	na	na	na	**0.48**	0.0058	0.000000056	na	**0.97**	0.23
HI		**54**	**63**	**17**	**168**	**92**	**11**	**3**	**9**	**18**	**16**	**2**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-5
Dioxin/Furan TEF Calculations for
Ecological Receptors for Consolidated Unit 21-006(c)-99

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.000022	0.01	2.2E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000052	0.01	5.2E-08
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	0.00000029	0.01	2.9E-09
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	0.00000030	0.1	3.0E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.00000086	0.1	8.6E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.00000089	0.1	8.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000025	0.1	2.5E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000025	0.1	2.5E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.00000027	0.1	2.7E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.00024	0.0003	7.2E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.000016	0.0003	4.8E-09
Pentachlorodibenzofuran[1,2,3,7,8-]	0.00000010	0.03	3.0E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000019	0.3	5.7E-08
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000021	0.1	2.1E-08
2,3,7,8-TCDD Equivalent			**7.1E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-6
Minimum ESL Comparison for Consolidated Unit 21-006(c)-99

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.3	0.05	Plant	**26**
Barium	71	110	Plant	**0.65**
Chromium	6.2	2.3	Earthworm	**2.7**
Copper	8.8	15	American robin (insectivore)	**0.59**
Cyanide (total)	0.11	0.1	American robin (herbivore)	**1.1**
Lead	16	14	American robin (insectivore)	**1.1**
Mercury	0.062	0.013	American robin (insectivore)	**4.8**
Nickel	5.6	9.7	Montane shrew	**0.58**
Selenium	1.7	0.52	Plant	**3.3**
Zinc	380	48	American robin (insectivore)	**7.9**
Organic Chemicals (mg/kg)				
Benzo(a)anthracene	0.98	3	Montane shrew	**0.33**
Benzo(a)pyrene	0.95	53	Montane shrew	0.018
Benzo(b)fluoranthene	1.8	18	Plant	0.10
Benzo(g,h,i)perylene	2.8	24	Montane shrew	0.12
Benzo(k)fluoranthene	0.64	62	Montane shrew	0.010
Bis(2-ethylhexyl)phthalate	8.7	0.02	American robin (insectivore)	**435**
Chrysene	1.5	2.4	Montane shrew	**0.63**
Fluoranthene	0.48	10	Earthworm	0.048
Indeno(1,2,3-cd)pyrene	2.3	62	Montane shrew	0.037
Methylene chloride	0.0022	2.6	Deer mouse	0.00085
Phenanthrene	1.4	5.5	Earthworm	0.25
Pyrene	0.38	10	Earthworm	0.038
2,3,7,8-TCDD equivalent	0.00000071	0.00000029	Montane shrew	**2.4**
Tetrachloroethene	0.0063	0.18	Montane shrew	0.035
Toluene	0.00053	23	Montane shrew	0.000023
Radionuclides (pCi/g)				
Americium-241	0.84	44	Earthworm	0.019
Cesium-137	0.83	680	Red fox	0.0012
Plutonium-238	0.12	44	Earthworm	0.0027
Plutonium-239/240	19	47	Earthworm	**0.40**
Strontium-90	0.49	560	Red fox	0.00088
Tritium	0.25	36000	Plant	0.0000069
Uranium-234	5.6	51	Earthworm	0.11
Uranium-235/236	0.18	55	Earthworm	0.0033
Uranium-238	1.2	55	Earthworm	0.022

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-7
Hazard Index Analysis for Consolidated Unit 21-006(c)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	1.3	na*	na	na	na	na	**2.8**	**0.46**	0.017	**26**	**5.1**	0.030
Barium	71	0.0065	0.0019	0.087	0.071	0.076	0.039	0.022	0.22	**0.65**	0.055	0.0017
Chromium	6.2	0.00080	0.00017	0.0032	0.0074	0.0056	0.0032	0.00047	**2.7**	**2.6**	0.0082	0.00021
Copper	8.8	0.080	0.0055	0.23	**0.59**	**0.40**	0.14	0.033	0.11	0.13	0.23	0.0023
Cyanide (total)	0.11	0.23	0.18	**1.1**	**1.1**	**1.1**	0.00031	0.00014	na	na	0.00034	0.000048
Lead	16	0.13	0.020	**0.75**	**1.1**	**0.99**	0.13	0.043	0.0093	0.13	0.22	0.0043
Mercury	0.062	**0.76**	0.22	**0.89**	**4.8**	**2.8**	0.021	0.0028	**1.2**	0.0018	0.037	0.0014
Nickel	5.6	0.035	0.0019	0.035	0.27	0.15	0.28	0.011	0.020	0.15	**0.58**	0.0047
Selenium	1.7	**0.31**	0.018	**1.7**	**2.3**	**2.0**	**2.1**	**0.83**	**0.43**	**3.3**	**2.6**	0.021
Zinc	380	**1.2**	0.16	**1.1**	**7.9**	**4.5**	**2.2**	0.21	**3.2**	**2.4**	**3.9**	0.063
Organic Chemicals (mg/kg)												
Benzo(a)anthracene	0.98	na	na	na	na	na	0.29	0.16	na	0.054	**0.33**	0.031
Bis(2-ethylhexyl)phthalate	8.7	**190**	**260**	**0.44**	**435**	**220**	**7.9**	0.0032	na	na	**15**	**7.3**
Chrysene	1.5	na	na	na	na	na	**0.48**	0.23	na	na	**0.63**	**0.060**
2,3,7,8-TCDD equivalent	0.00000071	na	na	na	na	na	**1.2**	0.015	0.00000014	na	**2.5**	**0.59**
Radionuclides (pCi/g)												
Plutonium-239/240	19	0.00055	0.00012	0.0022	0.0090	0.0090	0.00013	0.00011	**0.40**	0.00012	0.00017	0.00057
HI		**193**	**261**	**6**	**453**	**232**	**18**	**2**	**8**	**35**	**31**	**8**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-8
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-009

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.000011	0.01	1.1E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000016	0.01	1.6E-08
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	0.00000035	0.1	3.5E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.00000067	0.1	6.7E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.00000055	0.1	5.5E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000011	0.1	1.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.00000015	0.1	1.5E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000087	0.0003	2.6E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000037	0.0003	1.1E-09
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.00000018	1	1.8E-07
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000015	0.1	1.5E-08
2,3,7,8-TCDD Equivalent			**5.3E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-9
Minimum ESL Comparison for SWMU 21-009

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Barium	153	110	Plant	**1.4**
Chromium	14	2.3	Earthworm	**6.1**
Cyanide (total)	0.32	0.10	American robin (herbivore)	**3.2**
Lead	17	14	American robin (insectivore)	**1.2**
Selenium	11	0.52	Plant	**21**
Zinc	49	48	American robin (insectivore)	**1.0**
Organic Chemicals (mg/kg)				
Anthracene	0.015	6.8	Plant	0.0022
Benzo(a)pyrene	0.069	53	Montane shrew	0.0013
Benzo(b)fluoranthene	0.16	18	Plant	0.0089
Benzo(k)fluoranthene	0.057	62	Montane shrew	0.00092
Chloroform	0.0012	8.0	Deer mouse	0.00015
Dichloroethene[1,1-]	0.00089	11	Montane shrew	0.000081
Fluoranthene	0.10	10	Earthworm	0.010
2,3,7,8-TCDD equivalent	0.00000053	0.00000029	Montane shrew	**1.8**
Pyrene	0.051	10	Earthworm	0.0051
Tetrachloroethene	0.00068	0.18	Montane shrew	0.0038
Radionuclides (pCi/g)				
Americium-241	0.23	44	Earthworm	0.0052
Plutonium-239/240	0.31	47	Earthworm	0.0066
Tritium	0.044	36000	Plant	0.0000012

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-10
Hazard Index Analysis for SWMU 21-009

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Barium	153	0.014	0.0041	0.19	0.15	0.16	0.085	0.046	**0.46**	**1.4**	0.12	0.0037
Chromium	14	0.0019	0.00039	0.0076	0.017	0.013	0.0076	0.0011	**6.1**	**6.0**	0.019	0.00048
Cyanide (total)	0.32	**0.67**	**0.54**	**3.2**	**3.2**	**3.2**	0.00093	0.00043	na*	na	0.0010	0.00014
Lead	17	0.14	0.021	**0.80**	**1.2**	**1.0**	0.14	0.045	0.0098	0.14	0.23	0.0045
Selenium	11	**1.9**	0.11	**11**	**14**	**12**	**13**	**5.1**	**2.6**	**21**	**16**	0.13
Zinc	49	0.15	0.021	0.14	**1.0**	**0.58**	0.29	0.027	**0.41**	**0.31**	**0.50**	0.0082
Organic Chemicals (mg/kg)												
2,3,7,8-TCDD equivalent	0.00000053	na	na	na	na	na	**0.91**	0.011	0.00000011	na	**1.8**	**0.44**
	HI	**3**	0.7	**15**	**20**	**17**	**14**	**5**	**10**	**29**	**19**	0.6

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-11
Minimum ESL Comparison for SWMU 21-012(b)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.19	0.050	Plant	**3.8**
Arsenic	2.8	6.8	Earthworm	**0.41**
Barium	78	110	Plant	**0.71**
Beryllium	0.65	2.5	Plant	0.26
Cadmium	0.30	0.27	Montane shrew	**1.1**
Chromium	13	2.3	Earthworm	**5.7**
Cobalt	2.0	13	Plant	0.15
Copper	136	15	American robin (insectivore)	**9.1**
Cyanide (total)	0.20	0.10	American robin (herbivore)	**2.0**
Lead	18	14	American robin (insectivore)	**1.3**
Lithium	12	2.0	Plant	**6.0**
Mercury	1.4	0.013	American robin (insectivore)	**108**
Molybdenum	1.2	2.0	Plant	**0.60**
Nickel	5.4	9.7	Montane shrew	**0.56**
Selenium	0.97	0.52	Plant	**1.9**
Strontium	27	96	Deer mouse	0.28
Uranium	2.2	25	Plant	0.088
Vanadium	15	0.025	Plant	**600**
Zinc	97	48	American robin (insectivore)	**2.0**
Organic Chemicals (mg/kg)				
Acetone	0.0081	1.2	Deer mouse	0.0068
Aroclor-1260	0.0015	0.14	Red fox	0.011
Benzo(a)anthracene	0.024	3.0	Montane shrew	0.0080
Benzo(b)fluoranthene	0.016	18	Plant	0.00089
Benzoic acid	0.63	1.0	Montane shrew	**0.63**
Chloroform	0.00037	8.0	Deer mouse	0.000046
Chrysene	0.031	2.4	Montane shrew	0.013
Fluoranthene	0.017	10	Earthworm	0.0017
Methylene chloride	0.0048	2.6	Deer mouse	0.0018
Phenanthrene	0.026	5.5	Earthworm	0.0047
Pyrene	0.020	10	Earthworm	0.0020
Toluene	0.0048	23	Montane shrew	0.00021
Trichloroethene	0.00032	42	Montane shrew	0.0000076

Table H-5.3-11 (continued)

COPC	EPC	ESL	Receptor	HQ
Radionuclides (pCi/g)				
Americium-241	0.69	44	Earthworm	0.016
Cesium-134	0.13	320	Red fox	0.00041
Cesium-137	0.39	680	Red fox	0.00057
Plutonium-238	0.11	44	Earthworm	0.0025
Plutonium-239/240	0.44	47	Earthworm	0.0094
Tritium	0.075	36000	Plant	0.0000021
Uranium-234	1.4	51	Earthworm	0.027
Uranium-235/236	0.083	55	Earthworm	0.0015
Uranium-238	1.3	55	Earthworm	0.024

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-12
Hazard Index Analysis for SWMU 21-012(b)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	0.19	na*	na	na	na	na	**0.40**	0.067	0.0025	**3.8**	**0.74**	0.0043
Arsenic	2.8	0.018	0.0026	0.067	0.16	0.11	0.088	0.018	**0.41**	0.16	0.19	0.0035
Barium	78	0.0071	0.0021	0.095	0.078	0.084	0.043	0.024	0.24	**0.71**	0.060	0.0019
Cadmium	0.30	0.15	0.00051	0.067	**1.0**	**0.55**	**0.58**	0.030	0.0021	0.0093	**1.1**	0.00058
Chromium	13	0.0017	0.00036	0.0070	0.016	0.012	0.0070	0.0010	**5.7**	**5.5**	0.018	0.00044
Copper	136	**1.2**	0.085	**3.6**	**9.1**	**6.2**	**2.1**	**0.50**	**1.7**	**1.9**	**3.6**	0.036
Cyanide (total)	0.20	**0.42**	**0.34**	**2.0**	**2.0**	**2.0**	0.00059	0.00027	na	na	0.00064	0.000090
Lead	18	0.15	0.022	**0.85**	**1.3**	**1.1**	0.15	0.048	0.010	0.15	0.25	0.0048
Lithium	12	na	na	na	na	na	0.12	0.046	na	**6.0**	**0.31**	0.013
Mercury	1.4	**17**	**4.9**	**20**	**108**	**63**	**0.46**	0.063	**28**	0.041	**0.81**	0.030
Molybdenum	1.2	0.0089	0.00068	0.061	0.068	0.064	na	na	na	**0.6**	na	na
Nickel	5.4	0.034	0.0019	0.034	0.26	0.14	0.27	0.011	0.019	0.14	**0.56**	0.0045
Selenium	0.97	0.17	0.010	**0.97**	**1.3**	**1.1**	**1.2**	**0.46**	0.24	**1.9**	**1.5**	0.012
Vanadium	15	0.18	0.088	**1.7**	**2.2**	**2.0**	0.031	0.0100	na	**600**	0.11	0.0045
Zinc	97	0.30	0.040	0.28	**2.0**	**1.1**	**0.57**	0.054	**0.80**	**0.60**	**0.99**	0.016
Organic Chemicals (mg/kg)												
Benzoic acid	0.63	na	na	na	na	na	**0.48**	0.15	na	na	**0.63**	0.0018
HI		**20**	**5**	**30**	**127**	**77**	**6**	1	**37**	**622**	**11**	0.1

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-13
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-013(c)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.000013	0.01	1.3E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000024	0.01	2.4E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.00000054	0.1	5.4E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.00000049	0.1	4.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000039	0.1	3.9E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000021	0.1	2.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.00000023	0.1	2.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.00011	0.0003	3.3E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000052	0.0003	1.6E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000027	0.3	8.1E-08
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000026	0.1	2.6E-08
2,3,7,8-TCDD Equivalent			**4.8E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-14
Minimum ESL Comparison for SWMU 21-013(c)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Arsenic	3.8	6.8	Earthworm	**0.56**
Barium	109	110	Plant	**0.99**
Cadmium	0.21	0.27	Montane shrew	**0.78**
Chromium	10	2.3	Earthworm	**4.3**
Lead	14	14	American robin (insectivore)	**1.0**
Mercury	0.32	0.013	American robin (insectivore)	**25**
Nickel	6.7	9.7	Montane shrew	**0.69**
Selenium	2.1	0.52	Plant	**4.0**
Thallium	0.19	0.032	Montane shrew	**5.9**
Uranium	1.3	25	Plant	0.052
Vanadium	23	0.025	Plant	**920**
Organic Chemicals (mg/kg)				
Acenaphthene	0.037	0.25	Plant	0.15
Anthracene	0.024	6.8	Plant	0.0035
Aroclor-1254	0.0042	0.041	American robin (insectivore)	0.10
Aroclor-1260	0.0023	0.14	Red fox	0.016
Benzo(a)anthracene	0.080	3.0	Montane shrew	0.027
Benzo(a)pyrene	0.035	53	Montane shrew	0.00066
Benzo(b)fluoranthene	0.056	18	Plant	0.0031
Benzo(g,h,i)perylene	0.041	24	Montane shrew	0.0017
Benzo(k)fluoranthene	0.18	62	Montane shrew	0.0029
Benzoic acid	0.46	1.0	Montane shrew	**0.46**
Bis(2-ethylhexyl)phthalate	0.36	0.02	American robin (insectivore)	**18**
Chloroform	0.00029	8.0	Deer mouse	0.000036
Chrysene	0.046	2.4	Montane shrew	0.019
Fluoranthene	0.065	10	Earthworm	0.0065
Fluorene	0.021	3.7	Earthworm	0.0057
Indeno(1,2,3-cd)pyrene	0.038	62	Montane shrew	0.00061
Phenanthrene	0.045	5.5	Earthworm	0.0082
Pyrene	0.068	10	Earthworm	0.0068
2,3,7,8-TCDD equivalent	0.00000048	0.00000029	Montane shrew	**1.7**
Radionuclides (pCi/g)				
Americium-241	0.042	44	Earthworm	0.00095
Cesium-137	0.25	680	Red fox	0.00037
Plutonium-239/240	0.11	560	Earthworm	0.00020
Strontium-90	0.12	36000	Red fox	0.0000033
Tritium	0.95	51	Plant	0.019
Uranium-235/236	1.0	55	Earthworm	0.018

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-15
Hazard Index Analysis for SWMU 21-013(c)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Arsenic	3.8	0.024	0.0035	0.091	0.21	0.15	0.12	0.024	**0.56**	0.21	0.25	0.0047
Barium	108.7	0.0099	0.0029	0.13	0.11	0.12	0.060	0.033	**0.33**	**0.99**	0.084	0.0027
Cadmium	0.21	0.11	0.00037	0.049	**0.74**	**0.40**	**0.42**	0.022	0.0015	0.0067	**0.78**	0.00042
Chromium	10.4	0.0014	0.00028	0.0055	0.013	0.0095	0.0055	0.00080	**4.3**	**4.3**	0.014	0.00035
Lead	14.1	0.12	0.017	**0.67**	**1.0**	**0.88**	0.12	0.038	0.0083	0.12	0.20	0.0038
Mercury	0.32	**3.9**	**1.1**	**4.6**	**25**	**15**	0.11	0.015	**6.4**	0.0094	0.19	0.0069
Nickel	6.7	0.042	0.0023	0.042	**0.32**	0.18	**0.33**	0.013	0.024	0.18	**0.69**	0.0056
Selenium	2.1	**0.37**	0.022	**2.1**	**2.8**	**2.4**	**2.5**	**0.99**	**0.51**	**4.0**	**3.2**	0.025
Thallium	0.19	0.029	0.0025	0.021	0.21	0.12	**2.8**	0.068	na*	**1.9**	**5.9**	0.068
Vanadium	23.1	0.27	0.14	**2.6**	**3.4**	**3.0**	0.048	0.015	na	**920**	0.16	0.0070
Organic Chemicals (mg/kg)												
Benzoic acid	0.46	na	na	na	na	na	**0.35**	0.11	na	na	**0.46**	0.0013
Bis(2-ethylhexyl)phthalate	0.36	**7.9**	**11**	0.06	**18**	**8.9**	**0.32**	0.00013	na	na	**0.6**	0.30
2,3,7,8-TCDD equivalent	0.00000048	na	na	na	na	na	**0.83**	0.010	0.000000097	na	**1.7**	**0.40**
HI		**13**	**12**	**10**	**52**	**31**	**8**	1	**12**	**932**	**14**	0.8

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

Table H-5.3-16
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-022(h)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.000018	0.01	1.8E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000029	0.01	2.9E-08
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	0.00000025	0.01	2.5E-09
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	0.00000021	0.1	2.1E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.00000092	0.1	9.2E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.00000049	0.1	4.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000041	0.1	4.1E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000025	0.1	2.5E-08
Hexachlorodibenzofuran[1,2,3,7,8,9-]	0.00000011	0.1	1.1E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.00000027	0.1	2.7E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.00013	0.0003	3.9E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000066	0.0003	2.0E-09
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.00000014	1	1.4E-07
Pentachlorodibenzofuran[1,2,3,7,8-]	0.00000011	0.03	3.3E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000034	0.3	1.0E-07
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000035	0.1	3.5E-08
2,3,7,8-TCDD Equivalent			**8.0E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-17
Minimum ESL Comparison for SWMU 21-022(h)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.18	0.05	Plant	**3.6**
Barium	78	110	Plant	**0.71**
Cadmium	3.0	0.27	Montane shrew	**11**
Chromium	105	2.3	Earthworm	**46**
Copper	181	15	American robin (insectivore)	**12**
Cyanide (total)	0.23	0.1	American robin (herbivore)	**2.3**
Lead	1675	14	American robin (insectivore)	**120**
Mercury	0.78	0.013	American robin (insectivore)	**60**
Molybdenum	10	2	Plant	**5.0**
Nickel	7.2	9.7	Montane shrew	**0.74**
Selenium	0.41	0.52	Plant	**0.79**
Silver	20	2.6	American robin (insectivore)	**7.7**
Zinc	561	48	American robin (insectivore)	**12**
Organic Chemicals (mg/kg)				
Acenaphthene	0.43	0.25	Plant	**1.7**
Anthracene	0.62	6.8	Plant	0.091
Aroclor-1254	0.048	0.041	American robin (insectivore)	**1.2**
Aroclor-1260	0.021	0.14	Red fox	0.15
Benzo(a)anthracene	0.96	3	Montane shrew	**0.32**
Benzo(a)pyrene	0.93	53	Montane shrew	0.018
Benzo(b)fluoranthene	1.3	18	Plant	0.072
Benzo(g,h,i)perylene	2.0	24	Montane shrew	0.083
Benzo(k)fluoranthene	1.5	62	Montane shrew	0.024
Bis(2-ethylhexyl)phthalate	1.2	0.02	American robin (insectivore)	**60**
Butylbenzylphthalate	0.51	90	Montane shrew	0.0057
Chrysene	1.1	2.4	Montane shrew	**0.46**
Dibenzo(a,h)anthracene	0.43	12	Montane shrew	0.036
Dibenzofuran	1.1	6.1	Plant	0.18
Di-n-butylphthalate	0.35	0.011	American robin (insectivore)	**32**
Fluoranthene	5.6	10	Earthworm	**0.56**
Fluorene	0.37	3.7	Earthworm	0.10
Indeno(1,2,3-cd)pyrene	5.0	62	Montane shrew	0.081
Methylene chloride	0.0033	2.6	Deer mouse	0.0013
Methylnaphthalene[2-]	0.51	2.5	Montane shrew	0.20
Naphthalene	1.7	1	Plant	**1.7**
Phenanthrene	1.8	5.5	Earthworm	**0.33**

Table H-5.3-17 (continued)

COPC	EPC	ESL	Receptor	HQ
Pyrene	9.9	10	Earthworm	**0.99**
2,3,7,8-TCDD equivalent	0.00000080	0.00000029	Montane shrew	**2.8**
Radionuclides (pCi/g)				
Americium-241	1.1	44	Earthworm	0.025
Cesium-137	0.39	680	Red fox	0.00057
Plutonium-238	21	44	Earthworm	**0.48**
Plutonium-239/240	20	47	Earthworm	**0.43**
Strontium-90	0.38	560	Red fox	0.00068
Tritium	0.034	36000	Plant	0.00000094
Uranium-235/236	0.081	55	Earthworm	0.0015

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-18
Hazard Index Analysis for SWMU 21-022(h)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	0.18	na*	na	na	na	na	**0.38**	0.063	0.0024	**3.6**	**0.71**	0.0041
Barium	78	0.0071	0.0021	0.095	0.078	0.084	0.043	0.024	0.24	**0.71**	0.060	0.0019
Cadmium	3.0	**1.5**	0.0051	**0.67**	**10**	**5.5**	**5.8**	**0.30**	0.021	0.092	**11**	0.0058
Chromium	100	0.014	0.0028	0.055	0.13	0.095	0.055	0.0080	**46**	**44**	0.14	0.0035
Copper	180	**1.6**	0.11	**4.8**	**12**	**8.2**	**2.8**	**0.67**	**2.3**	**2.6**	**4.8**	0.048
Cyanide (total)	0.23	**0.49**	**0.40**	**2.3**	**2.3**	**2.3**	0.00068	0.00031	na	na	0.00075	0.00011
Lead	1700	**14**	**2.1**	**80**	**120**	**105**	**14**	**4.5**	**0.99**	**14**	**23**	**0.45**
Mercury	0.78	**9.5**	**2.8**	**11**	**60**	**35**	0.26	0.035	**16**	0.023	**0.46**	0.017
Molybdenum	9.8	0.075	0.0058	**0.52**	**0.58**	**0.54**	na	na	na	**5.0**	na	na
Nickel	7.2	0.045	0.0025	0.045	**0.34**	0.19	**0.36**	0.014	0.026	0.19	**0.74**	0.0060
Selenium	0.41	0.073	0.0042	**0.41**	**0.54**	**0.47**	**0.49**	0.19	0.099	**0.79**	**0.62**	0.0048
Silver	20	**1.1**	0.024	**1.8**	**7.7**	**4.7**	**0.84**	0.13	na	0.036	**1.4**	0.0049
Zinc	560	**1.8**	0.23	**1.6**	**12**	**6.6**	**3.3**	**0.31**	**4.7**	**3.5**	**5.7**	0.094
Organic Chemicals (mg/kg)												
Acenaphthene	0.43	na	na	na	na	na	0.0027	0.00089	na	**1.7**	0.0036	0.000070
Aroclor-1254	0.048	0.28	0.22	0.037	**1.2**	**0.60**	0.054	0.00092	na	0.00030	0.11	**0.32**
Benzo(a)anthracene	0.96	na	na	na	na	na	0.28	0.15	na	0.053	**0.32**	0.030
Bis(2-ethylhexyl)phthalate	1.2	**28**	**38**	0.062	**60**	**31**	**1.1**	0.00046	na	na	**2.1**	**1.0**

Table H-5.3-18 (continued)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Chrysene	1.1	na	na	na	na	na	**0.34**	0.16	na	na	**0.46**	0.042
Di-n-butylphthalate	0.35	**5.1**	**1.5**	**0.90**	**32**	**17**	0.00095	0.000022	na	0.0022	0.0019	0.000070
Fluoranthene	5.6	na	na	na	na	na	0.15	0.021	**0.56**	na	0.25	0.015
Naphthalene	1.7	0.017	0.0029	**0.50**	0.11	0.30	0.18	0.14	na	**1.7**	0.063	0.0014
Phenanthrene	1.8	na	na	na	na	na	0.12	0.030	**0.33**	na	0.18	0.0061
Pyrene	9.9	na	na	na	na	na	**0.31**	0.090	**0.99**	na	**0.45**	0.028
2,3,7,8-TCDD equivalent	0.00000080	na	na	na	na	na	**1.4**	0.017	0.00000016	na	**2.8**	**0.66**
Radionuclides (pCi/g)												
Plutonium-238	21	0.00065	0.00016	0.0025	0.010	0.0100	0.00019	0.00017	**0.48**	0.00019	0.00023	0.00070
Plutonium-239/240	20	0.00058	0.00012	0.0023	0.0094	0.0094	0.00013	0.00012	**0.43**	0.00012	0.00018	0.00060
HI		**64**	**45**	**105**	**319**	**218**	**32**	**7**	**73**	**78**	**55**	**3**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-19
Dioxin/Furan TEF Calculations for
Ecological Receptors for Consolidated Unit 21-023(a)-99

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0000096	0.01	9.6E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.000056	0.01	5.6E-07
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.00000061	0.1	6.1E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.00000019	0.1	1.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000031	0.1	3.1E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000019	0.1	1.9E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000097	0.0003	2.9E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.000018	0.0003	5.4E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000013	0.3	3.9E-08
Tetrachlorodibenzofuran[2,3,7,8-]	0.0000000951	0.1	9.5E-09
		2,3,7,8-TCDD Equivalent	**8.7E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-20
Minimum ESL Comparison for Consolidated Unit 21-023(a)-99

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.31	0.050	Plant	**6.2**
Arsenic	3.7	6.8	Earthworm	**0.54**
Barium	90	110	Plant	**0.82**
Chromium	12	2.3	Earthworm	**5.2**
Cobalt	2.3	13	Plant	0.18
Copper	5.2	15	American robin (insectivore)	**0.35**
Lead	395	14	American robin (insectivore)	**28**
Manganese	239	220	Plant	**1.1**
Mercury	0.49	0.013	American robin (insectivore)	**38**
Selenium	5.8	0.52	Plant	**11**
Vanadium	11	0.025	Plant	**440**
Organic Chemicals (mg/kg)				
Acenaphthene	1.4	0.25	Plant	**5.6**
Acetone	0.011	1.2	Deer mouse	0.0092
Anthracene	0.78	6.8	Plant	0.11
Aroclor-1254	0.0069	0.041	American robin (insectivore)	0.17
Benzo(a)anthracene	15	3	Montane shrew	**5.0**
Benzo(a)pyrene	3.9	53	Montane shrew	0.074
Benzo(b)fluoranthene	4.7	18	Plant	0.26
Benzo(g,h,i)perylene	3.9	24	Montane shrew	0.16
Benzo(k)fluoranthene	0.032	62	Montane shrew	0.00052
Bis(2-ethylhexyl)phthalate	2.1	0.020	American robin (insectivore)	**105**
Chrysene	4.8	2.4	Montane shrew	**2.0**
Di-n-butylphthalate	0.094	0.011	American robin (insectivore)	**8.5**
Fluoranthene	6.4	10	Earthworm	**0.64**
Fluorene	0.42	3.7	Earthworm	0.11
Indeno(1,2,3-cd)pyrene	4.1	62	Montane shrew	0.066
Methylnaphthalene[2-]	0.40	2.5	Montane shrew	0.16
Naphthalene	1.17	1.0	Plant	**1.2**
Phenanthrene	1.4	5.5	Earthworm	0.25
Pyrene	5.8	10	Earthworm	**0.58**
2,3,7,8-TCDD equivalent	0.00000087	0.00000029	Montane shrew	**3.0**
Tetrachloroethene	0.0017	0.18	Montane shrew	0.0094
Toluene	0.00040	23	Montane shrew	0.000017

Table H-5.3-20 (continued)

COPC	EPC	ESL	Receptor	HQ
Radionuclides (pCi/g)				
Americium-241	0.60	44	Earthworm	0.014
Cesium-137	0.13	680	Red fox	0.00019
Plutonium-238	0.072	44	Earthworm	0.0016
Plutonium-239/240	1.5	47	Earthworm	0.032
Strontium-90	2.0	560	Red fox	0.0036
Tritium	1.2	36000	Plant	0.000033
Uranium-234	1.6	51	Earthworm	0.031
Uranium-235/236	0.10	55	Earthworm	0.0018

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-21
Hazard Index Analysis for Consolidated Unit 21-023(a)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	0.31	na*	na	na	na	na	**0.65**	0.11	0.0040	**6.2**	**1.2**	0.0069
Arsenic	3.7	0.023	0.0033	0.087	0.20	0.14	0.11	0.023	**0.54**	0.20	0.24	0.0045
Barium	90	0.0082	0.0024	0.11	0.090	0.097	0.050	0.027	0.27	**0.82**	0.069	0.0022
Chromium	12	0.0015	0.00031	0.0061	0.014	0.010	0.0061	0.00089	**5.2**	**4.8**	0.015	0.00038
Copper	5.2	0.047	0.0033	0.14	**0.35**	0.24	0.081	0.019	0.065	0.074	0.14	0.0014
Lead	395	**3.3**	**0.49**	**19**	**28**	**25**	**3.3**	**1.1**	0.23	**3.3**	**5.5**	0.11
Manganese	239	0.0068	0.0027	0.17	0.077	0.13	0.17	0.12	**0.53**	**1.1**	0.16	0.0058
Mercury	0.49	**6.0**	**1.8**	**7.0**	**38**	**22**	0.16	0.022	**9.8**	0.014	0.29	0.011
Selenium	5.8	**1.0**	0.060	**5.8**	**7.7**	**6.7**	**7.0**	**2.8**	**1.4**	**11**	**8.8**	0.069
Vanadium	11	0.14	0.067	**1.3**	**1.7**	**1.5**	0.024	0.0076	na	**440**	0.081	0.0035
Organic Chemicals (mg/kg)												
Acenaphthene	1.4	na	na	na	na	na	0.0086	0.0028	na	**5.6**	0.012	0.00022
Benzo(a)anthracene	15	na	na	na	na	na	**4.5**	**2.5**	na	**0.86**	**5.0**	**0.48**
Bis(2-ethylhexyl)phthalate	2.1	**47**	**64**	0.11	**105**	**53**	**1.9**	0.00079	na	na	**3.6**	**1.8**
Chrysene	4.8	na	na	na	na	na	**1.5**	**0.73**	na	na	**2.0**	0.19
Di-n-butylphthalate	0.094	**1.4**	**0.39**	0.24	**8.5**	**4.5**	0.00025	0.0000059	na	0.00059	0.00052	0.000019
Fluoranthene	6.4	na	na	na	na	na	0.17	0.025	**0.64**	na	0.29	0.018
Naphthalene	1.17	0.012	0.0020	**0.34**	0.073	0.21	0.12	0.098	na	**1.2**	0.043	0.00098
Pyrene	5.8	na	na	na	na	na	0.18	0.053	**0.58**	na	0.26	0.016
2,3,7,8-TCDD Equivalent	0.00000087	na	na	na	na	na	**1.5**	0.018	0.00000017	na	**3.0**	**0.72**
HI		**59**	**67**	**34**	**190**	**114**	**21**	**8**	**19**	**475**	**31**	**3**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* n/a = Not applicable.

Table H-5.3-22
Minimum ESL Comparison for SWMU 21-024(a)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Barium	71	110	Plant	**0.65**
Chromium	9.5	2.3	Earthworm	**4.1**
Cobalt	2.1	13	Plant	0.16
Copper	32	15	American robin (insectivore)	**2.1**
Lead	19	14	American robin (insectivore)	**1.4**
Mercury	0.26	0.013	American robin (insectivore)	**20**
Nickel	4.2	9.7	Montane shrew	**0.43**
Selenium	1.2	0.52	Plant	**2.3**
Uranium	1.4	25	Plant	0.056
Vanadium	11	0.025	Plant	**440**
Zinc	49	48	American robin (insectivore)	**1.0**
Organic Chemicals (mg/kg)				
Acetone	0.26	1.2	Deer mouse	0.22
Anthracene	0.0092	6.8	Plant	0.0014
Benzo(a)anthracene	0.015	3	Montane shrew	0.0050
Benzo(b)fluoranthene	0.016	18	Plant	0.00089
Benzoic acid	0.62	1	Montane shrew	**0.62**
Bis(2-ethylhexyl)phthalate	0.12	0.02	American robin (insectivore)	**6.0**
Chloroaniline[4-]	0.46	1	Plant	**0.46**
Chloroform	0.00025	8	Deer mouse	0.000031
Chrysene	0.015	2.4	Montane shrew	0.0063
Fluoranthene	0.021	10	Earthworm	0.0021
Methylene chloride	0.0055	2.6	Deer mouse	0.0021
Phenanthrene	0.012	5.5	Earthworm	0.0022
Pyrene	0.021	10	Earthworm	0.0021
Toluene	0.0026	23	Montane shrew	0.00011
Trichloroethene	0.0029	42	Montane shrew	0.000069
Radionuclides (pCi/g)				
Americium-241	0.10	44	Earthworm	0.0023
Cesium-137	0.29	680	Red fox	0.00043
Plutonium-238	0.027	44	Earthworm	0.00061
Plutonium-239/240	0.77	47	Earthworm	0.016
Strontium-90	0.16	560	Red fox	0.00029
Tritium	0.035	36000	Plant	0.00000097
Uranium-234	1.3	51	Earthworm	0.025
Uranium-235/236	0.067	55	Earthworm	0.0012
Uranium-238	1.2	55	Earthworm	0.022

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-23
Hazard Index Analysis for SWMU 21-024(a)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Barium	71	0.0065	0.0019	0.087	0.071	0.077	0.040	0.022	0.22	**0.65**	0.055	0.0017
Chromium	9.5	0.0012	0.00026	0.0050	0.011	0.0087	0.0050	0.00073	**4.1**	**4.0**	0.013	0.00032
Copper	32	0.29	0.020	**0.85**	**2.1**	**1.5**	**0.50**	0.12	**0.40**	**0.46**	**0.85**	0.0085
Lead	19	0.15	0.023	**0.88**	**1.4**	**1.2**	0.15	0.050	0.011	0.15	0.26	0.0050
Mercury	0.26	**3.2**	**0.93**	**3.7**	**20**	**12**	0.087	0.012	**5.2**	0.0076	0.15	0.0057
Nickel	4.2	0.027	0.0015	0.027	0.20	0.11	0.21	0.0085	0.015	0.11	**0.43**	0.0035
Selenium	1.2	0.21	0.012	**1.2**	**1.6**	**1.3**	**1.4**	**0.55**	0.28	**2.3**	**1.8**	0.014
Vanadium	11	0.14	0.067	**1.3**	**1.7**	**1.5**	0.024	0.0076	na	**440**	0.082	0.0035
Zinc	49	0.15	0.020	0.14	**1.0**	**0.58**	0.29	0.027	**0.41**	**0.31**	**0.50**	0.0082
Organic Chemicals (mg/kg)												
Benzoic acid	0.62	na*	na	na	na	na	**0.48**	0.15	na	na	**0.62**	0.0018
Bis(2-ethylhexyl)phthalate	0.12	**2.6**	**3.5**	0.0058	**6.0**	**2.9**	0.11	0.000043	na	na	0.20	0.097
Chloroaniline[4-]	0.46	na	na	na	na	na	na	na	0.26	**0.46**	na	na
HI		**7**	**5**	**8**	**34**	**21**	**3**	0.9	**11**	**448**	**5**	0.1

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-24
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(b)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.00001	0.01	1.0E-07
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000021	0.01	2.1E-08
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.00000059	0.1	5.9E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000060	0.1	6.0E-08
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.00000032	0.1	3.2E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.00000023	0.1	2.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.00007	0.0003	2.1E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000035	0.0003	1.1E-09
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000038	0.3	1.1E-07
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000052	0.1	5.2E-08
2,3,7,8-TCDD Equivalent			**4.8E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-25
Minimum ESL Comparison for SWMU 21-024(b)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Arsenic	2.7	6.8	Earthworm	**0.40**
Barium	93	110	Plant	**0.85**
Chromium	18	2.3	Earthworm	**7.8**
Cobalt	2.1	13	Plant	0.16
Copper	22	15	American robin (insectivore)	**1.5**
Cyanide (total)	0.37	0.1	American robin (herbivore)	**3.7**
Lead	19	14	American robin (insectivore)	**1.4**
Mercury	2.3	0.013	American robin (insectivore)	**180**
Nickel	7.3	9.7	Montane shrew	**0.75**
Selenium	1.04	0.52	Plant	**2.0**
Silver	8.0	2.6	American robin (insectivore)	**3.1**
Strontium	24	96	Deer mouse	0.25
Zinc	59	48	American robin (insectivore)	**1.2**
Organic Chemicals (mg/kg)				
Anthracene	0.058	6.8	Plant	0.0085
Aroclor-1254	0.091	0.041	American robin (insectivore)	**2.2**
Aroclor-1260	0.052	0.14	Red fox	**0.37**
Benzo(a)anthracene	0.11	3	Montane shrew	0.037
Benzo(a)pyrene	0.15	53	Montane shrew	0.0028
Benzo(b)fluoranthene	0.054	18	Plant	0.0030
Benzo(g,h,i)perylene	0.10	24	Montane shrew	0.0042
Benzo(k)fluoranthene	0.074	62	Montane shrew	0.0012
Bis(2-ethylhexyl)phthalate	0.46	0.02	American robin (insectivore)	**23**
Chrysene	0.044	2.4	Montane shrew	0.018
Di-n-butylphthalate	0.50	0.011	American robin (insectivore)	**45**
Fluoranthene	0.088	10	Earthworm	0.0088
Indeno(1,2,3-cd)pyrene	0.048	62	Montane shrew	0.00077
Phenanthrene	0.25	5.5	Earthworm	0.045
Pyrene	0.075	10	Earthworm	0.0075
2,3,7,8-TCDD equivalent	0.00000048	0.00000029	Montane shrew	**1.7**
Toluene	0.0014	23	Montane shrew	0.000061
Radionuclides (pCi/g)				
Americium-241	39	44	Earthworm	**0.89**
Cesium-137	0.45	680	Red fox	0.00066
Plutonium-238	0.43	44	Earthworm	0.0098
Plutonium-239/240	60	47	Earthworm	**1.3**

Table H-5.3-25 (continued)

COPC	EPC	ESL	Receptor	HQ
Tritium	0.021	36000	Plant	0.00000058
Uranium-234	1.7	51	Earthworm	0.033
Uranium-235/236	0.11	55	Earthworm	0.0020
Uranium-238	1.7	55	Earthworm	0.031

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-26
Hazard Index Analysis for SWMU 21-024(b)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Arsenic	2.7	0.017	0.0025	0.065	0.15	0.10	0.085	0.017	**0.40**	0.15	0.18	0.0033
Barium	93	0.0085	0.0025	0.11	0.093	0.10	0.052	0.028	0.28	**0.85**	0.072	0.0023
Chromium	18	0.0024	0.00049	0.0095	0.022	0.016	0.0095	0.0014	**7.8**	**7.6**	0.024	0.00060
Copper	22	0.20	0.014	**0.57**	**1.5**	**0.99**	**0.34**	0.080	0.27	**0.31**	**0.57**	0.0057
Cyanide (total)	0.37	**0.79**	**0.64**	**3.7**	**3.7**	**3.7**	0.0011	0.00050	na*	na	0.0012	0.00017
Lead	19	0.16	0.024	**0.91**	**1.4**	**1.2**	0.16	0.052	0.011	0.16	0.27	0.0052
Mercury	2.3	**29**	**8.4**	**34**	**180**	**107**	**0.78**	0.11	**47**	0.069	**1.4**	0.051
Nickel	7.3	0.046	0.0025	0.046	**0.35**	0.19	**0.37**	0.015	0.026	0.19	**0.75**	0.0061
Selenium	1.04	0.19	0.011	**1.0**	**1.4**	**1.2**	**1.3**	**0.49**	0.25	**2.0**	**1.6**	0.012
Silver	8.0	**0.42**	0.0095	**0.73**	**3.1**	**1.9**	**0.33**	0.053	na	0.014	**0.57**	0.0019
Zinc	59	0.18	0.025	0.17	**1.2**	**0.69**	**0.35**	0.033	**0.49**	**0.37**	**0.60**	0.0098
Organic Chemicals (mg/kg)												
Aroclor-1254	0.091	**0.53**	**0.41**	0.070	**2.2**	**1.1**	0.10	0.0017	na	0.00057	0.21	**0.61**
Aroclor-1260	0.052	0.014	0.011	0.0011	0.059	0.031	0.0026	0.000017	na	na	0.0052	**0.37**
Bis(2-ethylhexyl)phthalate	0.46	**10**	**14**	0.023	**23**	**11**	**0.41**	0.00017	na	na	**0.77**	**0.38**
Di-n-butylphthalate	0.50	**7.3**	**2.1**	**1.3**	**45**	**24**	0.0013	0.000031	na	0.0031	0.0028	0.000099
2,3,7,8-TCDD equivalent	0.00000048	na	na	na	na	na	**0.81**	0.0097	0.000000093	na	**1.7**	**0.39**

Table H-5.3-26 (continued)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Radionuclides (pCi/g)												
Americium-241	39	0.0011	0.00063	0.0030	0.0098	0.0098	0.0012	0.0012	**0.89**	0.0019	0.0013	0.0015
Plutonium-239/240	60	0.0018	0.00038	0.0070	0.029	0.029	0.00040	0.00035	**1.3**	0.00038	0.00055	0.0018
HI		**49**	**26**	**43**	**263**	**153**	**5**	0.9	**59**	**12**	**9**	**2**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-27
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(d)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.00047	0.01	4.7E-06
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	0.000022	0.1	2.2E-06
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.000026	0.1	2.6E-06
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.000023	0.1	2.3E-06
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.0029	0.0003	8.7E-07
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.000015	1	1.5E-05
Tetrachlorodibenzodioxin[2,3,7,8-]	0.0000022	1	2.2E-06
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.00013	0.01	1.3E-06
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	0.0000073	0.01	7.3E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.000011	0.1	1.1E-06
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.0000048	0.1	4.8E-07
Hexachlorodibenzofuran[1,2,3,7,8,9-]	0.0000027	0.1	2.7E-07
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.0000070	0.1	7.0E-07
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.00029	0.0003	8.7E-08
Pentachlorodibenzofuran[1,2,3,7,8-]	0.0000027	0.03	8.1E-08
Pentachlorodibenzofuran[2,3,4,7,8-]	0.0000064	0.3	1.9E-06
Tetrachlorodibenzofuran[2,3,7,8-]	0.0000048	0.1	4.8E-07
		2,3,7,8-TCDD Equivalent	**3.6E-05**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-28
Minimum ESL Comparison for SWMU 21-024(d)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Arsenic	3.5	6.8	Earthworm	**0.51**
Barium	78	110	Plant	**0.71**
Chromium	34	2.3	Earthworm	**15**
Cobalt	2.9	13	Plant	0.22
Copper	114	15	American robin (insectivore)	**7.6**
Cyanide (total)	0.46	0.10	American robin (herbivore)	**4.6**
Lead	36	14	American robin (insectivore)	**2.6**
Manganese	323	220	Plant	**1.5**
Mercury	0.40	0.013	American robin (insectivore)	**31**
Nickel	13	9.7	Montane shrew	**1.3**
Selenium	1.8	0.52	Plant	**3.5**
Silver	9.0	2.6	American robin (insectivore)	**3.5**
Uranium	6.5	25	Plant	0.26
Zinc	80	48	American robin (insectivore)	**1.7**
Organic Chemicals (mg/kg)				
Acenaphthene	0.076	0.25	Plant	0.30
Acenaphthylene	0.016	120	Montane shrew	0.00013
Anthracene	0.17	6.8	Plant	0.025
Aroclor-1242	0.26	0.041	American robin (insectivore)	**6.3**
Aroclor-1254	0.33	0.041	American robin (insectivore)	**8.0**
Aroclor-1260	0.13	0.14	Red fox	**0.93**
Benzo(a)anthracene	0.14	3.0	Montane shrew	0.047
Benzo(a)pyrene	0.27	53	Montane shrew	0.0051
Benzo(b)fluoranthene	0.11	18	Plant	0.0061
Benzo(g,h,i)perylene	0.039	24	Montane shrew	0.0016
Benzo(k)fluoranthene	0.30	62	Montane shrew	0.0048
Benzoic acid	0.45	1.0	Montane shrew	**0.45**
Bis(2-ethylhexyl)phthalate	0.20	0.020	American robin (insectivore)	**10**
Butylbenzylphthalate	0.25	90	Montane shrew	0.0028
Chrysene	0.21	2.4	Montane shrew	0.088
Dibenzo(a,h)anthracene	0.040	12	Montane shrew	0.0033
Dichlorobenzene[1,4-]	0.37	0.88	Montane shrew	**0.42**
Di-n-butylphthalate	0.21	0.011	American robin (insectivore)	**19**
Fluoranthene	0.12	10	Earthworm	0.012
Fluorene	0.021	3.7	Earthworm	0.0057
Indeno(1,2,3-cd)pyrene	0.042	62	Montane shrew	0.00068

Table H-5.3-28 (continued)

COPC	EPC	ESL	Receptor	HQ
Methylene chloride	0.019	2.6	Deer mouse	0.0073
Phenanthrene	0.18	5.5	Earthworm	0.033
Pyrene	0.12	10	Earthworm	0.012
2,3,7,8-TCDD equivalent	0.000036	0.00000029	Montane shrew	**124**
Toluene	0.0025	23	Montane shrew	0.00011
Trichloroethene	0.0023	42	Montane shrew	0.000055
Radionuclides (pCi/g)				
Americium-241	0.39	44	Earthworm	0.0089
Cesium-137	0.36	680	Red fox	0.00053
Europium-152	0.39	380	Earthworm	0.0010
Plutonium-238	0.072	44	Earthworm	0.0016
Plutonium-239/240	5.9	47	Earthworm	0.13
Strontium-90	0.38	560	Red fox	0.00068
Tritium	0.036	36000	Plant	0.0000010
Uranium-234	2.6	51	Earthworm	0.051
Uranium-235/236	0.13	55	Earthworm	0.0024
Uranium-238	1.9	55	Earthworm	0.035

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-29
Hazard Index Analysis for SWMU 21-024(d)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Arsenic	3.5	0.022	0.0032	0.084	0.20	0.14	0.11	0.022	**0.51**	0.20	0.24	0.0044
Barium	78	0.0071	0.0021	0.095	0.078	0.084	0.043	0.024	0.24	**0.71**	0.060	0.0019
Chromium	34	0.0044	0.00092	0.018	0.041	0.031	0.018	0.0026	**15**	**14**	0.046	0.0011
Copper	114	**1.0**	0.071	**3.0**	**7.6**	**5.2**	**1.8**	**0.42**	**1.4**	**1.6**	**3.0**	0.030
Cyanide (total)	0.46	**0.97**	**0.79**	**4.6**	**4.6**	**4.6**	0.0013	0.00062	na*	na	0.0015	0.00021
Lead	36	0.30	0.044	**1.7**	**2.6**	**2.2**	0.30	0.097	0.021	0.30	**0.50**	0.0097
Manganese	323	0.0092	0.0036	0.23	0.10	0.17	0.23	0.16	**0.72**	**1.5**	0.22	0.0079
Mercury	0.40	**4.9**	**1.4**	**5.8**	**31**	**18**	0.13	0.018	**8.1**	0.012	0.24	0.0088
Nickel	13	0.082	0.0045	0.082	**0.63**	**0.35**	**0.66**	0.026	0.047	**0.35**	**1.3**	0.011
Selenium	1.8	**0.32**	0.019	**1.8**	**2.4**	**2.1**	**2.2**	**0.86**	**0.44**	**3.5**	**2.7**	0.021
Silver	9.0	**0.47**	0.011	**0.82**	**3.5**	**2.1**	**0.37**	0.060	na	0.016	**0.64**	0.0022
Zinc	80	0.25	0.033	0.23	**1.7**	**0.94**	**0.47**	0.045	**0.67**	**0.50**	**0.82**	0.013
Organic Chemicals (mg/kg)												
Aroclor-1242	0.26	**0.98**	0.18	0.26	**6.3**	**3.2**	**0.34**	0.0085	na	na	**0.67**	0.016
Aroclor-1254	0.33	**2.0**	**1.5**	0.26	**8.0**	**4.2**	**0.38**	0.0064	na	0.0021	**0.75**	**2.2**
Aroclor-1260	0.13	0.035	0.028	0.0028	0.15	0.076	0.0065	0.000043	na	na	0.013	**0.93**
Benzoic acid	0.45	na	na	na	na	na	**0.35**	0.11	na	na	**0.45**	0.0013
Bis(2-ethylhexyl)phthalate	0.20	**4.4**	**6.0**	0.0099	**10**	**4.9**	0.18	0.000073	na	na	**0.33**	0.16

Table H-5.3-29 (continued)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Di-n-butylphthalate	0.21	**3.1**	**0.89**	**0.55**	**19**	**10**	0.00058	0.000013	na	0.0013	0.0012	0.000043
2,3,7,8-TCDD equivalent	0.000037	na	na	na	na	na	**63**	**0.76**	0.0000073	na	**124**	**31**
HI		**19**	**11**	**20**	**98**	**58**	**71**	**3**	**27**	**23**	**136**	**34**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-30
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(e)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.0000048	0.0003	1.4E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.00000041	0.0003	1.2E-10
		2,3,7,8-TCDD Equivalent	**1.5E-09**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-31
Minimum ESL Comparison for SWMU 21-024(e)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.50	0.05	Plant	**10**
Barium	99	110	Plant	**0.90**
Cadmium	2.7	0.27	Montane shrew	**10**
Chromium	9.0	2.3	Earthworm	**3.9**
Copper	25	15	American robin (insectivore)	**1.7**
Cyanide (total)	4.4	0.1	American robin (herbivore)	**44**
Lead	39	14	American robin (insectivore)	**2.8**
Mercury	0.51	0.013	American robin (insectivore)	**39**
Molybdenum	0.87	2	Plant	**0.44**
Selenium	1.2	0.52	Plant	**2.3**
Silver	0.41	2.6	American robin (insectivore)	0.16
Uranium	11	25	Plant	**0.44**
Zinc	61	48	American robin (insectivore)	**1.3**
Organic Chemicals (mg/kg)				
Acenaphthene	0.019	0.25	Plant	0.076
Acenaphthylene	0.026	120	Montane shrew	0.00022
Acetone	0.0090	1.2	Deer mouse	0.0075
Anthracene	0.074	6.8	Plant	0.011
Benzo(a)anthracene	0.24	3	Montane shrew	0.080
Benzo(a)pyrene	0.20	53	Montane shrew	0.0038
Benzo(b)fluoranthene	0.32	18	Plant	0.018
Benzo(g,h,i)perylene	0.13	24	Montane shrew	0.0054
Benzo(k)fluoranthene	0.079	62	Montane shrew	0.0013
Bis(2-ethylhexyl)phthalate	0.38	0.02	American robin (insectivore)	**19**
Chloroaniline[4-]	0.41	1	Plant	**0.41**
Chrysene	0.24	2.4	Montane shrew	0.10
Di-n-butylphthalate	0.14	0.011	American robin (insectivore)	**13**
Fluoranthene	0.064	10	Earthworm	0.0064
Fluorene	0.031	3.7	Earthworm	0.0084
Indeno(1,2,3-cd)pyrene	0.17	62	Montane shrew	0.0027
Methylene chloride	0.0025	2.6	Deer mouse	0.00096
Methylnaphthalene[2-]	0.011	2.5	Montane shrew	0.0044
Naphthalene	0.021	1	Plant	0.021
Phenanthrene	0.044	5.5	Earthworm	0.0080

Table H-5.3-31 (continued)

COPC	EPC	ESL	Receptor	HQ
Pyrene	0.067	10	Earthworm	0.0067
2,3,7,8-TCDD equivalent	0.0000000015	0.00000029	Montane shrew	0.0055
Toluene	0.0079	23	Montane shrew	0.00034
Trichloroethene	0.005	42	Montane shrew	0.00012
Radionuclides (pCi/g)				
Americium-241	0.58	44	Earthworm	0.013
Cesium-137	0.64	680	Red fox	0.00094
Plutonium-238	0.33	44	Earthworm	0.0075
Plutonium-239/240	16	47	Earthworm	**0.34**
Strontium-90	0.91	560	Red fox	0.0016
Tritium	0.020	36000	Plant	0.00000056
Uranium-234	3.2	51	Earthworm	0.063
Uranium-235/236	0.17	55	Earthworm	0.0031
Uranium-238	2.6	55	Earthworm	0.047

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-32
Hazard Index Analysis for SWMU 21-024(e)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	0.50	na*	na	na	na	na	**1.0**	0.17	0.0064	**10**	**1.9**	0.011
Barium	99	0.0090	0.0027	0.12	0.099	0.11	0.055	0.030	0.30	**0.90**	0.076	0.0024
Cadmium	2.7	**1.4**	0.0047	**0.62**	**9.5**	**5.1**	**5.4**	0.28	0.020	0.086	**10**	0.0054
Chromium	9.0	0.0012	0.00024	0.0047	0.011	0.0082	0.0047	0.00069	**3.9**	**3.8**	0.012	0.00030
Copper	25	0.23	0.016	**0.66**	**1.7**	**1.1**	**0.39**	0.093	**0.31**	**0.36**	**0.66**	0.0066
Cyanide (total)	4.4	**9.3**	**7.5**	**44**	**44**	**44**	0.013	0.0059	na	na	0.014	0.0020
Lead	39	**0.32**	0.048	**1.8**	**2.8**	**2.4**	**0.32**	0.10	0.023	**0.32**	**0.54**	0.010
Mercury	0.51	**6.2**	**1.8**	**7.2**	**39**	**23**	0.17	0.023	**10**	0.015	0.30	0.011
Molybdenum	0.87	0.0067	0.00051	0.046	0.051	0.048	na	na	na	**0.44**	na	na
Selenium	1.2	0.21	0.012	**1.2**	**1.6**	**1.3**	**1.4**	**0.56**	0.28	**2.3**	**1.8**	0.014
Uranium	11	0.00052	0.00028	0.0058	0.0069	0.0065	0.015	0.0055	na	**0.44**	0.050	0.0023
Zinc	61	0.19	0.025	0.17	**1.3**	**0.72**	**0.36**	0.034	**0.51**	**0.38**	**0.62**	0.010
Organic Chemicals (mg/kg)												
Bis(2-ethylhexyl)phthalate	0.38	**8.5**	**12**	0.019	**19**	**9.6**	**0.35**	0.00014	na	na	**0.65**	**0.32**
Chloroaniline[4-]	0.41	na	na	na	na	na	na	na	0.23	**0.41**	na	na
Di-n-butylphthalate	0.14	**2.0**	**0.57**	**0.35**	**13**	**6.5**	0.00037	0.0000086	na	0.00086	0.00076	0.000027
Radionuclides (pCi/g)												
Plutonium-239/240	16	0.00049	0.00010	0.0019	0.0079	0.0079	0.00011	0.000097	**0.34**	0.00010	0.00015	0.00050
HI		**28**	**22**	**56**	**132**	**94**	**9**	1	**16**	**19**	**17**	0.4

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

Table H-5.3-33
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(g)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0000013	0.01	1.3E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.0000088	0.0003	2.6E-09
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.00000055	0.01	5.5E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.00000071	0.0003	2.1E-10
TCDD[2,3,7,8-] Equivalent			**2.1E-08**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-34
Minimum ESL Comparison for SWMU 21-024(g)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Arsenic	3.1	6.8	Earthworm	**0.46**
Barium	58	110	Plant	**0.53**
Cadmium	0.37	0.27	Montane shrew	**1.4**
Chromium	12	2.3	Earthworm	**5.2**
Cobalt	2.1	13	Plant	0.16
Copper	6.3	15	American robin (insectivore)	**0.42**
Cyanide (total)	0.25	0.10	American robin (herbivore)	**2.5**
Lead	24	14	American robin (insectivore)	**1.7**
Mercury	0.18	0.013	American robin (insectivore)	**14**
Nickel	5.0	9.7	Montane shrew	**0.52**
Selenium	1.0	0.52	Plant	**1.9**
Uranium	3.1	25	Plant	0.12
Zinc	67	48	American robin (insectivore)	**1.4**
Organic Chemicals (mg/kg)				
Acenaphthene	0.04	0.25	Plant	0.16
Acetone	0.085	1.2	Deer mouse	0.071
Anthracene	0.11	6.8	Plant	0.016
Aroclor-1254	0.0025	0.041	American robin (insectivore)	0.061
Aroclor-1260	0.0022	0.14	Red fox	0.016
Benzo(a)anthracene	0.06	3.0	Montane shrew	0.020
Benzo(a)pyrene	0.36	53	Montane shrew	0.0068
Benzo(b)fluoranthene	0.0736	18	Plant	0.0041
Benzo(g,h,i)perylene	0.22	24	Montane shrew	0.092
Benzo(k)fluoranthene	0.04	62	Montane shrew	0.00065
Benzoic acid	0.22	1.0	Montane shrew	0.22
Bis(2-ethylhexyl)phthalate	0.11	0.020	American robin (insectivore)	**5.5**
Chrysene	0.06	2.4	Montane shrew	0.025
Di-n-butylphthalate	0.3	0.011	American robin (insectivore)	**27**
Fluoranthene	0.10	10	Earthworm	0.0010
Fluorene	0.04	3.7	Earthworm	0.011
Indeno(1,2,3-cd)pyrene	0.20	62	Montane shrew	0.032
Methylnaphthalene[2-]	0.03	2.5	Montane shrew	0.012
Naphthalene	0.04	1.0	Plant	0.040
Phenanthrene	0.049	5.5	Earthworm	0.089
Pyrene	0.09	10	Earthworm	0.0090
2,3,7,8-TCDD equivalent	0.000000021	0.00000029	Montane shrew	0.072

Table H-5.3-34 (continued)

COPC	EPC	ESL	Receptor	HQ
Toluene	0.0011	23	Montane shrew	0.000048
Radionuclides (pCi/g)				
Americium-241	0.051	44	Earthworm	0.0012
Cesium-137	0.38	680	Red fox	0.00056
Plutonium-238	0.033	44	Earthworm	0.00075
Plutonium-239/240	1.0	47	Earthworm	0.021
Tritium	0.037	36000	Plant	0.0000010
Uranium-234	1.7	51	Earthworm	0.033
Uranium-235/236	0.090	55	Earthworm	0.0016
Uranium-238	1.6	55	Earthworm	0.029

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-35
Hazard Index Analysis for SWMU 21-024(g)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Arsenic	3.1	0.020	0.0029	0.075	0.17	0.12	0.098	0.020	**0.46**	0.17	0.21	0.0039
Barium	58	0.0053	0.0016	0.071	0.058	0.063	0.032	0.018	0.18	**0.53**	0.045	0.0014
Cadmium	0.37	0.18	0.00063	0.084	**1.3**	**0.68**	**0.72**	0.037	0.0026	0.012	**1.4**	0.00072
Chromium	12	0.0015	0.00031	0.0061	0.014	0.011	0.0061	0.00089	**5.2**	**4.8**	0.015	0.00039
Copper	6.3	0.057	0.0039	0.17	**0.42**	0.29	0.098	0.023	0.079	0.090	0.17	0.0017
Cyanide (total)	0.25	**0.53**	**0.43**	**2.5**	**2.5**	**2.5**	0.00073	0.00033	na*	na	0.00080	0.00011
Lead	24	0.20	0.030	**1.2**	**1.7**	**1.5**	0.20	0.066	0.014	0.20	**0.34**	0.0066
Mercury	0.18	**2.2**	**0.64**	**2.6**	**14**	**8.2**	0.060	0.0082	**3.6**	0.0053	0.11	0.0039
Nickel	5.0	0.031	0.0017	0.031	0.24	0.13	0.25	0.0099	0.018	0.13	**0.52**	0.0041
Selenium	0.98	0.18	0.010	**0.98**	**1.3**	**1.1**	**1.2**	**0.47**	0.24	**1.9**	**1.5**	0.012
Zinc	67	0.21	0.028	0.19	**1.4**	**0.79**	**0.39**	0.037	**0.56**	**0.42**	**0.68**	0.011
Organic Chemicals (mg/kg)												
Bis(2-ethylhexyl)phthalate	0.11	**2.4**	**3.3**	0.0055	**5.5**	**2.8**	0.10	0.000041	na	na	0.19	0.092
Di-n-butylphthalate	0.33	**4.8**	**1.4**	**0.84**	**27**	**16**	0.00088	0.000020	na	0.0020	0.0018	0.000065
HI		**11**	**6**	**9**	**56**	**34**	**3**	0.7	**10**	**8**	**5**	0.1

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-36
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(h)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0000018	0.01	1.8E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000012	0.0003	3.6E-09
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.00000065	0.01	6.5E-09
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.000000063	0.1	6.3E-09
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.000000088	0.1	8.8E-09
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.00000097	0.0003	2.9E-10
2,3,7,8-TCDD Equivalent			**4.3E-08**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-37
Minimum ESL Comparison for SWMU 21-024(h)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.1	0.050	Plant	**22**
Arsenic	4.1	6.8	Earthworm	**0.60**
Barium	73	110	Plant	**0.66**
Cadmium	0.63	0.27	Montane shrew	**2.3**
Chromium	15	2.3	Earthworm	**6.5**
Copper	82	15	American robin (insectivore)	**5.5**
Cyanide (total)	0.43	0.10	American robin (herbivore)	**4.3**
Lead	62	14	American robin (insectivore)	**4.4**
Mercury	6.5	0.013	American robin (insectivore)	**500**
Molybdenum	0.72	2.0	Plant	**0.36**
Nickel	4.6	9.7	Montane shrew	**0.47**
Selenium	0.98	0.52	Plant	**1.9**
Silver	3.5	2.6	American robin (insectivore)	**1.3**
Vanadium	12	0.025	Plant	**480**
Zinc	113.4	48	American robin (insectivore)	**2.4**
Organic Chemicals (mg/kg)				
Acenaphthene	0.025	0.25	Plant	0.10
Acenaphthylene	0.014	120	Montane shrew	0.00012
Acetone	0.0050	1.2	Deer mouse	0.0042
Anthracene	0.029	6.8	Plant	0.0043
Benzo(a)anthracene	0.039	3.0	Montane shrew	0.013
Benzo(a)pyrene	0.18	53	Montane shrew	0.0034
Benzo(b)fluoranthene	0.16	18	Plant	0.0089
Benzo(g,h,i)perylene	0.14	24	Montane shrew	0.0058
Benzo(k)fluoranthene	0.046	62	Montane shrew	0.00074
Benzoic acid	0.61	1.0	Montane shrew	**0.61**
Bis(2-ethylhexyl)phthalate	0.20	0.020	American robin (insectivore)	**10**
Chloroform	0.00025	8.0	Deer mouse	0.000031
Chrysene	0.036	2.4	Montane shrew	0.015
Di-n-butylphthalate	0.25	0.011	American robin (insectivore)	**23**
Fluoranthene	0.050	10	Earthworm	0.0050
Fluorene	0.015	3.7	Earthworm	0.0041
Indeno(1,2,3-cd)pyrene	0.10	62	Montane shrew	0.0016
Naphthalene	0.015	1.0	Plant	0.015
Phenanthrene	0.037	5.5	Earthworm	0.0067

Table H-5.3-37 (continued)

COPC	EPC	ESL	Receptor	HQ
Pyrene	0.053	10	Earthworm	0.0053
2,3,7,8-TCDD equivalent	0.000000043	0.00000029	Montane shrew	0.15
Tetrachloroethene	0.00025	0.18	Montane shrew	0.0014
Toluene	0.00085	23	Montane shrew	0.000037
Radionuclides (pCi/g)				
Americium-241	0.086	44	Earthworm	0.0020
Cesium-137	0.24	680	Red fox	0.00035
Plutonium-238	0.036	44	Earthworm	0.00082
Plutonium-239/240	1.6	47	Earthworm	0.034
Tritium	3.8	36000	Plant	0.00011
Uranium-234	1.6	51	Earthworm	0.031
Uranium-235/236	0.087	55	Earthworm	0.0016
Uranium-238	1.5	55	Earthworm	0.027

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-38
Hazard Index Analysis for SWMU 21-024(h)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	1.1	na*	na	na	na	na	**2.3**	**0.39**	0.014	**22**	**4.3**	0.025
Arsenic	4.1	0.026	0.0037	0.098	0.23	0.16	0.13	0.026	**0.60**	0.23	0.27	0.0051
Barium	73	0.0066	0.0020	0.089	0.073	0.078	0.040	0.022	0.22	**0.66**	0.056	0.0018
Cadmium	0.63	**0.31**	0.0011	0.14	**2.2**	**1.2**	**1.2**	0.063	0.0045	0.020	**2.3**	0.0012
Chromium	15	0.0020	0.00042	0.0081	0.019	0.014	0.0081	0.0012	**6.5**	**6.4**	0.020	0.00051
Copper	82	**0.75**	0.051	**2.2**	**5.5**	**3.7**	**1.3**	0.30	**1.0**	**1.2**	**2.2**	0.022
Cyanide (total)	0.43	**0.91**	**0.74**	**4.3**	**4.3**	**4.3**	0.0013	0.00058	na	na	0.0014	0.00019
Lead	62	**0.52**	0.077	**3.0**	**4.4**	**3.9**	**0.52**	0.17	0.037	**0.52**	**0.86**	0.017
Mercury	6.5	**79**	**23**	**93**	**500**	**296**	**2.2**	0.30	**130**	0.19	**3.8**	0.14
Molybdenum	0.72	0.0055	0.00042	0.038	0.042	0.040	na	na	na	**0.36**	na	na
Nickel	4.6	0.029	0.0016	0.029	0.22	0.12	0.23	0.0091	0.016	0.12	**0.47**	0.0038
Selenium	0.98	0.18	0.010	**0.98**	**1.3**	**1.1**	**1.2**	**0.47**	0.24	**1.9**	**1.5**	0.012
Silver	3.5	0.19	0.0042	**0.32**	**1.3**	**0.82**	0.15	0.024	na	0.0063	0.25	0.00086
Vanadium	12	0.14	0.068	**1.3**	**1.7**	**1.5**	0.024	0.0077	na	**480**	0.083	0.0035
Zinc	113.4	**0.35**	0.047	**0.32**	**2.4**	**1.3**	**0.67**	0.063	**0.95**	**0.71**	**1.2**	0.019
Organic Chemicals (mg/kg)												
Benzoic acid	0.61	na	na	na	na	na	**0.47**	0.15	na	na	**0.61**	0.0018

Table H-5.3-38 (continued)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Bis(2-ethylhexyl)phthalate	0.20	**4.5**	**6.1**	0.010	**10**	**5.1**	0.18	0.000075	na	na	**0.34**	0.17
Di-n-butylphthalate	0.25	**3.6**	**1.0**	**0.64**	**23**	**12**	0.00067	0.000016	na	0.0016	0.0014	0.000050
HI		**91**	**31**	**106**	**557**	**331**	**11**	**2**	**140**	**514**	**18**	0.4

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-39
Minimum ESL Comparison for SWMU 21-024(i)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.6	0.05	Plant	**32**
Arsenic	3.6	6.8	Earthworm	**0.53**
Barium	107	110	Plant	**0.97**
Chromium	13	2.3	Earthworm	**5.7**
Copper	8.9	15	American robin (insectivore)	**0.59**
Lead	40	14	American robin (insectivore)	**2.9**
Lithium	15	2	Plant	**7.5**
Mercury	3.8	0.013	American robin (insectivore)	**292**
Selenium	0.51	0.52	Plant	**0.98**
Strontium	223	96	Deer mouse	**2.3**
Zinc	97	48	American robin (insectivore)	**2.0**
Organic Chemicals (mg/kg)				
Acenaphthene	0.044	0.25	Plant	0.18
Acetone	0.065	1.2	Deer mouse	0.054
Anthracene	0.045	6.8	Plant	0.0066
Aroclor-1254	0.16	0.041	American robin (insectivore)	**3.9**
Aroclor-1260	0.20	0.14	Red fox	**1.4**
Benzo(a)anthracene	0.082	3	Montane shrew	0.027
Benzo(a)pyrene	0.074	53	Montane shrew	0.0014
Benzo(b)fluoranthene	0.078	18	Plant	0.0043
Benzo(k)fluoranthene	0.078	62	Montane shrew	0.0013
Benzoic acid	0.18	1	Montane shrew	0.18
Bis(2-ethylhexyl)phthalate	0.055	0.02	American robin (insectivore)	**2.8**
Butanone[2-]	0.018	360	Deer mouse	0.000050
Chrysene	0.089	2.4	Montane shrew	0.037
DDT[4,4'-]	0.0028	0.044	Montane shrew	0.064
Di-n-butylphthalate	0.043	0.011	American robin (insectivore)	**3.9**
Fluoranthene	0.57	10	Earthworm	0.057
Phenanthrene	0.66	5.5	Earthworm	0.12
Pyrene	0.52	10	Earthworm	0.052
Toluene	0.0060	23	Montane shrew	0.00026
Radionuclides (pCi/g)				
Americium-241	0.062	44	Earthworm	0.0014
Cesium-137	0.23	680	Red fox	0.00034
Plutonium-239/240	0.69	47	Earthworm	0.015
Tritium	48	36000		0.0013

Table H-5.3-39 (continued)

COPC	EPC	ESL	Receptor	HQ
Uranium-234	2.4	51	Earthworm	0.047
Uranium-235/236	0.12	55	Earthworm	0.0022
Uranium-238	1.5	55	Earthworm	0.027

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-40
Hazard Index Analysis for SWMU 21-024(i)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	1.6	na*	na	na	na	na	**3.2**	**0.54**	0.020	**32**	**6.0**	0.035
Arsenic	3.6	0.023	0.0033	0.086	0.20	0.14	0.11	0.023	**0.53**	0.20	0.24	0.0045
Barium	107	0.0097	0.0029	0.13	0.11	0.12	0.059	0.032	**0.32**	**0.97**	0.082	0.0026
Chromium	13	0.0017	0.00035	0.0068	0.015	0.012	0.0068	0.00099	**5.7**	**5.3**	0.017	0.00043
Copper	8.9	0.081	0.0056	0.24	**0.59**	**0.41**	0.14	0.033	0.11	0.13	0.24	0.0024
Lead	40	**0.33**	0.049	**1.9**	**2.9**	**2.5**	**0.33**	0.11	0.023	**0.33**	**0.55**	0.011
Lithium	15	na	na	na	na	na	0.15	0.059	na	**7.5**	**0.39**	0.017
Mercury	3.8	**47**	**14**	**55**	**292**	**174**	**1.3**	0.17	**76**	0.11	**2.2**	0.083
Selenium	0.51	0.091	0.0052	**0.51**	**0.68**	**0.58**	**0.61**	0.24	0.12	**0.98**	**0.77**	0.0060
Strontium	223	na	na	na	na	na	**2.3**	**2.0**	na	na	**0.34**	0.012
Zinc	97	0.30	0.040	0.28	**2.0**	**1.1**	**0.57**	0.054	**0.81**	**0.61**	**0.99**	0.016
Organic Chemicals (mg/kg)												
Aroclor-1254	0.16	**0.93**	**0.72**	0.12	**3.9**	**2.0**	0.18	0.0030	na	0.00099	**0.36**	**1.1**
Aroclor-1260	0.20	0.055	0.044	0.0044	0.23	0.12	0.010	0.000068	na	na	0.020	**1.4**
Bis(2-ethylhexyl)phthalate	0.055	**1.2**	**1.7**	0.0028	**2.8**	**1.4**	0.050	0.000020	na	na	0.093	0.046
Di-n-butylphthalate	0.043	**0.64**	0.18	0.11	**3.9**	**2.1**	0.00012	0.0000027	na	0.00027	0.00024	0.0000086
HI		**51**	**17**	**58**	**309**	**184**	**9**	**3**	**84**	**48**	**12**	**3**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available

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Table H-5.3-41
Minimum ESL Comparison for SWMU 21-024(j)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Arsenic	3.2	6.8	Earthworm	**0.47**
Barium	74	110	Plant	**0.67**
Chromium	7.4	2.3	Earthworm	**3.2**
Copper	5.4	15	American robin (insectivore)	**0.36**
Lead	14	14	American robin (insectivore)	**1.0**
Manganese	330	220	Plant	**1.5**
Nickel	5.2	9.7	Montane shrew	**0.54**
Selenium	7.1	0.52	Plant	**14**
Zinc	197.9	48	American robin (insectivore)	**4.1**
Organic Chemicals (mg/kg)				
Acenaphthene	0.048	0.25	Plant	0.19
Anthracene	0.074	6.8	Plant	0.011
Aroclor-1254	0.080	0.041	American robin (insectivore)	**2.0**
Aroclor-1260	0.065	0.14	Red fox	**0.46**
Benzo(a)anthracene	0.15	3	Montane shrew	0.050
Benzo(a)pyrene	0.10	53	Montane shrew	0.0019
Benzo(b)fluoranthene	0.063	18	Plant	0.0035
Benzo(g,h,i)perylene	0.11	24	Montane shrew	0.0046
Bis(2-ethylhexyl)phthalate	0.088	0.02	American robin (insectivore)	**4.4**
Chloroform	0.00028	8	Deer mouse	0.000035
Chrysene	0.066	2.4	Montane shrew	0.028
Fluoranthene	0.077	10	Earthworm	0.0077
Fluorene	0.036	3.7	Earthworm	0.010
Indeno(1,2,3-cd)pyrene	0.087	62	Montane shrew	0.0014
Methylene Chloride	0.0036	2.6	Deer mouse	0.0014
Naphthalene	0.012	1	Plant	0.012
Phenanthrene	0.059	5.5	Earthworm	0.011
Pyrene	0.074	10	Earthworm	0.0074
Toluene	0.0018	23	Montane shrew	0.000078
Radionuclides (pCi/g)				
Americium-241	0.15	44	Earthworm	0.0034
Cesium-137	0.33	680	Red fox	0.00049
Plutonium-239/240	0.096	47	Earthworm	0.0020
Tritium	0.24	36000	Plant	0.0000067
Uranium 235/236	0.43	55	Earthworm	0.0078
Uranium-234	7.7	51	Earthworm	0.15

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-42
Hazard Index Analysis for SWMU 21-024(j)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Arsenic	3.2	0.020	0.0029	0.076	0.18	0.12	0.100	0.020	**0.47**	0.18	0.21	0.0039
Barium	74	0.0067	0.0020	0.090	0.074	0.079	0.041	0.022	0.22	**0.67**	0.057	0.0018
Chromium	7.4	0.00097	0.00020	0.0039	0.0090	0.0068	0.0039	0.00057	**3.2**	**3.1**	0.0099	0.00025
Copper	5.4	0.049	0.0034	0.14	**0.36**	0.25	0.085	0.020	0.068	0.077	0.14	0.0014
Lead	14	0.12	0.017	**0.67**	**1.0**	**0.88**	0.12	0.038	0.0083	0.12	0.20	0.0038
Manganese	330	0.0095	0.0037	0.24	0.11	0.18	0.24	0.17	**0.74**	**1.5**	0.22	0.0081
Nickel	5.2	0.032	0.0018	0.032	0.25	0.14	0.26	0.010	0.018	0.14	**0.54**	0.0043
Selenium	7.1	**1.3**	0.073	**7.1**	**9.4**	**8.1**	**8.5**	**3.4**	**1.7**	**14**	**11**	0.084
Zinc	197.9	**0.62**	0.082	**0.57**	**4.1**	**2.3**	**1.2**	0.11	**1.6**	**1.2**	**2.0**	0.033
Organic Chemicals (mg/kg)												
Aroclor-1254	0.080	**0.47**	**0.36**	0.061	**2.0**	**1.0**	0.090	0.0015	na*	0.00050	0.18	**0.53**
Aroclor-1260	0.065	0.018	0.014	0.0014	0.074	0.038	0.0033	0.000022	na	na	0.0065	**0.46**
Bis(2-ethylhexyl)phthalate	0.088	**2.0**	**2.7**	0.0044	**4.4**	**2.2**	0.080	0.000033	na	na	0.15	0.073
HI		**5**	**3**	**9**	**22**	**15**	**11**	**4**	**8**	**21**	**15**	1

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-43
Minimum ESL Comparison for Consolidated Unit 21-024(l)-99

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Barium	115	110	Plant	**1.0**
Cadmium	0.34	0.27	Montane shrew	**1.3**
Chromium	10	2.3	Earthworm	**4.3**
Cobalt	4.5	13	Plant	**0.35**
Copper	11	15	American robin (insectivore)	**0.73**
Lead	149	14	American robin (insectivore)	**11**
Lithium	13	2.0	Plant	**6.5**
Mercury	0.10	0.013	American robin (insectivore)	**7.7**
Selenium	1.1	0.52	Plant	**2.1**
Zinc	123	48	American robin (insectivore)	**2.6**
Organic Chemicals (mg/kg)				
Acenaphthylene	0.012	120	Montane shrew	0.00010
Acenaphthene	0.15	0.25	Plant	**0.60**
Acetone	0.35	1.2	Deer mouse	0.29
Anthracene	0.44	6.8	Plant	0.065
Benzo(a)anthracene	1.0	3.0	Montane shrew	**0.33**
Benzo(a)pyrene	0.66	53	Montane shrew	0.012
Benzo(b)fluoranthene	1.4	18	Plant	0.078
Benzo(g,h,i)perylene	0.28	24	Montane shrew	0.012
Benzo(k)fluoranthene	0.24	62	Montane shrew	0.0039
Bis(2-ethylhexyl)phthalate	0.25	0.020	American robin (insectivore)	**13**
Chloroform	0.00022	8.0	Deer mouse	0.000028
Chrysene	1.04	2.4	Montane shrew	**0.43**
Dibenzofuran	0.22	6.1	Plant	0.036
Fluoranthene	2.6	10	Earthworm	0.26
Fluorene	0.13	3.7	Earthworm	0.035
Indeno(1,2,3-cd)pyrene	0.28	62	Montane shrew	0.0045
Methylene chloride	0.0041	2.6	Deer mouse	0.0016
Methylnaphthalene[2-]	0.04	2.5	Montane shrew	0.016
Naphthalene	0.17	1.0	Plant	0.17
Phenanthrene	2.0	5.5	Earthworm	**0.36**
Pyrene	2.2	10	Earthworm	0.22
Toluene	0.0014	23	Montane shrew	0.000061
Radionuclides (pCi/g)				
Americium-241	0.86	44	Earthworm	0.020
Cesium-137	0.19	680	Red fox	0.00028

Table H-5.3-43 (continued)

COPC	EPC	ESL	Receptor	HQ
Plutonium-238	1.0	44	Earthworm	0.023
Plutonium-239/240	18	47	Earthworm	**0.38**
Tritium	0.16	36000	Plant	0.0000044
Uranium-234	1.4	51	Earthworm	0.027
Uranium-235/236	0.077	55	Earthworm	0.0014

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-44
Hazard Index Analysis for Consolidated Unit 21-024(l)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Barium	115	0.010	0.0031	0.14	0.12	0.12	0.064	0.035	**0.35**	**1.0**	0.089	0.0028
Cadmium	0.34	0.17	0.00059	0.078	**1.2**	**0.64**	**0.67**	0.035	0.0025	0.011	**1.3**	0.00067
Chromium	10.26	0.0013	0.00028	0.0054	0.012	0.0093	0.0054	0.00079	**4.3**	**4.3**	0.014	0.00034
Cobalt	4.52	0.0049	0.0013	0.027	0.047	0.038	0.011	0.0025	na*	**0.35**	0.028	0.00084
Copper	11.24	0.10	0.0070	0.30	**0.73**	**0.51**	0.18	0.042	0.14	0.16	0.30	0.0030
Lead	149	**1.2**	0.18	**7.1**	**11**	**9.3**	**1.2**	**0.40**	0.088	**1.2**	**2.1**	0.040
Lithium	13	na	na	na	na	na	0.13	0.051	na	**6.5**	**0.33**	0.014
Mercury	0.10	**1.2**	**0.35**	**1.4**	**7.7**	**4.5**	0.033	0.0045	**2.0**	0.0029	0.058	0.0021
Selenium	1.10	0.20	0.011	**1.1**	**1.5**	**1.3**	**1.3**	**0.52**	0.27	**2.1**	**1.7**	0.013
Zinc	122.9	**0.38**	0.051	**0.35**	**2.6**	**1.4**	**0.72**	0.068	**1.0**	**0.77**	**1.3**	0.020
Organic Chemicals (mg/kg)												
Acenaphthene	0.15	na	na	na	na	na	0.00092	0.00030	na	**0.6**	0.0012	0.000024
Benzo(a)anthracene	1.033	na	na	na	na	na	0.30	0.17	na	0.057	**0.33**	0.032
Bis(2-ethylhexyl)phthalate	0.25	**5.6**	**7.6**	0.013	**13**	**6.3**	0.23	0.000093	na	na	**0.42**	0.21
Chrysene	1.0	na	na	na	na	na	**0.34**	0.16	na	na	**0.43**	0.042
Phenanthrene	2.01600000	na	na	na	na	na	0.13	0.034	**0.36**	na	0.20	0.0070
Radionuclides (pCi/g)												
Plutonium-239/240	17.50	0.00051	0.00011	0.0020	0.0083	0.0083	0.00012	0.00010	**0.38**	0.00011	0.00016	0.00053
HI		**9**	**8**	**11**	**38**	**24**	**5**	**2**	**9**	**17**	**9**	0.4

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-45
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-024(o)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0000049	0.01	4.9E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000012	0.01	1.2E-08
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.00000020	0.1	2.0E-08
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.00000018	0.1	1.8E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000043	0.0003	1.3E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000027	0.0003	8.1E-10
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00000033	0.3	9.9E-08
2,3,7,8-TCDD Equivalent			**2.1E-07**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-46
Minimum ESL Comparison for SWMU 21-024(o)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Chromium	10	2.3	Earthworm	**4.3**
Cyanide (total)	0.3	0.1	American robin (herbivore)	**3.0**
Lead	30	14	American robin (insectivore)	**2.1**
Selenium	0.60	0.52	Plant	**1.2**
Uranium	2.4	25	Plant	0.096
Zinc	102.2	48	American robin (insectivore)	**2.1**
Organic Chemicals (mg/kg)				
Acenaphthene	0.061	0.25	Plant	0.24
Acetone	0.0027	1.2	Deer mouse	0.0023
Anthracene	0.067	6.8	Plant	0.0099
Aroclor-1260	0.020	0.14	Red fox	0.14
Benzo(a)anthracene	0.18	3	Montane shrew	0.060
Benzo(a)pyrene	0.27	53	Montane shrew	0.0051
Benzo(b)fluoranthene	0.56	18	Plant	0.031
Benzo(g,h,i)perylene	0.24	24	Montane shrew	0.010
Benzo(k)fluoranthene	0.78	62	Montane shrew	0.013
Benzoic acid	0.59	1	Montane shrew	**0.59**
Bis(2-ethylhexyl)phthalate	0.12	0.02	American robin (insectivore)	**6.0**
Chrysene	0.17	2.4	Montane shrew	0.071
Fluoranthene	0.47	10	Earthworm	0.047
Fluorene	0.083	3.7	Earthworm	0.022
Hexachlorobenzene	0.089	0.079	American robin (insectivore)	**1.1**
Methylnaphthalene[2-]	0.052	2.5	Montane shrew	0.021
Naphthalene	0.10	1	Plant	0.10
Phenanthrene	0.26	5.5	Earthworm	0.047
Pyrene	0.49	10	Earthworm	0.049
2,3,7,8-TCDD equivalent	0.00000021	0.00000029	Montane shrew	**0.72**
Toluene	0.0057	23	Montane shrew	0.00025
Radionuclides (pCi/g)				
Americium-241	0.047	44	Earthworm	0.0011
Cesium-137	0.45	680	Red fox	0.00066
Plutonium-238	0.085	44	Earthworm	0.0019
Plutonium-239/240	1.9	47	Earthworm	0.040
Tritium	0.014	36000	Plant	0.00000039

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-47
Hazard Index Analysis for SWMU 21-024(o)

COPEC	EP (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Chromium	10	0.0013	0.00028	0.0054	0.012	0.0093	0.0054	0.00078	**4.3**	**4.2**	0.014	0.00034
Cyanide (total)	1.3	**0.60**	**0.48**	**3.0**	**2.8**	**2.8**	0.00082	0.00038	na*	na	0.00090	0.00013
Lead	30	0.25	0.038	**1.4**	**2.1**	**1.9**	0.25	0.082	0.018	0.25	**0.42**	0.0082
Selenium	0.60	0.11	0.0062	**0.60**	**0.80**	**0.69**	**0.72**	0.29	0.15	**1.2**	**0.91**	0.0071
Zinc	102.2	**0.32**	0.043	0.29	**2.1**	**1.2**	**0.60**	0.057	**0.85**	**0.64**	**1.0**	0.017
Organic Chemicals (mg/kg)												
Benzoic acid	0.59	na	na	na	na	na	**0.45**	0.14	na	na	**0.59**	0.0017
Bis(2-ethylhexyl)phthalate	0.12	**2.6**	**3.6**	0.0060	**6.0**	**3.0**	0.11	0.000044	na	na	0.20	0.099
Hexachlorobenzene	0.089	0.16	0.0011	0.00089	**1.1**	**0.59**	0.22	0.000064	0.0089	0.0089	**0.45**	0.00036
2,3,7,8-TCDD Equivalent	0.00000021	na	na	na	na	na	**0.37**	0.0044	0.000000042	na	**0.72**	0.18
HI		**4**	**4**	**5**	**15**	**10**	**3**	0.6	**5**	**6**	**4**	0.3

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-48
Dioxin/Furan TEF Calculations for
Ecological Receptors for Consolidated Unit 21-026(a)-99

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.0000016	0.01	1.6E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000010	0.0003	3.0E-09
2,3,7,8-TCDD Equivalent			**1.9E-08**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-49
Minimum ESL Comparison for Consolidated Unit 21-026(a)-99

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.21	0.050	Plant	**4.2**
Arsenic	2.9	6.8	Earthworm	**0.43**
Barium	130.6	110	Plant	**1.2**
Cadmium	1.6	0.27	Montane shrew	**5.9**
Chromium	39	2.3	Earthworm	**17**
Copper	77	15	American robin (insectivore)	**5.1**
Cyanide (total)	2.7	0.10	American robin (herbivore)	**27**
Lead	41	14	American robin (insectivore)	**2.9**
Mercury	3.0	0.013	American robin (insectivore)	**231**
Nickel	11	9.7	Montane shrew	**1.1**
Selenium	0.56	0.52	Plant	**1.1**
Silver	8.8	2.6	American robin (insectivore)	**3.4**
Uranium	3.2	25	Plant	0.13
Zinc	224.8	48	American robin (insectivore)	**4.7**
Organic Chemicals (mg/kg)				
Acenaphthene	0.28	0.25	Plant	**1.1**
Anthracene	0.65	6.8	Plant	0.096
Aroclor-1254	0.0044	0.041	American robin (insectivore)	0.11
Aroclor-1260	0.0031	0.14	Red fox	0.022
Benzo(a)anthracene	0.55	3.0	Montane shrew	0.18
Benzo(a)pyrene	0.42	53	Montane shrew	0.0079
Benzo(b)fluoranthene	0.55	18	Plant	0.031
Benzo(g,h,i)perylene	0.23	24	Montane shrew	0.0096
Benzo(k)fluoranthene	0.47	62	Montane shrew	0.0076
Benzoic acid	0.50	1.0	Montane shrew	**0.50**
Bis(2-ethylhexyl)phthalate	0.69	0.020	American robin (insectivore)	**35**
Butylbenzylphthalate	0.22	90	Montane shrew	0.0024
Chloroform	0.00025	8.0	Deer mouse	0.000031
Chrysene	0.57	2.4	Montane shrew	0.24
Dibenzo(a,h)anthracene	0.84	12	Montane shrew	0.070
Dibenzofuran	0.055	6.1	Plant	0.0090
Dichlorobenzene[1,4-]	0.064	0.88	Montane shrew	0.073
Di-n-butylphthalate	0.24	0.011	American robin (insectivore)	**22**
Di-n-octylphthalate	0.10	1.1	Montane shrew	0.091
Fluoranthene	0.60	10	Earthworm	0.060
Fluorene	0.17	3.7	Earthworm	0.046

Table H-5.3-49 (continued)

COPC	EPC	ESL	Receptor	HQ
Indeno(1,2,3-cd)pyrene	0.24	62	Montane shrew	0.0039
Phenanthrene	2.20	5.5	Earthworm	**0.40**
Pyrene	0.54	10	Earthworm	0.054
2,3,7,8-TCDD equivalent	0.000000019	0.00000029	Montane shrew	0.066
Xylene (total)	0.0015	1.4	Montane shrew	0.0011
Radionuclides (pCi/g)				
Americium-241	13	44	Earthworm	0.30
Cesium-137	0.23	680	Red fox	0.00034
Plutonium-238	0.96	44	Earthworm	0.022
Plutonium-239/240	19	47	Earthworm	**0.40**
Tritium	0.72	36000	Plant	0.000020
Uranium-234	5.6	51	Earthworm	0.11
Uranium-235/236	0.17	55	Earthworm	0.0031
Uranium-238	1.3	55	Earthworm	0.024

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-50
Hazard Index Analysis for Consolidated Unit 21-026(a)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	0.21	na*	na	na	na	na	**0.45**	0.074	0.0027	**4.2**	**0.82**	0.0048
Arsenic	2.9	0.018	0.0026	0.069	0.16	0.11	0.090	0.018	**0.43**	0.16	0.19	0.0036
Barium	130.6	0.012	0.0035	0.16	0.13	0.14	0.073	0.040	**0.40**	**1.2**	0.10	0.0032
Cadmium	1.6	**0.79**	0.0027	**0.36**	**5.5**	**2.9**	**3.1**	0.16	0.011	0.050	**5.9**	0.0031
Chromium	39	0.0050	0.0010	0.020	0.046	0.035	0.020	0.0030	**17**	**16**	0.051	0.0013
Copper	77	**0.70**	0.048	**2.0**	**5.1**	**3.5**	**1.2**	0.28	**0.96**	**1.1**	**2.0**	0.020
Cyanide (total)	2.7	**5.7**	**4.7**	**27**	**27**	**27**	0.0079	0.0036	na	na	0.0087	0.0012
Lead	41	**0.34**	0.051	**2.0**	**2.9**	**2.6**	**0.34**	0.11	0.024	**0.34**	**0.57**	0.011
Mercury	3.0	**37**	**11**	**43**	**231**	**137**	**1.0**	0.14	**60**	0.089	**1.8**	0.065
Nickel	11	0.072	0.0040	0.072	**0.55**	0.30	**0.57**	0.023	0.041	0.30	**1.1**	0.0096
Selenium	0.56	0.100	0.0058	**0.56**	**0.75**	**0.64**	**0.67**	0.27	0.14	**1.1**	**0.85**	0.0067
Silver	8.8	**0.47**	0.011	**0.80**	**3.4**	**2.1**	**0.37**	0.059	na	0.016	**0.63**	0.0022
Zinc	224.8	**0.70**	0.094	**0.64**	**4.7**	**2.6**	**1.3**	0.12	**1.9**	**1.4**	**2.3**	0.037
Organic Chemicals (mg/kg)												
Acenaphthene	0.28	na	na	na	na	na	0.0018	0.00057	na	**1.1**	0.0023	0.000045
Benzoic Acid	0.50	na	na	na	na	na	**0.39**	0.12	na	na	**0.50**	0.0014
Bis(2-ethylhexyl)phthalate	0.69	**15**	**21**	0.034	**35**	**17**	**0.63**	0.00026	na	na	**1.2**	**0.57**
Di-n-butylphthalate	0.24	**3.5**	**1**	**0.61**	**22**	**11**	0.00065	0.000015	na	0.0015	0.0013	0.000048

Table H-5.3-50 (continued)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Phenanthrene	2.2	na	na	na	na	na	0.15	0.037	**0.40**	na	0.22	0.0076
Radionuclides (pCi/g)												
Plutonium-239/240	19	0.00056	0.00012	0.0022	0.0091	0.0091	0.00013	0.00011	**0.40**	0.00012	0.00017	0.00058
HI		**64**	**38**	**77**	**338**	**207**	**10**	**2**	**82**	**27**	**18**	0.7

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-51
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-027(a)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.05050	0.01	5.1E-04
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.00367	0.01	3.7E-05
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	0.000355	0.01	3.6E-06
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	0.000636	0.1	6.4E-05
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	0.001360	0.1	1.4E-04
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.000438	0.1	4.4E-05
Hexachlorodibenzofuran[1,2,3,4,7,8-]	0.000125	0.1	1.3E-05
Hexachlorodibenzofuran[1,2,3,6,7,8-]	0.000101	0.1	1.0E-05
Hexachlorodibenzofuran[1,2,3,7,8,9-]	0.00008	0.1	8.0E-06
Hexachlorodibenzofuran[2,3,4,6,7,8-]	0.000210	0.1	2.1E-05
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.21200	0.0003	6.4E-05
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.01180	0.0003	3.5E-06
Pentachlorodibenzodioxin[1,2,3,7,8-]	0.000315	1	3.2E-04
Pentachlorodibenzofuran[1,2,3,7,8-]	0.00003	0.03	9.0E-07
Pentachlorodibenzofuran[2,3,4,7,8-]	0.00008	0.3	2.4E-05
Tetrachlorodibenzodioxin[2,3,7,8-]	0.00003	1	3.0E-05
Tetrachlorodibenzofuran[2,3,7,8-]	0.00000330	0.1	3.3E-07
		2,3,7,8-TCDD Equivalent	**1.3E-03**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-52
Minimum ESL Comparison for SWMU 21-027(a)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.54	0.05	Plant	**11**
Arsenic	4.6	6.8	Earthworm	**0.68**
Barium	90	110	Plant	**0.82**
Cadmium	1.5	0.27	Montane shrew	**5.6**
Chromium	360	2.3	Earthworm	**157**
Copper	46	15	American robin (insectivore)	**3.1**
Lead	24	14	American robin (insectivore)	**1.7**
Lithium	9.7	2	Plant	**4.9**
Mercury	0.30	0.013	American robin (insectivore)	**23**
Nickel	7.7	9.7	Montane shrew	**0.80**
Selenium	1.6	0.52	Plant	**3.1**
Strontium	20	96	Deer mouse	0.21
Vanadium	18	0.025	Plant	**720**
Zinc	235.9	48	American robin (insectivore)	**4.9**
Organic Chemicals (mg/kg)				
Acenaphthene	0.047	0.25	Plant	0.19
Acetone	0.027	1.2	Deer mouse	0.023
Anthracene	0.035	6.8	Plant	0.0051
Aroclor-1254	0.052	0.041	American robin (insectivore)	**1.3**
Aroclor-1260	0.028	0.14	Red fox	0.20
Benzo(a)anthracene	0.14	3	Montane shrew	0.047
Benzo(a)pyrene	0.39	53	Montane shrew	0.0074
Benzo(b)fluoranthene	0.26	18	Plant	0.014
Benzo(g,h,i)perylene	0.14	24	Montane shrew	0.0058
Benzo(k)fluoranthene	0.24	62	Montane shrew	0.0039
Bis(2-ethylhexyl)phthalate	0.29	0.02	American robin (insectivore)	**15**
Butanone[2-]	0.0058	360	Deer mouse	0.000016
Chrysene	0.16	2.4	Montane shrew	0.067
Di-n-butylphthalate	0.12	0.011	American robin (insectivore)	**11**
Fluoranthene	0.35	10	Earthworm	0.035
Fluorene	0.034	3.7	Earthworm	0.0092
Indeno(1,2,3-cd)pyrene	0.12	62	Montane shrew	0.0019
Naphthalene	0.014	1	Plant	0.014
Phenanthrene	0.14	5.5	Earthworm	0.025
Pyrene	0.32	10	Earthworm	0.032

Table H-5.3-52 (continued)

COPC	EPC	ESL	Receptor	HQ
2,3,7,8-TCDD equivalent	0.0013	0.00000029	Montane shrew	**4483**
Tetrachloroethene	0.0056	0.18	Montane shrew	0.031
Toluene	0.00065	23	Montane shrew	0.000028
Radionuclides (pCi/g)				
Americium-241	18	44	Earthworm	**0.41**
Cesium-137	0.46	680	Red fox	0.00068
Plutonium-238	40	44	Earthworm	**0.91**
Plutonium-239/240	82	47	Earthworm	**1.7**
Tritium	0.37	36000	Plant	0.000010
Uranium-234	20	51	Earthworm	**0.39**
Uranium-235/236	1.1	55	Earthworm	0.020
Uranium-238	1.6	55	Earthworm	0.029

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-53
Hazard Index Analysis for SWMU 21-027(a)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	0.54	na*	na	na	na	na	**1.1**	0.19	0.0069	**11**	**2.1**	0.012
Arsenic	4.6	0.029	0.0042	0.11	0.25	0.18	0.14	0.029	**0.68**	0.25	**0.31**	0.0057
Barium	90	0.0082	0.0024	0.11	0.090	0.097	0.050	0.027	0.27	**0.82**	0.069	0.0022
Cadmium	1.5	**0.73**	0.0025	**0.33**	**5.0**	**2.7**	**2.8**	0.15	0.010	0.045	**5.6**	0.0028
Chromium	360	0.047	0.0097	0.19	**0.43**	**0.33**	0.19	0.028	**157**	**150**	**0.48**	0.012
Copper	46	**0.42**	0.029	**1.2**	**3.1**	**2.1**	**0.72**	0.17	**0.58**	**0.66**	**1.2**	0.012
Lead	24	0.20	0.030	**1.1**	**1.7**	**1.5**	0.20	0.065	0.014	0.20	**0.33**	0.0065
Lithium	9.7	na	na	na	na	na	0.097	0.039	na	**4.9**	0.26	0.011
Mercury	0.30	**3.6**	**1.1**	**4.2**	**23**	**13**	0.098	0.013	**5.9**	0.0087	0.17	0.0064
Nickel	7.7	0.048	0.0027	0.048	**0.37**	0.20	**0.39**	0.015	0.028	0.20	**0.80**	0.0065
Selenium	1.6	0.28	0.016	**1.6**	**2.1**	**1.8**	**1.9**	**0.76**	**0.39**	**3.1**	**2.4**	0.019
Vanadium	18	0.21	0.11	**2.0**	**2.7**	**2.4**	0.037	0.012	na	**720**	0.13	0.0054
Zinc	235.9	**0.74**	0.098	**0.67**	**4.9**	**2.8**	**1.4**	0.13	**2.0**	**1.5**	**2.4**	0.039
Organic Chemicals (mg/kg)												
Aroclor-1254	0.052	0.30	0.24	0.040	**1.3**	**0.65**	0.059	0.00100	na	0.00032	0.12	**0.35**
Bis(2-ethylhexyl)phthalate	0.29	**6.4**	**8.7**	0.014	**15**	**7.2**	0.26	0.00011	na	na	**0.49**	0.24
Di-n-butylphthalate	0.12	**1.8**	**0.50**	**0.31**	**11**	**5.7**	0.00032	0.0000075	na	0.00075	0.00067	0.000024
2,3,7,8-TCDD Equivalent	0.0013	na	na	na	na	na	**2198**	**27**	0.00025	na	**4483**	**1062**

Table H-5.3-53 (continued)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Radionuclides (pCi/g)												
Americium-241	18	0.00051	0.00029	0.0014	0.0044	0.0044	0.00055	0.00055	**0.41**	0.00084	0.00057	0.00068
Plutonium-238	40	0.0013	0.00031	0.0048	0.020	0.019	0.00036	0.00033	**0.91**	0.00036	0.00043	0.0013
Plutonium-239/240	82	0.0024	0.00051	0.0095	0.039	0.039	0.00055	0.00048	**1.7**	0.00051	0.00074	0.0025
Uranium-234	20	0.00017	0.00011	0.00042	0.0015	0.0015	0.00022	0.00021	**0.39**	0.0015	0.00022	0.00045
HI		**15**	**11**	**12**	**71**	**41**	**2207**	**29**	**170**	**893**	**4500**	**1063**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.3-54
Dioxin/Furan TEF Calculations for Ecological Receptors for SWMU 21-027(c)

COPC	EPC 0–5 ft (mg/kg)	TEF*	Equivalency Calculation
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	0.000005	0.01	5.0E-08
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	0.0000012	0.01	1.2E-08
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	0.00000019	0.1	1.9E-08
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	0.000050	0.0003	1.5E-08
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	0.0000022	0.0003	6.6E-10
2,3,7,8-TCDD Equivalent			**9.7E-08**

*TEFs from www.who.int/ipcs/assessment/tef_update/en/print.html.

Table H-5.3-55
Minimum ESL Comparison for SWMU 21-027(c)

COPC	EPC	ESL	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Barium	93	110	Plant	**0.85**
Chromium	17	2.3	Earthworm	**7.4**
Cobalt	2.7	13	Plant	0.21
Copper	14	15	American robin (insectivore)	**0.93**
Lead	58	14	American robin (insectivore)	**4.1**
Mercury	0.090	0.013	American robin (insectivore)	**6.9**
Selenium	0.91	0.52	Plant	**1.8**
Uranium	1.2	25	Plant	0.048
Zinc	84	48	American robin (insectivore)	**1.8**
Organic Chemicals (mg/kg)				
Acenaphthene	0.081	0.25	Plant	**0.32**
Acenaphthylene	0.021	120	Montane shrew	0.00018
Acetone	0.011	1.2	Deer mouse	0.0092
Anthracene	0.11	6.8	Plant	0.016
Aroclor-1260	0.0016	0.14	Red fox	0.011
Benzo(a)anthracene	0.57	3	Montane shrew	0.19
Benzo(a)pyrene	0.33	53	Montane shrew	0.0062
Benzo(b)fluoranthene	0.70	18	Plant	0.039
Benzo(g,h,i)perylene	1.12	24	Montane shrew	0.047
Benzo(k)fluoranthene	0.23	62	Montane shrew	0.0037
Benzoic acid	0.31	1	Montane shrew	**0.31**
Bis(2-ethylhexyl)phthalate	18	0.02	American robin (insectivore)	**900**
Chrysene	0.38	2.4	Montane shrew	0.16
Dibenzofuran	0.25	6.1	Plant	0.041
Di-n-butylphthalate	0.13	0.011	American robin (insectivore)	**12**
Fluoranthene	0.68	10	Earthworm	0.068
Fluorene	0.079	3.7	Earthworm	0.021
Indeno(1,2,3-cd)pyrene	0.19	62	Montane shrew	0.0031
Methylene chloride	0.0070	2.6	Deer mouse	0.0027
Methylnaphthalene[2-]	0.079	2.5	Montane shrew	0.032
Naphthalene	0.22	1	Plant	0.22
Phenanthrene	0.52	5.5	Earthworm	0.095
Pyrene	1.2	10	Earthworm	0.12
2,3,7,8-TCDD equivalent	0.000000097	0.00000029	Montane shrew	**0.33**
Toluene	0.0018	23	Montane shrew	0.000078
Trichloroethene	0.0019	42	Montane shrew	0.000045

Table H-5.3-55 (continued)

COPC	EPC	ESL	Receptor	HQ
Radionuclides (pCi/g)				
Americium-241	0.660	44	Earthworm	0.015
Cesium-134	0.141	320	Red fox	0.00044
Cesium-137	0.263	680	Red fox	0.00039
Plutonium-238	0.092	44	Earthworm	0.0021
Plutonium-239/240	7.841	47	Earthworm	0.17
Strontium-90	2.970	560	Red fox	0.0053
Tritium	0.026	36000	Plant	0.00000072
Uranium-234	1.645	51	Earthworm	0.032

Note: Bolded values indicate HQ greater than 0.3.

Table H-5.3-56
Hazard Index Analysis for SWMU 21-027(c)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omniore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Barium	93	0.0084	0.0025	0.11	0.093	0.100	0.052	0.028	0.28	**0.85**	0.071	0.0023
Chromium	17	0.0023	0.00047	0.0091	0.021	0.016	0.0091	0.0013	**7.4**	**7.2**	0.023	0.00058
Copper	14	0.13	0.0087	**0.36**	**0.93**	**0.63**	0.22	0.051	0.17	0.20	**0.36**	0.0036
Lead	58	**0.48**	0.071	**2.7**	**4.1**	**3.6**	**0.48**	0.16	0.034	**0.48**	**0.80**	0.016
Mercury	0.090	**1.1**	**0.32**	**1.3**	**6.9**	**4.1**	0.030	0.0041	**1.8**	0.0027	0.053	0.0020
Selenium	0.91	0.16	0.0094	**0.91**	**1.2**	**1.0**	**1.1**	**0.43**	0.22	**1.8**	**1.4**	0.011
Zinc	84	0.26	0.035	0.24	**1.8**	**0.99**	**0.49**	0.047	**0.70**	**0.52**	**0.86**	0.014
Organic Chemicals (mg/kg)												
Acenaphthene	0.081	na*	na	na	na	na	0.00050	0.00016	na	**0.32**	0.00067	0.000013
Benzoic acid	0.31	na	na	na	na	na	0.24	0.073	na	**na**	**0.31**	0.00087
Bis(2-ethylhexyl)phthalate	18	**394**	**537**	**0.89**	**900**	**444**	**16**	0.0066	na	**na**	**30**	**15**
Di-n-butylphthalate	0.13	**1.8**	**0.52**	**0.32**	**12**	**6.0**	0.00034	0.0000078	na	0.00078	0.00069	0.000025
2,3,7,8-TCDD Equivalent	0.000000097	na	na	na	na	na	0.17	0.0020	0.000000020	**na**	**0.33**	0.082
HI		**398**	**538**	**7**	**927**	**460**	**19**	0.8	**11**	**11**	**34**	**15**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-1
Comparison of EPCs to
Background Concentrations for AOC 21-002(b)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Arsenic	3.805	0.3–9.3	0.25–5
Barium	92.5	21–410	1.4–51.6
Cadmium	0.403	0.2–2.6	0.1–1.5
Chromium	14.85	1.9–36.5	0.25–13
Cyanide (total)	0.4	0.5*	0.5*
Lead	132.3	2–28	1.6–15.5
Selenium	4.694	0.1–1.7	0.1–0.105
Zinc	102.4	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-2
Comparison of EPCs to
Background Concentrations for Consolidated Unit 21-006(c)-99

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	1.33	0.1–1	0.05–0.4
Barium	70.96	21–410	1.4–51.6
Chromium	6.163	1.9–36.5	0.25–13
Copper	8.834	0.25–16	0.25–6.2
Cyanide (total)	0.106	0.5*	0.5*
Lead	15.83	2–28	1.6–15.5
Mercury	0.0623	0.05–0.1	0.1*
Nickel	5.629	1–29	0.5–7
Selenium	1.744	0.1–1.7	0.1–0.105
Zinc	379.8	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-3
Comparison of EPCs to
Background Concentrations for SWMU 21-009

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Barium	153	21–410	1.4–51.6
Chromium	14.37	1.9–36.5	0.25–13
Cyanide (total)	0.315	0.5*	0.5*
Lead	16.74	2–28	1.6–15.5
Selenium	10.63	0.1–1.7	0.1–0.105
Zinc	49.36	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-4
Comparison of EPCs to
Background Concentrations for SWMU 21-012(b)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	0.193	0.1–1	0.05–0.4
Arsenic	2.823	0.3–9.3	0.25–5
Barium	77.73	21–410	1.4–51.6
Cadmium	0.296	0.2–2.6	0.1–1.5
Calcium	3571	500–14000	200–2230
Chromium	13.29	1.9–36.5	0.25–13
Copper	135.7	0.25–16	0.25–6.2
Cyanide (total)	0.199	0.5*	0.5*
Iron	10365	3300–36000	190–19500
Lead	17.8	2–28	1.6–15.5
Mercury	1.377	0.05–0.1	0.1*
Nickel	5.397	1–29	0.5–7
Selenium	0.974	0.1–1.7	0.1–0.105
Zinc	96.56	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-5
Comparison of EPCs to
Background Concentrations for SWMU 21-013(c)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Arsenic	3.802	0.3–9.3	0.25–5
Barium	108.7	21–410	1.4–51.6
Cadmium	0.214	0.2–2.6	0.1–1.5
Chromium	10.42	1.9–36.5	0.25–13
Lead	14.13	2–28	1.6–15.5
Mercury	0.319	0.05–0.1	0.1*
Nickel	6.66	1–29	0.5–7
Selenium	2.089	0.1–1.7	0.1–0.105
Vanadium	23.07	4–56.5	0.25–21

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-6
Comparison of EPCs to
Background Concentrations for SWMU 21-022(h)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	0.184	0.1–1	0.05–0.4
Barium	78.15	21–410	1.4–51.6
Cadmium	2.951	0.2–2.6	0.1–1.5
Calcium	14228	500–14000	200–2230
Chromium	104.6	1.9–36.5	0.25–13
Copper	181.1	0.25–16	0.25–6.2
Cyanide (total)	0.231	0.5*	0.5*
Lead	1675	2–28	1.6–15.5
Mercury	0.775	0.05–0.1	0.1*
Nickel	7.178	1–29	0.5–7
Selenium	0.407	0.1–1.7	0.1–0.105
Silver	20.11	1*	0.2–1.9
Zinc	561	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-7
Comparison of EPCs to
Background Concentrations for Consolidated Unit 21-023(a)-99

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	0.311	0.1–1	0.05–0.4
Arsenic	3.65	0.3–9.3	0.25–5
Barium	89.95	21–410	1.4–51.6
Calcium	9480	500–14000	200–2230
Chromium	11.54	1.9–36.5	0.25–13
Copper	5.204	0.25–16	0.25–6.2
Lead	394.8	2–28	1.6–15.5
Manganese	238.6	76–1100	22–752
Mercury	0.491	0.05–0.1	0.1*
Selenium	5.802	0.1–1.7	0.1–0.105
Vanadium	11.39	4–56.5	0.25–21

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-8
Comparison of EPCs to
Background Concentrations for SWMU 21-024(a)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Barium	71.23	21–410	1.4–51.6
Chromium	9.542	1.9–36.5	0.25–13
Copper	32.22	0.25–16	0.25–6.2
Lead	18.52	2–28	1.6–15.5
Mercury	0.26	0.05–0.1	0.1*
Nickel	4.246	1–29	0.5–7
Selenium	1.164	0.1–1.7	0.1–0.105
Vanadium	11.44	4–56.5	0.25–21

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-9
Comparison of EPCs to
Background Concentrations for SWMU 21-024(b)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Arsenic	2.713	0.3–9.3	0.25–5
Barium	93.42	21–410	1.4–51.6
Chromium	18.14	1.9–36.5	0.25–13
Copper	21.71	0.25–16	0.25–6.2
Cyanide (total)	0.373	0.5*	0.5*
Lead	19.16	2–28	1.6–15.5
Mercury	2.345	0.05–0.1	0.1*
Nickel	7.331	1–29	0.5–7
Selenium	1.039	0.1–1.7	0.1–0.105
Silver	7.978	1*	0.2–1.9
Zinc	59.02	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-10
Comparison of EPCs to
Background Concentrations for SWMU 21-024(d)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Arsenic	3.526	0.3–9.3	0.25–5
Barium	77.82	21–410	1.4–51.6
Chromium	34.22	1.9–36.5	0.25–13
Copper	114	0.25–16	0.25–6.2
Cyanide (total)	0.456	0.5*	0.5*
Lead	35.93	2–28	1.6–15.5
Manganese	322.6	76–1100	22–752
Mercury	0.404	0.05–0.1	0.1*
Nickel	13.14	1–29	0.5–7
Selenium	1.796	0.1–1.7	0.1–0.105
Silver	8.982	1*	0.2–1.9
Uranium	6.537	0.2–3.6	0.2–5
Zinc	80.24	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-11
Comparison of EPCs to
Background Concentrations for SWMU 21-024(e)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	0.501	0.1–1	0.05–0.4
Barium	99.25	21–410	1.4–51.6
Cadmium	2.746	0.2–2.6	0.1–1.5
Chromium	9.02	1.9–36.5	0.25–13
Copper	25.01	0.25–16	0.25–6.2
Cyanide (total)	4.35	0.5*	0.5*
Lead	38.84	2–28	1.6–15.5
Mercury	0.507	0.05–0.1	0.1*
Selenium	1.166	0.1–1.7	0.1–0.105
Uranium	10.98	0.2–3.6	0.2–5
Zinc	60.93	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-12
Comparison of EPCs to
Background Concentrations for SWMU 21-024(g)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Arsenic	3.14	0.3–9.3	0.25–5
Barium	58.32	21–410	1.4–51.6
Cadmium	0.368	0.2–2.6	0.1–1.5
Chromium	11.56	1.9–36.5	0.25–13
Copper	6.296	0.25–16	0.25–6.2
Cyanide (total)	0.247	0.5*	0.5*
Iron	9037	3300–36000	190–19500
Lead	24.37	2–28	1.6–15.5
Mercury	0.18	0.05–0.1	0.1*
Nickel	4.968	1–29	0.5–7
Selenium	0.983	0.1–1.7	0.1–0.105
Zinc	66.94	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-13
Comparison of EPCs to
Background Concentrations for SWMU 21-024(h)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	1.123	0.1–1	0.05–0.4
Arsenic	4.119	0.3–9.3	0.25–5
Barium	72.72	21–410	1.4–51.6
Cadmium	0.627	0.2–2.6	0.1–1.5
Chromium	15.36	1.9–36.5	0.25–13
Copper	82.1	0.25–16	0.25–6.2
Cyanide (total)	0.427	0.5*	0.5*
Lead	62.19	2–28	1.6–15.5
Mercury	6.502	0.05–0.1	0.1*
Nickel	4.574	1–29	0.5–7
Selenium	0.984	0.1–1.7	0.1–0.105
Silver	3.536	1*	0.2–1.9
Vanadium	11.56	4–56.5	0.25–21
Zinc	113.4	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-14
Comparison of EPCs to
Background Concentrations for SWMU 21-024(i)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	1.553	0.1–1	0.05–0.4
Arsenic	3.62	0.3–9.3	0.25–5
Barium	107	21–410	1.4–51.6
Calcium	11618	500–14000	200–2230
Chromium	12.83	1.9–36.5	0.25–13
Copper	8.93	0.25–16	0.25–6.2
Lead	39.91	2–28	1.6–15.5
Mercury	3.817	0.05–0.1	0.1*
Selenium	0.507	0.1–1.7	0.1–0.105
Zinc	97.1	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-15
Comparison of EPCs to
Background Concentrations for SWMU 21-024(j)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Arsenic	3.197	0.3–9.3	0.25–5
Barium	73.64	21–410	1.4–51.6
Chromium	7.443	1.9–36.5	0.25–13
Copper	5.418	0.25–16	0.25–6.2
Lead	14.04	2–28	1.6–15.5
Manganese	333.1	76–1100	22–752
Nickel	5.167	1–29	0.5–7
Selenium	7.061	0.1–1.7	0.1–0.105
Zinc	197.9	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

Table H-5.4-16
Comparison of EPCs to
Background Concentrations for Consolidated Unit 21-024(l)-99

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Barium	115.3	21–410	1.4–51.6
Cadmium	0.343	0.2–2.6	0.1–1.5
Chromium	10.26	1.9–36.5	0.25–13
Cobalt	4.524	1–9.5	3.14*
Copper	11.24	0.25–16	0.25–6.2
Lead	149.1	2–28	1.6–15.5
Mercury	0.0987	0.05–0.1	0.1*
Selenium	1.096	0.1–1.7	0.1–0.105
Zinc	122.9	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.

* No summary statistics available; the BV was used.

Table H-5.4-17
Comparison of EPCs to
Background Concentrations for SWMU 21-024(o)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Chromium	10.19	1.9–36.5	0.25–13
Cyanide (total)	1.33	0.5*	0.5*
Lead	30.39	2–28	1.6–15.5
Selenium	0.599	0.1–1.7	0.1–0.105
Zinc	102.2	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-18
Comparison of EPCs to
Background Concentrations for Consolidated Unit 21-026(a)-99

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	0.214	0.1–1	0.05–0.4
Arsenic	2.884	0.3–9.3	0.25–5
Barium	130.6	21–410	1.4–51.6
Cadmium	1.585	0.2–2.6	0.1–1.5
Calcium	10465	500–14000	200–2230
Chromium	38.52	1.9–36.5	0.25–13
Copper	76.55	0.25–16	0.25–6.2
Cyanide (total)	2.7	0.5*	0.5*
Lead	41	2–28	1.6–15.5
Mercury	3.009	0.05–0.1	0.*[b]
Nickel	11.48	1–29	0.5–7
Selenium	0.559	0.1–1.7	0.1–0.105
Silver	8.849	1*	0.2–1.9
Vanadium	13.41	4–56.5	0.25–21
Zinc	224.8	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-19
Comparison of EPCs to
Background Concentrations for SWMU 21-027(a)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Antimony	0.538	0.1–1	0.05–0.4
Arsenic	4.587	0.3–9.3	0.25–5
Barium	90.33	21–410	1.4–51.6
Cadmium	1.451	0.2–2.6	0.1–1.5
Chromium	359.7	1.9–36.5	0.25–13
Copper	46.36	0.25–16	0.25–6.2
Lead	24.03	2–28	1.6–15.5
Mercury	0.295	0.05–0.1	0.1*
Nickel	7.749	1–29	0.5–7
Selenium	1.589	0.1–1.7	0.1–0.105
Vanadium	17.96	4–56.5	0.25–21
Zinc	235.9	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-20
Comparison of EPCs to
Background Concentrations for SWMU 21-027(c)

COPEC	EPC (mg/kg)	Soil Background Concentrations (mg/kg)	Tuff Background Concentrations (mg/kg)
Barium	92.73	21–410	1.4–51.6
Calcium	5434	500–14000	200–2230
Chromium	17.34	1.9–36.5	0.25–13
Copper	13.86	0.25–16	0.25–6.2
Lead	57.62	2–28	1.6–15.5
Mercury	0.0903	0.05–0.1	0.1*
Selenium	0.907	0.1–1.7	0.1–0.105
Zinc	83.9	14–75.5	5.5–65.6

Note: From LANL 1998, 059730.
* No summary statistics available; the BV was used.

Table H-5.4-21
PAUFs for Ecological Receptors for AOC 21-002(b)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.0000089
American Robin	0.42	16.8	0.0023
Deer Mouse	0.077	3	0.013
Desert Cottontail	3.1	124	0.00030
Montane Shrew	0.39	15.6	0.0024
Red Fox	1038	41,520	0.00000091

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.038 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

Table H-5.4-22
PAUFs for Ecological Receptors for Consolidated Unit 21-006(c)-99

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000054
American Robin	0.42	16.8	0.014
Deer Mouse	0.077	3	0.076
Desert Cottontail	3.1	124	0.0018
Montane Shrew	0.39	15.6	0.015
Red Fox	1038	41,520	0.0000055

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.23 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

Table H-5.4-23
PAUFs for Ecological Receptors for SWMU 21-009

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.0000033
American Robin	0.42	16.8	0.00083
Deer Mouse	0.077	3	0.0046
Desert Cottontail	3.1	124	0.00011
Montane Shrew	0.39	15.6	0.00089
Red Fox	1038	41,520	0.00000033

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.014 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

Table H-5.4-24
PAUFs for Ecological Receptors for SWMU 21-012(b)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000036
American Robin	0.42	16.8	0.0090
Deer Mouse	0.077	3	0.051
Desert Cottontail	3.1	124	0.0012
Montane Shrew	0.39	15.6	0.0097
Red Fox	1038	41,520	0.0000037

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.15 ha) divided by the population area. If a PAUF is greater than 1, no adjustment is made.

Table H-5.4-25
PAUFs for Ecological Receptors for SWMU 21-013(c)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.00029
American Robin	0.42	16.8	0.072
Deer Mouse	0.077	3	0.40
Desert Cottontail	3.1	124	0.0098
Montane Shrew	0.39	15.6	0.078
Red Fox	1038	41,520	0.000029

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (1.2 ha) divided by the population area. If a PAUF greater than 1 no adjustment is made.

Table H-5.4-26
PAUFs for Ecological Receptors for SWMU 21-022(h)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000013
American Robin	0.42	16.8	0.0032
Deer Mouse	0.077	3	0.018
Desert Cottontail	3.1	124	0.00043
Montane Shrew	0.39	15.6	0.0034
Red Fox	1038	41,520	0.0000013

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.053 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-27
PAUFs for Ecological Receptors for Consolidated Unit 21-023(a)-99

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000025
American Robin	0.42	16.8	0.0063
Deer Mouse	0.077	3	0.035
Desert Cottontail	3.1	124	0.00085
Montane Shrew	0.39	15.6	0.0067
Red Fox	1038	41,520	0.0000025

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.105 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-28
PAUFs for Ecological Receptors for SWMU 21-024(a)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000016
American Robin	0.42	16.8	0.0041
Deer Mouse	0.077	3	0.023
Desert Cottontail	3.1	124	0.00055
Montane Shrew	0.39	15.6	0.0044
Red Fox	1038	41,520	0.0000016

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.069 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-29
PAUFs for Ecological Receptors for SWMU 21-024(b)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000019
American Robin	0.42	16.8	0.0047
Deer Mouse	0.077	3	0.026
Desert Cottontail	3.1	124	0.00064
Montane Shrew	0.39	15.6	0.0051
Red Fox	1038	41,520	0.0000019

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.079 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-30
PAUFs for Ecological Receptors for SWMU 21-024(d)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000038
American Robin	0.42	16.8	0.0096
Deer Mouse	0.077	3	0.054
Desert Cottontail	3.1	124	0.0013
Montane Shrew	0.39	15.6	0.010
Red Fox	1038	41,520	0.0000039

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.16 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-31
PAUFs for Ecological Receptors for SWMU 21-024(e)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000048
American Robin	0.42	16.8	0.012
Deer Mouse	0.077	3	0.068
Desert Cottontail	3.1	124	0.0016
Montane Shrew	0.39	15.6	0.013
Red Fox	1038	41,520	0.0000049

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.204 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-32
PAUFs for Ecological Receptors for SWMU 21-024(g)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000046
American Robin	0.42	16.8	0.012
Deer Mouse	0.077	3	0.065
Desert Cottontail	3.1	124	0.0016
Montane Shrew	0.39	15.6	0.013
Red Fox	1038	41,520	0.0000047

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.196 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-33
PAUFs for Ecological Receptors for SWMU 21-024(h)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000015
American Robin	0.42	16.8	0.0038
Deer Mouse	0.077	3	0.021
Desert Cottontail	3.1	124	0.00052
Montane Shrew	0.39	15.6	0.0041
Red Fox	1038	41,520	0.0000015

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.064 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-34
PAUFs for Ecological Receptors for SWMU 21-024(i)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000023
American Robin	0.42	16.8	0.0057
Deer Mouse	0.077	3	0.032
Desert Cottontail	3.1	124	0.00077
Montane Shrew	0.39	15.6	0.0062
Red Fox	1038	41,520	0.0000023

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.096 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-35
PAUFs for Ecological Receptors for SWMU 21-024(j)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000018
American Robin	0.42	16.8	0.0047
Deer Mouse	0.077	3	0.026
Desert Cottontail	3.1	124	0.00063
Montane Shrew	0.39	15.6	0.0050
Red Fox	1038	41,520	0.0000019

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.078 ha) divided by the population area. If a PAUF is greater than 1no adjustment is made.

Table H-5.4-36
PAUFs for Ecological Receptors for Consolidated Unit 21-024(l)-99

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000045
American Robin	0.42	16.8	0.011
Deer Mouse	0.077	3	0.064
Desert Cottontail	3.1	124	0.0016
Montane Shrew	0.39	15.6	0.012
Red Fox	1038	41,520	0.0000046

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.19 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-37
PAUFs for Ecological Receptors for SWMU 21-024(o)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000017
American Robin	0.42	16.8	0.0042
Deer Mouse	0.077	3	0.023
Desert Cottontail	3.1	124	0.00056
Montane Shrew	0.39	15.6	0.0045
Red Fox	1038	41,520	0.0000017

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.07 ha) divided by the population area. If a PAUF is greater than 1no adjustment is made.

Table H-5.4-38
PAUFs for Ecological Receptors for Consolidated Unit 21-026(a)-99

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000059
American Robin	0.42	16.8	0.015
Deer Mouse	0.077	3	0.083
Desert Cottontail	3.1	124	0.0020
Montane Shrew	0.39	15.6	0.016
Red Fox	1038	41,520	0.0000060

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.25 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-39
PAUFs for Ecological Receptors for SWMU 21-027(a)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000020
American Robin	0.42	16.8	0.0051
Deer Mouse	0.077	3	0.029
Desert Cottontail	3.1	124	0.00069
Montane Shrew	0.39	15.6	0.0055
Red Fox	1038	41,520	0.0000021

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.086 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-40
PAUFs for Ecological Receptors for SWMU 21-027(c)

Receptor	Home Range (ha)	Population Area (ha)[a]	PAUF[b]
American Kestrel	106	4240	0.000039
American Robin	0.42	16.8	0.0099
Deer Mouse	0.077	3	0.055
Desert Cottontail	3.1	124	0.0013
Montane Shrew	0.39	15.6	0.011
Red Fox	1038	41,520	0.0000040

[a] Values from EPA 1993, 059384.

[b] PAUF is calculated as the area of the site (0.17 ha) divided by the population area. If a PAUF is greater than 1 no adjustment is made.

Table H-5.4-41
Adjusted HQs and HIs for AOC 21-002(b)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Lead	130	0.0000098	0.0000015	0.014	0.021	0.019	0.014	0.00011	0.078	**1.1**	0.0045	0.000000033
Selenium	4.7	0.0000075	0.00000043	0.011	0.014	0.012	0.071	0.00068	**1.1**	**9.0**	0.017	0.000000051
Zinc	100	0.0000029	0.00000038	0.00066	0.0048	0.0027	0.0076	0.000017	**0.85**	**0.64**	0.0025	0.000000016
Organic Chemicals (mg/kg)												
Aroclor-1254	0.042	0.0000022	0.0000017	0.000072	0.0023	0.0012	0.00060	0.00000025	na*	0.00026	0.00023	0.00000025
Bis(2-ethylhexyl)phthalate	2.0	0.00039	0.00054	0.00022	0.22	0.11	0.023	0.00000022	na	na	0.0082	0.0000015
Di-n-butylphthalate	0.47	0.000062	0.000017	0.0027	0.096	0.050	0.000016	0.0000000090	na	0.0029	0.0000063	0.000000000086
2,3,7,8-TCDD equivalent	0.00000028	na	na	na	na	na	0.0061	0.0000018	0.000000056	na	0.0023	0.00000021
	Adjusted HI	0.0005	0.0006	0.03	0.4	0.2	0.1	0.0008	**2**	**11**	0.03	0.000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

Table H-5.4-42
Adjusted HQs and HIs for Consolidated Unit 21-006(c)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Zinc	380	0.000064	0.0000085	0.015	0.11	0.061	0.17	0.00039	**3.2**	**2.4**	0.057	0.00000035
Organic Chemicals (mg/kg)												
Benzo(a)anthracene	0.98	na*	na	na	na	na	0.022	0.00029	na	0.054	0.0048	0.00000017
Bis(2-ethylhexyl)phthalate	8.7	0.010	0.014	0.0059	**5.9**	**3.0**	**0.60**	0.0000059	na	na	0.22	0.000040
Chrysene	1.5	na	na	na	na	na	0.037	0.00042	na	na	0.0091	0.00000033
2,3,7,8-TCDD equivalent	0.00000071	na	na	na	na	na	0.093	0.000027	0.00000014	na	0.036	0.0000033
Radionuclides (pCi/g)												
Plutonium-239/240	19	0.000000030	0.0000000063	0.000030	0.00012	0.00012	0.0000095	0.00000020	**0.40**	0.00012	0.0000025	0.0000000031
Adjusted HI		0.01	0.01	0.02	**6**	**3**	0.9	0.001	**4**	**2**	0.3	0.00004

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-43
Adjusted HQs and HIs for SWMU 21-009

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Selenium	11	0.0000062	0.00000036	0.0088	0.012	0.010	0.059	0.00057	**2.6**	**20**	0.014	0.000000042
Organic Chemicals (mg/kg)												
2,3,7,8-TCDD equivalent	0.00000053	na*	na	na	na	na	0.0042	0.0000012	0.00000011	na	0.0016	0.00000015
Adjusted HI		0.000006	0.0000004	0.009	0.01	0.01	0.06	0.0006	**3**	**20**	0.02	0.0000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-44
Adjusted HQs and HIs for SWMU 21-012(b)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Copper	140	0.000044	0.0000030	0.032	0.082	0.056	0.11	0.00062	**1.7**	**1.9**	0.035	0.00000013
Lithium	12	na*	na	na	na	na	0.0059	0.000057	na	**5.8**	0.0030	0.000000048
Mercury	1.4	0.00060	0.00018	0.18	**0.96**	**0.57**	0.023	0.000077	**28**	0.041	0.0079	0.00000011
Molybdenum	1.2	0.00000032	0.000000024	0.00055	0.00062	0.00058	na	na	na	**0.58**	na	na
Zinc	97	0.000011	0.0000014	0.0025	0.018	0.010	0.029	0.000066	**0.80**	**0.60**	0.0096	0.000000059
Organic Chemicals (mg/kg)												
Benzoic acid	0.63	na	na	na	na	na	0.025	0.00018	na	na	0.0061	0.0000000066
Adjusted HI		0.0007	0.0002	0.2	1	0.6	0.2	0.001	**31**	**9**	0.06	0.0000004

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-45
Adjusted HQs and HIs for SWMU 21-013(c)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Mercury	0.32	0.0011	0.00033	**0.33**	**1.8**	**1.0**	0.043	0.00014	**6.4**	0.0094	0.015	0.00000020
Selenium	2.1	0.00011	0.0000062	0.15	0.2	0.17	**1**	0.0097	**0.51**	**4**	0.25	0.00000073
Organic Chemicals (mg/kg)												
Benzoic acid	0.46	na*	na	na	na	na	0.14	0.0011	na	na	0.036	0.000000038
Bis(2-ethylhexyl)phthalate	0.36	0.0023	0.0031	0.0013	**1.3**	**0.64**	0.13	0.0000013	na	na	0.047	0.0000086
2,3,7,8-TCDD equivalent	0.00000048	na	na	na	na	na	**0.34**	0.000098	0.000000097	na	0.13	0.000012
Adjusted HI		0.004	0.003	0.5	**3**	**2**	**2**	0.01	**7**	**4**	0.5	0.00002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-46
Adjusted HQs and HIs for SWMU 21-022(h)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Chromium	100	0.00000017	0.000000035	0.00017	0.00040	0.00030	0.00097	0.0000034	**45**	**44**	0.00047	0.0000000045
Copper	180	0.000021	0.0000014	0.015	0.038	0.026	0.050	0.00029	**2.3**	**2.6**	0.016	0.000000061
Lead	1700	0.00017	0.000026	0.25	**0.38**	**0.33**	0.25	0.0019	**0.99**	**14**	0.079	0.00000058
Mercury	0.78	0.00012	0.000035	0.035	0.19	0.11	0.0046	0.000015	**16**	0.023	0.0015	0.000000022
Molybdenum	9.8	0.00000094	0.000000072	0.0016	0.0018	0.0017	na*	na	na	**4.9**	na	na
Silver	20	0.000013	0.00000030	0.0058	0.024	0.015	0.015	0.000057	na	0.036	0.0049	0.0000000063
Zinc	560	0.000022	0.0000029	0.0051	0.037	0.021	0.058	0.00013	**4.7**	**3.5**	0.019	0.00000012
Organic Chemicals (mg/kg)												
Acenaphthene	0.43	na	na	na	na	na	0.000048	0.00000038	na	**1.7**	0.000012	0.000000000089
Aroclor-1254	0.048	0.0000035	0.0000027	0.00012	0.0037	0.0019	0.00096	0.00000039	na	0.00030	0.00037	0.00000041
Benzo(a)anthracene	0.96	na	na	na	na	na	0.0050	0.000066	na	0.053	0.0011	0.000000038
Bis(2-ethylhexyl)phthalate	1.2	0.00035	0.00047	0.00020	0.20	0.098	0.020	0.00000020	na	na	0.0072	0.0000013
Chrysene	1.1	na	na	na	na	na	0.0060	0.000070	na	na	0.0015	0.000000054
Di-n-butylphthalate	0.35	0.000064	0.000018	0.0028	0.10	0.053	0.000017	0.0000000093	na	0.0022	0.0000066	0.000000000089
Fluoranthene	5.6	na	na	na	na	na	0.0026	0.0000091	**0.56**	na	0.00086	0.000000020
Naphthalene	1.7	0.00000021	0.000000036	0.0016	0.00034	0.00094	0.0031	0.000061	na	**1.7**	0.00021	0.0000000018
Phenanthrene	1.8	na	na	na	na	na	0.0021	0.000013	**0.32**	na	0.00060	0.0000000078
Pyrene	9.9	na	na	na	na	na	0.0055	0.000039	**0.99**	na	0.0015	0.000000035
2,3,7,8-TCDD equivalent	0.00000080	na	na	na	na	na	0.024	0.0000071	0.00000016	na	0.0093	0.00000084
Radionuclides (pCi/g)												
Plutonium-238	21	0.0000000082	0.0000000020	0.0000079	0.000033	0.000031	0.0000034	0.000000074	**0.48**	0.00019	0.00000077	0.00000000089
Plutonium-239/240	20	0.0000000072	0.0000000015	0.0000072	0.000030	0.000030	0.0000023	0.000000050	**0.42**	0.00012	0.00000061	0.00000000076
Adjusted HI		0.0008	0.0006	0.3	1	0.7	0.4	0.003	**72**	**73**	0.1	0.000004

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-47
Adjusted HQs and HIs for Consolidated Unit 21-023(a)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Lead	390	0.000081	0.000012	0.12	0.18	0.15	0.12	0.00090	0.23	**3.3**	0.037	0.00000027
Mercury	0.49	0.00015	0.000043	0.044	0.24	0.14	0.0057	0.000019	**9.8**	0.014	0.0019	0.000000027
Selenium	5.8	0.000026	0.0000015	0.036	0.048	0.042	0.24	0.0023	**1.4**	**11**	0.059	0.00000017
Organic Chemicals (mg/kg)												
Acenaphthene	1.4	na*	na	na	na	na	0.00030	0.0000024	na	**5.5**	0.000077	0.00000000056
Benzo(a)anthracene	15	na	na	na	na	na	0.16	0.0021	na	**0.86**	0.035	0.0000012
Bis(2-ethylhexyl)phthalate	2.1	0.0012	0.0016	0.00066	**0.66**	**0.33**	0.067	0.00000066	na	na	0.024	0.0000045
Chrysene	4.8	na	na	na	na	na	0.054	0.00062	na	na	0.013	0.00000048
Di-n-butylphthalate	0.094	0.000034	0.0000097	0.0015	0.053	0.028	0.0000089	0.0000000050	na	0.00059	0.0000035	0.000000000048
Fluoranthene	6.4	na	na	na	na	na	0.0059	0.000021	**0.64**	na	0.0020	0.000000045
Naphthalene	1.2	0.00000029	0.000000049	0.0022	0.00046	0.0013	0.0042	0.000083	na	**1.2**	0.00029	0.0000000025
Pyrene	5.8	na	na	na	na	na	0.0064	0.000045	**0.58**	na	0.0018	0.000000041
2,3,7,8-TCDD equivalent	0.00000087	na	na	na	na	na	0.052	0.000015	0.00000017	na	0.020	0.0000018
Adjusted HI		0.001	0.002	0.2	1	0.7	0.7	0.006	**13**	**22**	0.2	0.000009

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-48
Adjusted HQs and HIs for SWMU 21-024(a)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Copper	32	0.0000047	0.00000033	0.0035	0.0088	0.0060	0.011	0.000066	**0.40**	**0.46**	0.0037	0.000000014
Mercury	0.26	0.000051	0.000015	0.015	0.082	0.048	0.0020	0.0000065	**5.2**	0.0076	0.00067	0.0000000093
Organic Chemicals (mg/kg)												
Benzoic acid	0.62	na*	na	na	na	na	0.011	0.000082	na	na	0.0027	0.0000000029
Bis(2-ethylhexyl)phthalate	0.12	0.000042	0.000057	0.000024	0.024	0.012	0.0024	0.000000024	na	na	0.00086	0.00000016
Chloroaniline[4-]	0.46	na	na	na	na	na	na	na	0.26	**0.46**	na	na
Adjusted HI		0.0001	0.00007	0.02	0.1	0.07	0.03	0.0002	**6**	0.9	0.01	0.0000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-49
Adjusted HQs and HIs for SWMU 21-024(b)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Copper	22	0.0000037	0.00000025	0.0027	0.0068	0.0046	0.0089	0.000051	0.27	**0.31**	0.0029	0.000000011
Mercury	2.3	0.00053	0.00016	0.16	**0.85**	**0.50**	0.021	0.000068	**47**	0.069	0.0070	0.000000097
Silver	8.0	0.0000078	0.00000018	0.0034	0.014	0.0087	0.0087	0.000034	na*	0.014	0.0029	0.0000000037
Organic Chemicals (mg/kg)												
Aroclor-1254	0.091	0.0000100	0.0000077	0.00033	0.010	0.0053	0.0027	0.0000011	na	0.00057	0.0010	0.0000012
Aroclor-1260	0.052	0.00000026	0.00000021	0.0000053	0.00028	0.00014	0.000068	0.000000011	na	na	0.000026	0.00000070
Bis(2-ethylhexyl)phthalate	0.46	0.00019	0.00026	0.00011	0.11	0.054	0.011	0.00000011	na	na	0.0039	0.00000072
Di-n-butylphthalate	0.50	0.00014	0.000039	0.0060	0.21	0.11	0.000035	0.000000020	na	0.0031	0.000014	0.00000000019
2,3,7,8-TCDD equivalent	0.00000048	na	na	na	na	na	0.021	0.0000062	0.000000093	na	0.0081	0.00000074
Radionuclides (pCi/g)												
Americium-241	39	0.000000021	0.000000012	0.000014	0.000046	0.000046	0.000032	0.00000078	**0.89**	0.0019	0.0000064	0.0000000029
Plutonium-239/240	60	0.000000033	0.0000000070	0.000033	0.00013	0.00013	0.000011	0.00000023	**1.3**	0.00038	0.0000028	0.0000000035
Adjusted HI		0.0009	0.0005	0.2	1	0.7	0.07	0.0002	**49**	0.4	0.03	0.000003

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-50
Adjusted HQs and HIs for SWMU 21-024(d)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Copper	110	0.000040	0.0000027	0.029	0.073	0.050	0.096	0.00055	**1.4**	**1.6**	0.031	0.00000012
Lead	36	0.000011	0.0000017	0.016	0.025	0.022	0.016	0.00013	0.021	0.30	0.0052	0.000000038
Mercury	0.40	0.00019	0.000055	0.056	0.30	0.18	0.0073	0.000024	**8.1**	0.012	0.0025	0.000000034
Selenium	1.8	0.000012	0.00000071	0.017	0.023	0.020	0.12	0.0011	**0.44**	**3.5**	0.028	0.000000083
Silver	9.0	0.000018	0.00000041	0.0079	0.033	0.020	0.020	0.000078	na*	0.016	0.0067	0.0000000085
Uranium	6.5	0.000000012	0.0000000064	0.000033	0.000039	0.000037	0.00047	0.0000043	na	0.26	0.00031	0.0000000053
Organic Chemicals (mg/kg)												
Acenaphthene	0.076	na	na	na	na	na	0.000026	0.00000020	na	0.30	0.0000066	0.000000000048
Aroclor-1242	0.26	0.000038	0.0000070	0.0025	0.060	0.031	0.018	0.000011	na	na	0.0070	0.000000062
Aroclor-1254	0.33	0.000075	0.000058	0.0025	0.078	0.040	0.020	0.0000083	na	0.0021	0.0078	0.0000086
Aroclor-1260	0.13	0.0000013	0.0000011	0.000027	0.0014	0.00074	0.00035	0.000000057	na	na	0.00014	0.0000036
Benzoic Acid	0.45	na	na	na	na	na	0.019	0.00014	na	na	0.0047	0.0000000050
Bis(2-ethylhexyl)phthalate	0.20	0.00017	0.00023	0.000095	0.095	0.047	0.0097	0.000000095	na	na	0.0035	0.00000064
Di-n-butylphthalate	0.21	0.00012	0.000034	0.0053	0.19	0.098	0.000031	0.000000017	na	0.0013	0.000012	0.00000000017
2,3,7,8-TCDD equivalent	0.000037	na	na	na	na	na	**3.4**	0.0010	0.0000073	na	**1.3**	0.00012
Adjusted HI		0.0007	0.0004	0.1	0.9	0.5	**4**	0.003	**10**	**6**	1	0.0001

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-51
Adjusted HQs and HIs for SWMU 21-024(e)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Copper	25	0.000011	0.00000075	0.0080	0.020	0.014	0.027	0.00015	**0.31**	**0.36**	0.0086	0.000000032
Cyanide (total)	4.4	0.00045	0.00036	**0.53**	**0.53**	**0.53**	0.00087	0.0000097	na*	na	0.00018	0.0000000097
Lead	39	0.000016	0.0000023	0.022	0.034	0.029	0.022	0.00017	0.023	**0.32**	0.0071	0.000000052
Mercury	0.51	0.00030	0.000087	0.088	**0.47**	0.28	0.011	0.000038	**10**	0.015	0.0039	0.000000054
Molybdenum	0.87	0.00000032	0.000000025	0.00056	0.00062	0.00059	na	na	na	**0.44**	na	na
Uranium	11	0.000000025	0.000000014	0.000070	0.000083	0.000078	0.00100	0.0000090	na	**0.44**	0.00065	0.000000011
Organic Chemicals (mg/kg)												
Bis(2-ethylhexyl)phthalate	0.38	0.00041	0.00056	0.00023	0.23	0.12	0.024	0.00000023	na	na	0.0085	0.0000016
Chloroaniline[4-]	0.41	na	na	na	na	na	na	na	0.23	**0.41**	na	na
Di-n-butylphthalate	0.14	0.000097	0.000027	0.0043	0.15	0.079	0.000025	0.000000014	na	0.00086	0.0000099	0.00000000013
Radionuclides (pCi/g)												
Plutonium-239/240	16	0.000000023	0.0000000050	0.000023	0.000095	0.000095	0.0000075	0.00000016	**0.35**	0.00010	0.0000020	0.0000000025
Adjusted HI		0.001	0.001	0.7	1	1	0.09	0.0004	**11**	**2**	0.03	0.000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-52
Adjusted HQs and HIs for SWMU 21-024(g)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Mercury	0.18	0.00010	0.000030	0.030	0.16	0.096	0.0039	0.000013	**3.6**	0.0053	0.0013	0.000000018
Organic Chemicals (mg/kg)												
Bis(2-ethylhexyl)phthalate	0.11	0.00011	0.00015	0.000064	0.064	0.032	0.0065	0.000000064	na*	na	0.0023	0.00000043
Di-n-butylphthalate	0.327	0.00022	0.000063	0.0098	**0.35**	0.18	0.000058	0.000000032	na	0.0020	0.000023	0.00000000031
Adjusted HI		0.0004	0.0002	0.04	0.6	0.3	0.01	0.00001	**4**	0.007	0.004	0.0000004

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-53
Adjusted HQs and HIs for SWMU 21-024(h)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Copper	82	0.000011	0.00000077	0.0082	0.021	0.014	0.027	0.00016	**1.0**	**1.2**	0.0089	0.000000033
Lead	62	0.0000078	0.0000012	0.011	0.017	0.015	0.011	0.000087	0.037	**0.52**	0.0035	0.000000026
Mercury	6.5	0.0012	0.00035	**0.35**	**1.9**	**1.1**	0.046	0.00015	**130**	0.19	0.016	0.00000022
Molybdenum	0.72	0.000000084	0.0000000064	0.00014	0.00016	0.00015	na*	na	na	**0.36**	na	na
Silver	3.5	0.0000028	0.000000064	0.0012	0.0052	0.0031	0.0031	0.000012	na	0.0063	0.0010	0.0000000013
Zinc	110	0.0000053	0.00000071	0.0012	0.0090	0.0051	0.014	0.000033	**0.95**	**0.71**	0.0047	0.000000029
Organic Chemicals (mg/kg)												
Benzoic acid	0.61	na	na	na	na	na	0.010	0.000075	na	na	0.0025	0.0000000027
Bis(2-ethylhexyl)phthalate	1.4	0.00047	0.00064	0.00027	0.27	0.13	0.027	0.00000027	na	na	0.0097	0.0000018
Di-n-butylphthalate	0.248	0.000055	0.000016	0.0024	0.086	0.045	0.000014	0.0000000080	na	0.0016	0.0000057	0.000000000076
Adjusted HI		0.002	0.001	0.4	**2**	1	0.1	0.0005	**132**	**3**	0.05	0.000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-54
Adjusted HQs and HIs for SWMU 21-024(i)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Antimony	1.6	na*	na	na	na	na	0.10	0.00041	0.020	**31**	0.037	0.000000080
Lead	40	0.0000075	0.0000011	0.011	0.016	0.014	0.011	0.000084	0.023	**0.33**	0.0034	0.000000025
Lithium	15	na	na	na	na	na	0.0047	0.000046	na	**7.4**	0.0024	0.000000039
Mercury	3.8	0.0011	0.00031	**0.31**	**1.7**	**0.99**	0.041	0.00013	**76**	0.11	0.014	0.00000019
Strontium	220	na	na	na	na	na	0.074	0.0016	na	na	0.0021	0.000000027
Zinc	97	0.0000069	0.00000092	0.0016	0.012	0.0065	0.018	0.000042	**0.81**	**0.61**	0.0061	0.000000037
Organic Chemicals (mg/kg)												
Aroclor-1254	0.16	0.000021	0.000016	0.00069	0.022	0.011	0.0057	0.0000024	na	0.00099	0.0022	0.0000024
Aroclor-1260	0.20	0.0000012	0.0000010	0.000025	0.0013	0.00069	0.00033	0.000000053	na	na	0.00013	0.0000034
Bis(2-ethylhexyl)phthalate	0.055	0.000028	0.000038	0.000016	0.016	0.0079	0.0016	0.000000016	na	na	0.00057	0.00000011
Di-n-butylphthalate	0.043	0.000014	0.0000041	0.00063	0.022	0.012	0.0000037	0.0000000021	na	0.00027	0.0000015	0.000000000020
Adjusted HI		0.001	0.0004	0.3	**2**	1	0.3	0.002	**77**	**39**	0.07	0.000006

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-55
Adjusted HQs and HIs for SWMU 21-024(j)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Selenium	7.1	0.000023	0.0000013	0.033	0.044	0.038	0.22	0.0021	**1.7**	**14**	0.054	0.00000016
Zinc	200	0.000011	0.0000015	0.0026	0.019	0.011	0.030	0.000069	**1.6**	**1.2**	0.010	0.000000062
Organic Chemicals (mg/kg)												
Aroclor-1260	0.0652	0.00000033	0.00000026	0.0000066	0.00035	0.00018	0.000085	0.000000014	na*	na	0.000033	0.00000088
Aroclor-1254	0.080	0.0000086	0.0000067	0.00029	0.0090	0.0046	0.0024	0.00000097	na	0.00050	0.00091	0.0000010
Bis(2-ethylhexyl)phthalate	0.088	0.000036	0.000049	0.000020	0.020	0.010	0.0021	0.000000021	na	na	0.00075	0.00000014
Adjusted HI		0.00008	0.00006	0.04	0.09	0.06	0.3	0.002	**3**	**15**	0.07	0.000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-56
Adjusted HQs and HIs for Consolidated Unit 21-024(l)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Lead	150	0.000056	0.0000084	0.081	0.12	0.11	0.080	0.00063	0.088	**1.2**	0.026	0.00000019
Lithium	13	na*	na	na	na	na	0.0082	0.000079	na	**6.4**	0.0041	0.000000067
Zinc	120	0.000017	0.0000023	0.0040	0.029	0.017	0.046	0.00011	**1.0**	**0.77**	0.015	0.000000095
Organic Chemicals (mg/kg)												
Acenaphthene	0.15	na	na	na	na	na	0.000059	0.00000047	na	**0.59**	0.000015	0.00000000011
Benzo(a)anthracene	1.0	na	na	na	na	na	0.019	0.00026	na	0.057	0.0042	0.00000015
Bis(2-ethylhexyl)phthalate	0.25	0.00025	0.00034	0.00014	0.14	0.072	0.015	0.00000014	na	na	0.0052	0.00000097
Chrysene	1.0	na	na	na	na	na	0.022	0.00025	na	na	0.0054	0.00000019
Phenanthrene	2.0	na	na	na	na	na	0.0086	0.000053	**0.37**	na	0.0025	0.000000032
Radionuclides (pCi/g)												
Plutonium-239/240	18	0.000000023	0.0000000050	0.000023	0.000095	0.000095	0.0000075	0.00000016	**0.37**	0.00011	0.0000020	0.0000000025
Adjusted HI		0.0003	0.0004	0.09	0.3	0.2	0.2	0.001	**2**	**9**	0.06	0.000002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-57
Adjusted HQs and HIs for SWMU 21-024(o)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Cyanide (total)	0.28	0.000010	0.0000080	0.012	0.012	0.012	0.000019	0.00000021	na*	na	0.0000041	0.00000000021
Lead	30	0.0000042	0.00000062	0.0060	0.0090	0.0079	0.0059	0.000046	0.018	0.25	0.0019	0.000000014
Zinc	100	0.0000053	0.00000070	0.0012	0.0089	0.0050	0.014	0.000032	**0.85**	**0.64**	0.0047	0.000000029
Organic Chemicals (mg/kg)												
Benzoic acid	0.59	na	na	na	na	na	0.011	0.000079	na	na	0.0026	0.0000000028
Bis(2-ethylhexyl)phthalate	0.12	0.000044	0.000060	0.000025	0.025	0.012	0.0025	0.000000025	na	na	0.00091	0.00000017
Hexachlorobenzene	0.089	0.0000026	0.000000018	0.0000037	0.0047	0.0025	0.0052	0.000000036	0.0089	0.0089	0.0020	0.00000000060
2,3,7,8-TCDD equivalent	0.00000021	na	na	na	na	na	0.0085	0.0000025	0.000000042	na	0.0033	0.00000030
	Adjusted HI	0.00007	0.00007	0.02	0.06	0.04	0.05	0.0002	0.9	0.9	0.02	0.0000005

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-58
Adjusted HQs and HIs for Consolidated Unit 21-026(a)-99

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Chromium	39	0.00000029	0.000000061	0.00030	0.00069	0.00052	0.0017	0.0000060	**17**	**16**	0.00082	0.0000000077
Copper	77	0.000041	0.0000028	0.030	0.076	0.052	0.099	0.00057	**0.96**	**1.1**	0.032	0.00000012
Cyanide (total)	2.7	0.00034	0.00027	**0.40**	**0.40**	**0.40**	0.00066	0.0000073	na*	na	0.00014	0.0000000074
Lead	41	0.000020	0.0000030	0.029	0.043	0.038	0.028	0.00022	0.024	**0.34**	0.0091	0.000000066
Mercury	3.0	0.0022	0.00063	**0.64**	**3.4**	**2.0**	0.083	0.00027	**60**	0.089	0.028	0.00000039
Silver	8.8	0.000027	0.00000062	0.012	0.050	0.031	0.031	0.00012	na	0.016	0.010	0.000000013
Zinc	220	0.000041	0.0000055	0.0095	0.069	0.039	0.11	0.00025	**1.9**	**1.4**	0.037	0.00000022
Organic Chemicals (mg/kg)												
Acenaphthene	0.28	na	na	na	na	na	0.00015	0.0000012	na	**1.1**	0.000037	0.00000000027
Benzoic acid	0.50	na	na	na	na	na	0.032	0.00024	na	na	0.0080	0.0000000086
Bis(2-ethylhexyl)phthalate	0.69	0.00090	0.0012	0.00051	**0.51**	0.26	0.052	0.00000051	na	na	0.019	0.0000034
Di-n-butylphthalate	0.239	0.00021	0.000059	0.0091	**0.32**	0.17	0.000054	0.000000030	na	0.0015	0.000021	0.00000000029
Phenanthrene	2.2	na	na	na	na	na	0.012	0.000075	**0.40**	na	0.0035	0.000000046
Radionuclides (pCi/g)												
Plutonium-239/240	19	0.000000033	0.0000000070	0.000033	0.00013	0.00013	0.000011	0.00000023	**0.41**	0.00012	0.0000028	0.0000000035
Adjusted HI		0.004	0.002	1	**5**	**3**	0.5	0.002	**81**	**20**	0.2	0.000004

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-59
Adjusted HQs and HIs for SWMU 21-027(a)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Chromium	360	0.00000095	0.00000020	0.00097	0.0022	0.0017	0.0054	0.000019	**160**	**150**	0.0026	0.000000025
Copper	46	0.0000085	0.00000059	0.0062	0.016	0.011	0.021	0.00012	**0.58**	**0.66**	0.0067	0.000000025
Lithium	9.7	na*	na	na	na	na	0.0028	0.000027	na	**4.8**	0.0014	0.000000023
Mercury	0.30	0.000073	0.000021	0.022	0.12	0.068	0.0028	0.0000093	**5.9**	0.0087	0.00095	0.000000013
Zinc	240	0.000015	0.0000020	0.0034	0.025	0.014	0.040	0.000091	**2.0**	**1.5**	0.013	0.000000081
Organic Chemicals (mg/kg)												
Aroclor-1254	0.052	0.0000062	0.0000048	0.00020	0.0065	0.0033	0.0017	0.00000069	na	0.00032	0.00065	0.00000071
Bis(2-ethylhexyl)phthalate	0.29	0.00013	0.00018	0.000073	0.073	0.037	0.0075	0.000000074	na	na	0.0027	0.00000049
Di-n-butylphthalate	0.12	0.000036	0.000010	0.0016	0.056	0.029	0.0000093	0.0000000052	na	0.00075	0.0000037	0.000000000050
2,3,7,8-TCDD Equivalent	0.0013	na	na	na	na	na	**63**	0.018	0.00025	na	**24**	0.0022
Radionuclides (pCi/g)												
Americium-241	18	0.000000010	0.0000000058	0.0000070	0.000023	0.000023	0.000016	0.00000038	**0.40**	0.00084	0.0000031	0.0000000014
Plutonium-238	40	0.000000025	0.0000000062	0.000025	0.00010	0.000097	0.000010	0.00000023	**0.91**	0.00036	0.0000024	0.0000000028
Plutonium-239/240	82	0.000000049	0.000000010	0.000049	0.00020	0.00020	0.000016	0.00000033	**1.7**	0.00051	0.0000041	0.0000000051
Uranium-234	20	0.0000000034	0.0000000022	0.0000022	0.0000074	0.0000074	0.0000064	0.00000015	**0.40**	0.0015	0.0000012	0.00000000093
Adjusted HI		0.0003	0.0002	0.03	0.3	0.2	**63**	0.02	**172**	**157**	**24**	0.002

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

* na = Not available.

Table H-5.4-60
Adjusted HQs and HIs for SWMU 21-027(c)

COPEC	EPC (mg/kg)	American Kestrel (avian intermediate carnivore)	American Kestrel (avian top carnivore)	American Robin (avian herbivore)	American Robin (avian insectivore)	American Robin (avian omnivore)	Deer Mouse (mammalian omnivore)	Desert Cottontail (mammalian herbivore)	Earthworm (soil dwelling invertebrate	Plant (terrestrial autotroph-producer)	Montane Shrew (mammalian insectivore)	Red Fox (mammalian top carnivore)
Inorganic Chemicals (mg/kg)												
Lead	58	0.000019	0.0000028	0.027	0.041	0.036	0.027	0.00021	0.034	**0.48**	0.0085	0.000000062
Zinc	84	0.000010	0.0000014	0.0024	0.017	0.0098	0.027	0.000062	**0.70**	**0.52**	0.0091	0.000000056
Organic Chemicals (mg/kg)												
Acenaphthene	0.081	na*	na	na	na	na	0.000028	0.00000022	na	**0.32**	0.0000071	0.000000000052
Benzoic acid	0.31	na	na	na	na	na	0.013	0.000098	na	na	0.0033	0.0000000035
Bis(2-ethylhexyl)phthalate	18	0.015	0.021	0.0088	**8.8**	**4.4**	**0.89**	0.0000088	na	na	**0.32**	0.000059
Di-n-butylphthalate	0.125	0.000072	0.000020	0.0032	0.11	0.059	0.000019	0.000000010	na	0.00078	0.0000074	0.00000000010
2,3,7,8-TCDD equivalent	0.000000097	na	na	na	na	na	0.0094	0.0000027	0.000000020	na	0.0036	0.00000033
Adjusted HI		0.02	0.02	0.04	**9**	**5**	1	0.0004	0.7	1	0.3	0.00006

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* na = Not available.

Table H-5.4-61
Summary of LOAEL-Based ESLs for Terrestrial Receptors

COPEC	Receptor	LOAEL-Based TRV	TRV Unit	LOAEL–Based ESL (mg/kg soil)	Approach to Deriving the LOAELs/LOECs*
2,3,7,8-TCDD equivalent	Deer Mouse	3.76E-06	mg/kg/d	3.90E-06	LOAEL is the geometric mean calculated from the same data set as the geometric mean NOAEL.
	Montane Shrew	3.76E-06	mg/kg/d	1.90E-06	LOAEL is the geometric mean calculated from the same data set as the geometric mean NOAEL.
Antimony	Plant	0.5	mg/kg soil	5.00E-01	The lowest observed effect concentration (LOEC) is derived from a LOEC with an unspecified exposure duration by applying a uncertainty factor of 0.1. The no observed effect concentration (NOEC) was derived from the same LOEC, except an uncertainty factor of 0.01 was applied.
Chromium	Earthworm	23.94	mg/kg soil	2.30E+01	The total chromium LOEC is equal to the chromium VI LOEC multiplied by 7. The chromium VI LOEC is the geometric mean calculated from the same data set as the geometric mean NOEC for chromium VI.
	Plant	12.6	mg/kg soil	1.20E+01	The total chromium LOEC is equal to the chromium VI LOEC multiplied by 7. The chromium VI LOEC is the geometric mean calculated from the same data set as the geometric mean NOEC for chromium VI.
Copper	Earthworm	530	mg/kg soil	5.30E+02	LOEC is extrapolated from the EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_copper.pdf). Applied an uncertainty factor of 5 to the maximum acceptable toxicity concentrations (MATCs) and an uncertainty factor of 10 to the EC10s in the data set and calculated the geometric mean.
	Plant	497	mg/kg soil	4.90E+02	LOEC is extrapolated from the EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_copper.pdf). Applied an uncertainty factor of 5 to the MATCs and an uncertainty factor of 10 to the EC10s in the data set and calculated the geometric mean.
Cyanide	Robin (insectivore)	0.4	mg/kg/d	1.00E+00	LOAEL is derived from a LD50 by applying an uncertainty factor of 0.1. The NOAEL was derived from the same LD50, except an uncertainty factor of 0.01 was applied.
	Robin (omnivore)	0.4	mg/kg/d	1.00E+00	LOAEL is derived from a LD50 by applying an uncertainty factor of 0.1. The NOAEL was derived from the same LD50 as the LOAEL was, except an uncertainty factor of 0.01 was applied.

Table 5.4-61 (continued)

COPEC	Receptor	LOAEL-Based TRV	TRV Unit	LOAEL–Based ESL (mg/kg soil)	Approach to Deriving the LOAELs/LOECs*
Lead	Earthworm	8407	mg/kg soil	8.40E+03	LOEC is extrapolated from the EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_lead.pdf). Applied an uncertainty factor of 5 for MATCs and calculated the geometric mean.
	Plant	576	mg/kg soil	5.70E+02	LOEC is extrapolated from the EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_lead.pdf). Applied an uncertainty factor of 5 for MATCs and calculated the geometric mean.
Lithium	Plant	20	mg/kg soil	2.00E+01	NOEC is equivalent to an EC20, which is from the literature. LOEC extrapolated based on an uncertainty factor of 10.
Mercury	Robin (insectivore)	0.19	mg/kg/d	1.30E-01	LOAEL is derived from a LD50 by applying an uncertainty factor of 0.1. The NOAEL is derived from the same LD50, except an uncertainty factor of 0.01 was applied.
	Robin (omnivore)	0.19	mg/kg/d	2.20E-01	LOAEL is derived from a LD50 by applying an uncertainty factor of 0.1. The NOAEL is derived from the same LD50, except an uncertainty factor of 0.01 was applied.
	Earthworm	0.5	mg/kg soil	5.00E-01	LOEC is from the literature. The NOEC is derived from this LOEC by applying an uncertainty factor 0.1.
Molybdenum	Plant	20	mg/kg soil	2.00E+01	NOEC is equivalent to an EC20 and is from the literature. LOEC is extrapolated based on an uncertainty factor of 10.
Selenium	Deer Mouse	0.215	mg/kg/d	1.20E+00	LOAEL is the pair to the NOAEL.
	Earthworm	41	mg/kg soil	4.10E+01	LOEC is extrapolated from EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_selenium.pdf). Applied an uncertainty factor of 10 for EC20s and calculated the geometric mean.
	Plant	3.4	mg/kg soil	3.40E+00	LOEC is extrapolated from EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_selenium.pdf). Applied an uncertainty factor of 5 for MATCs and an uncertainty factor of 10 for EC20s and calculated the geometric mean.
Uranium	Plant	256	mg/kg soil	2.50E+02	LOEC is extrapolated from the NOEC by applying an uncertainty factor of 10.

Table 5.4-61 (continued)

COPEC	Receptor	LOAEL-Based TRV	TRV Unit	LOAEL–Based ESL (mg/kg soil)	Approach to Deriving the LOAELs/LOECs*
Zinc	Earthworm	939	mg/kg soil	9.30E+02	LOEC is extrapolated from EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_zinc.pdf). Applied an uncertainty factor of 5 for MATCs and an uncertainty factor of 10 for EC10s and calculated the geometric mean.
	Plant	812	mg/kg soil	8.10E+02	LOEC is extrapolated from EPA geometric mean NOEC dataset (http://www.epa.gov/ecotox/ecossl/pdf/eco-ssl_zinc.pdf). Applied an uncertainty factor of 5 for MATCs and calculated the geometric mean.
Acenaphthene	Plant	2.5	mg/kg soil	2.50E+00	LOEC is extrapolated from an EC50 by applying an uncertainty factor of 0.1. The NOEC is extrapolated from the same EC50, except an uncertainty factor of 0.01 was applied.
Benzo(a)anthracene	Plant	180	mg/kg soil	1.80E+02	LOEC is extrapolated from a NOEC by applying an uncertainty factor of 10.
Bis(2-ethylhexyl)phthalate	Robin (insectivore)	11	mg/kg/d	2.00E-01	LOAEL is extrapolated from the NOAEL by applying an uncertainty factor of 10.
	Robin (omnivore)	11	mg/kg/d	4.00E-01	LOAEL is extrapolated from the NOAEL by applying an uncertainty factor of 10.
Chloroaniline[4-]	Plant	10	mg/kg soil	1.00E+01	LOEC is extrapolated from an EC50 by applying an uncertainty factor of 0.1. The NOEC is extrapolated from the same EC50, except an uncertainty factor of 0.01 was applied.
Di-n-butylphthalate	Robin (insectivore)	1.4	mg/kg/d	1.10E-01	LOAEL is from the literature. The NOAEL was derived by applying an uncertainty factor 0.1.
Fluoranthene	Earthworm	23.5	mg/kg soil	2.30E+01	LOEC is the geometric mean calculated from the same data set as the geometric mean NOEC.
Naphthalene	Plant	10	mg/kg soil	1.00E+01	LOEC is extrapolated from an EC50 by applying an uncertainty factor of 0.1. The NOEC is extrapolated from the same EC50, except an uncertainty factor of 0.01 was applied.
Phenanthrene	Earthworm	12.7	mg/kg soil	1.20E+01	LOEC is the geometric mean calculated from the same data set as the geometric mean NOEC.
Pyrene	Earthworm	20.2	mg/kg soil	2.00E+01	LOEC is the geometric mean calculated from the same data set as the geometric mean NOEC.

Table 5.4-61 (continued)

COPEC	Receptor	LOAEL-Based TRV	TRV Unit	LOAEL–Based ESL (mg/kg soil)	Approach to Deriving the LOAELs/LOECs*
Americium-241	Earthworm	1	rad/d	4.40E+02	No effect dose level is 0.1 rad/d for terrestrial animals and 1 rad/d for terrestrial plants based on DOE's Biota Dose Assessment (DOE 2002, 085637); low effect level = 1 rad/d
Plutonium-238	Earthworm	1	rad/d	4.40E+02	No effect dose level is 0.1 rad/d for terrestrial animals and 1 rad/d for terrestrial plants based on DOE's Biota Dose Assessment (DOE 2002, 085637); low effect level = 1 rad/d
Plutonium-239/240	Earthworm	1	rad/d	4.70E+02	No effect dose level is 0.1 rad/d for terrestrial animals and 1 rad/d for terrestrial plants based on DOE's Biota Dose Assessment (DOE 2002, 085637); low effect level = 1 rad/d
Uranium-234	Earthworm	1	rad/d	5.10E+02	No effect dose level is 0.1 rad/d for terrestrial animals and 1 rad/d for terrestrial plants based on DOE's Biota Dose Assessment (DOE 2002, 085637); low effect level = 1 rad/d

* Some COPECs (e.g., inorganic chemicals from EPA Eco-SSL documents) do not have LOAELs or LOECs provided. In these cases, an uncertainty factor of 10 was applied to the NOAEL/NOEC (i.e., EC10 and EC20) data in accordance with the acknowledged uncertainty between the LOAEL/LOEC and NOAEL/NOEC in Dourson and Stara (1983, 073474), Calbrese and Baldwin (1993, 110405), and EPA (http://www.epa.gov/epawaste/hazard/tsd/td/combust/ecorisk.htm). In the cases where EPA used MATCs for the NOAEL/NOEC data, an uncertainty factor of 5 was used to adjust to the LOAEL/LOEC because the MATC is between the NOAEL/NOEC and the LOAEL/LOEC.

Table H-5.4-62
HI Analysis Using LOAEL-Based ESLs for AOC 21-002(b)

COPEC	EPC (mg/kg)	Earthworm	Plant
Lead	132	n/a*	0.2
Selenium	4.7	0.1	**1.4**
Zinc	102	0.1	0.1
	HI	0.2	**2**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-63
HI Analysis Using LOAEL-Based ESLs for Consolidated Unit 21-006(c)-99

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)	Earthworm	Plant
Zinc	380	n/a*	n/a	**0.4**	**0.5**
Bis(2-ethylhexyl)phthalate	8.7	**44**	**22**	n/a	n/a
Plutonium-239/240	19	n/a	n/a	0.04	n/a
	HI	**44**	**22**	0.4	0.5

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-64
Adjusted HI Analysis for LOAEL-Based ESLs for Consolidated Unit 21-006(c)-99

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)
Bis(2-ethylhexyl)phthalate	8.7	**0.62**	**0.31**
	Adjusted HI	0.6	0.3

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-65
HI Analysis Using LOAEL-Based ESLs for SWMU 21-009

COPEC	EPC (mg/kg)	Earthworm	Plant
Selenium	11	0.3	**3.2**
	HI	0.3	**3**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-66
HI Analysis Using LOAEL-Based ESLs for SWMU 21-012(b)

COPEC	EPC (mg/kg)	Earthworm	Plant
Copper	136	0.3	0.3
Lithium	12	n/a*	**0.6**
Mercury	1.4	**2.8**	n/a
Molybdenum	1.2	n/a	0.06
Zinc	97	0.1	0.1
	HI	**3**	1

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-67
HI Analysis Using LOAEL-Based ESLs for SWMU 21-013(c)

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)	Deer Mouse	Earthworm	Plant
Mercury	0.32	**2.5**	**1.5**	n/a*	**0.6**	n/a
Selenium	2.1	n/a	n/a	**1.8**	0.05	**0.6**
Bis(2-ethylhexyl)phthalate	0.36	**1.8**	**0.9**	n/a	n/a	n/a
2,3,7,8-TCDD equivalent	0.00000048	n/a	n/a	0.1	n/a	n/a
	HI	**4**	**2**	**2**	0.7	0.6

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-68
Adjusted HI Analysis for LOAEL-Based ESLs for SWMU 21-013(c)

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)	Deer Mouse
Mercury	0.32	0.18	0.1	n/a*
Selenium	2.1	n/a	n/a	**0.72**
Bis(2-ethylhexyl)phthalate	0.36	0.13	0.065	n/a
2,3,7,8-TCDD equivalent	0.00000048	n/a	n/a	0.04
	HI	0.3	0.2	0.8

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-69
HI Analysis Using LOAEL-Based ESLs for SWMU 21-022(h)

COPEC	EPC (mg/kg)	Earthworm	Plant
Chromium	100	**4.3**	**8.3**
Copper	180	0.3	**0.4**
Lead	1700	**0.2**	**3.0**
Mercury	0.78	**1.6**	n/a*
Molybdenum	9.8	n/a	**0.49**
Zinc	560	**0.6**	**0.7**
Acenaphthene	0.43	n/a	0.2
Fluoranthene	5.6	0.24	n/a
Naphthalene	1.7	n/a	0.17
Phenanthrene	1.8	0.15	n/a
Pyrene	9.9	**0.5**	n/a
Plutonium-238	21	0.05	n/a
Plutonium-239/240	20	0.04	n/a
	HI	**8**	**13**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-70
HI Analysis Using LOAEL-Based ESLs for Consolidated Unit 21-023(a)-99

COPEC	EPC (mg/kg)	Earthworm	Plant
Lead	395	n/a*	**0.7**
Mercury	0.49	**0.98**	n/a
Selenium	5.8	**0.14**	**1.7**
Acenaphthene	1.4	n/a	**0.56**
Benzo(a)anthracene	15	n/a	0.08
Fluoranthene	6.4	0.28	n/a
Naphthalene	1.2	n/a	0.12
Pyrene	5.8	0.29	n/a
	HI	**2**	**3**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-71
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(a)

COPEC	EPC (mg/kg)	Earthworm
Copper	32	0.06
Mercury	0.26	**0.5**
	HI	0.6

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-72
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(b)

COPEC	EPC (mg/kg)	Earthworm
Mercury	2.3	**4.6**
Americium-241	39	0.09
Plutonium-239/240	60	0.13
	HI	**5**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-73
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(d)

COPEC	EPC (mg/kg)	Deer Mouse	Earthworm	Plant
Copper	114	n/a*	0.22	0.23
Mercury	0.4	n/a	**0.8**	n/a
Selenium	1.8	**n/a**	0.044	**0.53**
2,3,7,8-TCDD equivalent	0.000037	**9.5**	n/a	n/a
	HI	**10**	1	0.8

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-74
Adjusted HI Analysis for LOAEL-Based ESLs for SWMU 21-024(d)

COPEC	EPC (mg/kg)	Deer Mouse
2,3,7,8-TCDD equivalent	0.000037	**0.51**
	HI	0.5

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-75
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(e)

COPEC	EPC (mg/kg)	Earthworm	Plant
Copper	25	0.047	0.051
Lead	39	n/a*	0.068
Mercury	0.51	**1.02**	n/a
Molybdenum	0.87	n/a	0.044
Uranium	11	n/a	0.044
Chloroaniline[4-]	0.41	n/a	0.041
Plutonium-239/240	16	0.034	n/a
	HI	1	0.2

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-76
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(g)

COPEC	EPC (mg/kg)	Earthworm
Mercury	0.18	**0.36**
	HI	0.4

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-77
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(h)

COPEC	EPC (mg/kg)	American Robin (insectivore)	Earthworm	Plant
Copper	82	n/a*	0.15	0.17
Lead	62	n/a	n/a	0.11
Mercury	6.5	**50**	**13**	n/a
Molybdenum	0.72	n/a	n/a	0.036
Zinc	113	n/a	0.12	0.14
	HI	**50**	**13**	0.5

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-78
Adjusted HI Analysis for LOAEL-Based ESLs for SWMU 21-024(h)

COPEC	EPC (mg/kg)	American Robin (insectivore)
Mercury	6.5	0.19
	HI	0.2

Table H-5.4-79
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(i)

COPEC	EPC (mg/kg)	American Robin (insectivore)	Earthworm	Plant
Antimony	1.6	n/a*	n/a	**3.2**
Lead	40	n/a	n/a	0.07
Lithium	15	n/a	n/a	**0.75**
Mercury	3.8	**29**	**7.6**	n/a
Zinc	97	n/a	0.1	0.12
	HI	**29**	**8**	**4**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-80
Adjusted HI Analysis for LOAEL-Based ESLs for SWMU 21-024(i)

COPEC	EPC (mg/kg)	American Robin (insectivore)
Mercury	3.8	0.17
	HI	0.2

Table H-5.4-81
HI Analysis Using LOAEL-Based ESLs for SWMU 21-024(j)

COPEC	EPC (mg/kg)	Earthworm	Plant
Selenium	7.1	0.17	**2.1**
Zinc	198	0.21	0.24
	HI	0.4	**2**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-82
HI Analysis Using LOAEL-Based ESLs for Consolidated Unit 21-024(l)-99

COPEC	EPC (mg/kg)	Earthworm	Plant
Lead	149	n/a*	0.26
Lithium	13	n/a	**0.65**
Zinc	123	0.13	0.15
Acenaphthene	0.15	n/a	0.06
Phenanthrene	2	0.17	n/a
Plutonium-239/240	18	0.038	n/a
	HI	0.3	1

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-83
HI Analysis Using LOAEL-Based ESLs for Consolidated Unit 21-026(a)-99

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)	Earthworm	Plant
Chromium	39	n/a*	n/a	**1.7**	**3.3**
Copper	77	n/a	n/a	0.15	0.16
Cyanide (total)	2.7	**2.7**	**2.7**	n/a	n/a
Lead	41	n/a	n/a	n/a	0.072
Mercury	3	**23**	**14**	**6**	n/a
Zinc	225	n/a	n/a	0.24	0.28
Acenaphthene	0.28	n/a	n/a	n/a	0.11
Bis(2-ethylhexyl)phthalate	0.69	**3.5**	**n/a**	n/a	n/a
Di-n-butylphthalate	0.24	**2.2**	n/a	n/a	n/a
Phenanthrene	2.2	n/a	n/a	0.18	n/a
Plutonium-239/240	19	n/a	n/a	0.04	n/a
HI		**31**	**18**	**8**	**4**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-84
Adjusted HI Analysis for LOAEL-Based ESLs for Consolidated Unit 21-026(a)-99

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)
Cyanide (total)	2.7	0.041	0.041
Mercury	3	**0.35**	0.21
Bis(2-ethylhexyl)phthalate	0.69	0.053	n/a*
Di-n-butylphthalate	0.24	0.033	n/a
HI		0.5	0.3

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-85
HI Analysis Using LOAEL-Based ESLs for SWMU 21-027(a)

COPEC	EPC (mg/kg)	Deer Mouse	Montane Shrew	Earthworm	Plant
Chromium	360	n/a*	n/a	**16**	**30**
Copper	46	n/a	n/a	0.087	0.094
Lithium	9.7	n/a	n/a	n/a	**0.49**
Mercury	0.3	n/a	n/a	**0.6**	n/a
Zinc	240	n/a	n/a	0.26	0.3
2,3,7,8-TCDD equivalent	0.0013	**333**	**684**	n/a	n/a
Americium-241	18	n/a	n/a	0.041	n/a
Plutonium-238	40	n/a	n/a	0.091	n/a
Plutonium-239/240	82	n/a	n/a	0.17	n/a
Uranium-234	20	n/a	n/a	0.039	n/a
HI		**333**	**684**	**17**	**31**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.
* n/a = Not applicable.

Table H-5.4-86
Adjusted HI Analysis for LOAEL-Based ESLs for SWMU 21-027(a)

COPEC	EPC (mg/kg)	Deer Mouse	Montane Shrew
2,3,7,8-TCDD equivalent	0.0013	**9.66**	**3.76**
HI		**10**	**4**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-87
HI Analysis Using LOAEL-Based ESLs for SWMU 21-027(c)

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)
Bis(2-ethylhexyl)phthalate	18	**90**	**45**
HI		**90**	**45**

Note: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Table H-5.4-88
Adjusted HI Analysis for LOAEL-Based ESLs for SWMU 21-027(c)

COPEC	EPC (mg/kg)	American Robin (insectivore)	American Robin (omnivore)
Bis(2-ethylhexyl)phthalate	18	0.89	0.45
HI		0.9	0.4

Table H-5.4-89
COPEC Concentrations above Background in Canyon Reaches where Earthworm and Plant Toxicity Tests Have Been Conducted Compared with the EPCs for DP Site Aggregate Area Sites

COPEC	Range of EPCs (mg/kg)	Range of Canyon Reach Concentrations (mg/kg)
Antimony	1.6	0.92–3.2
Chromium	39–360	10.6–3740
Copper	22–180	12.5–223
Cyanide	0.28–4.4	0.965–11.6
Lead	30–1700	21.3–690
Mercury	0.18–6.5	0.12–5.57
Selenium	1.8–11	0.628–5.07
Zinc	97–560	65.7–1140
Bis(2-ethylhexyl)phthalate	0.055–18	0.0399–2
2,3,7,8-TCDD equivalent	0.00000028–0.0013	0.000000000171–0.00000496

Attachment H-1

ProUCL Files
(on CD included with this document)

Attachment H-2

Ecological Scoping Checklists

H2-1.0 ECOLOGICAL SCOPING CHECKLIST FOR MESA TOP SITES

Part A—Scoping Meeting Documentation

Site ID	Mesa top sites: AOC 21-002(b),Consolidated Unit 21-003-99, SWMU 21-009, SWMU 21-024(c), SWMU 21-024(m), SWMU 21-012(b), SWMU 21-024(a), SWMU 21-024(e), SWMU 21-024(g), Consolidated Unit 21-024(l)-99, SWMU 21-024(o), SWMU 21-027(c), Consolidated Unit 21-006(c)-99, SWMU 21-022(f), Consolidated Unit 21-022(h)-99, Consolidated Unit 21-023(a)-99, SWMU 21-024(b), SWMU 21-024(d), SWMU 21-024(h), SWMU 21-024(i), SWMU 21-024(j), SWMU 21-024(k), SWMU 21-024(n), SWMU 21-027(a)
Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.	From 1945 to 1978, TA-21 was used for plutonium research and metal production. The site has been used for various administrative and chemical research activities since 1978. The following sections describe each consolidated unit, SWMU, and AOC along with known or suspected mechanisms of release. *Consolidated Unit 21-006(c)-99* includes inactive underground seepage pits associated with buildings 21-002 and SWMU 21-003; SWMU 21-006(a), seepage disposal pit; SWMU 21-006(b), seepage disposal pit, drainline, and outfall; SWMU 21-006(c), seepage disposal pit; and SWMU 21-006(d), seepage disposal pit. SWMU 21-006(a), SWMU 21-006(c) and SWMU 21-006(d) are located on the mesa top; seepage disposal pits SWMU 21-006(a, c, and d) are all the same pit based on a reported location in the same area. All pits have been paved over. The form of site releases would be liquids and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines. *Consolidated Unit 21-022(h)-99* includes sumps, pipelines and outfalls associated buildings 21-150, 21-022 and 21-003, specifically SWMUs 21-022(h) sump, drainline, and outfall; 21-022(i), sump; and 21-022(j), sump. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines. *Consolidated Unit 21-023(a)-99* includes SWMU 21-023(a), a septic tank and drainlines that reportedly serviced a janitor's mop sink in building 21-003; SWMU 21-023(b), a septic tank and drainlines, received wastewater from the shower room in building 21-003; and SWMU 21-023(d), a septic tank and drainlines, received industrial waste and sewage from building 21-003. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-022(f)* is an inactive sump (structure 21-173) and pipeline. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(b)* is a septic tank, pipelines, and associated outfall that formerly routed sewage from building 21-17 (a passageway connecting buildings 21-004 and 21-005). The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(d)* is an inactive septic tank, pipelines, and associated outfall that routed sewage from an office building (building 21-001) to the south rim of the mesa above Los Alamos Canyon; located on mesa top. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(h)* is a septic tank, pipelines, and associated outfall that originally received sewage from building 21-151, an administrative building and

	shop, and then later, building 21-152, a polonium-processing and high-temperature laboratory. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(i)* is a septic tank, pipelines and associated outfall associated with building 21-209. The portion of the inlet line from the fence to the septic tank, the septic tank, the outlet line, and the outfall were removed in 2001 as part of an interim action. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(j)* is an inactive septic tank, pipelines, and associated outfall that received sewage from building 21-155, a warehouse and laboratory. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(k)* is an inactive septic tank, tile leach field, pipelines, and associated outfall that received sewage from building 21-209, a high-temperature chemistry building. SWMU 21-024(k) is located on the mesa top; directly south of building 21-155 and is outside of the fenced area. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines and septic tanks. *SWMU 21-024(n)* originally consisted of a corrugated metal pipe, which exited building 21-155, and an outfall. Three additional pipelines and outfalls were identified in the same vicinity during a 2004 geophysical survey and/or from as-built engineering drawings. SWMU 21-024(n) is located on mesa top; east of building 21-213 by approximately 100 feet. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance lines. *SWMU 21-027(a)* consists of a surface drainage and outfall in addition to drain lines that received effluent from floor drains in building 21-003. The form of release was liquid and the most likely mechanisms are seepage into the subsurface and leaks from conveyance. *AOC 21-002(b)* is a former drum storage structure (structure 21-38) and consisted of three tin-siding walls, a roof, and a concrete floor. The area is currently being used for staging material such as, PVC pipe and scrap metal. The release was liquid or solid and likely from spills or leaking drums. *Consolidated Unit 21-003-99* consists of SWMU 21-003 and SWMU 21-013(f). SWMU 21-013(f) is contained entirely within SWMU 21-003. SWMU 21-003 was a PCB container storage area inside building 21-061, including the area immediately outside and east of the building. SWMU 21-003 is located on the mesa top and on a bench in the canyon. SWMU 21-013(f) is on the mesa top; south of building 21-61, stretching to the edge of the mesa, but not over the edge to Los Alamos Canyon. It was the site of soil piles and possibly a surface disposal area within the boundaries of building 21-003. The release was liquid or solid and likely from spills, leaking drums or surface disposal of materials. *SWMU 21-009* is a former waste treatment laboratory (building 21-33) that was a 16-ft × 48-ft wood-frame structure with a 12-ft ceiling and a wooden floor built on concrete pillars. SWMU 21-009 is located on the mesa top. SWMU 21-009 also includes an abandoned septic tank on the south side of TA-21. The form of release was liquid and the most likely mechanisms are seepage into the subsurface, leaks from conveyance lines and the septic tank, and spills from drum handling during waste treatment. *SWMU 21-024(c)* is an inactive septic system that formerly routed sewage from two buildings (buildings 21-54 and 21-61) through a septic tank (structure 21-56).

	SWMU 21-024(m) is the original outfall location for a septic system that cannot be located, although the approximate location is south of building 21-209. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank. *SWMU 21-012(b)* is a dry well and pipelines associated with the old steam plant building 21-009. This location now serves as a parking lot for the steam plant (building 21-357). SWMU 21-012(b) consists of two concrete steam blow-down pits, a separate drain line that drained each pit toward the southern edge of DP Mesa, a seepage pit, a drywell, an outfall pipe associated with floor drains in building 21-009, and piping conveying effluent between structures. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the dry well. *SWMU 21-024(a)* is an inactive septic system formerly routed sewage from the old steam plant (building 21-009) through a septic tank (structure 21-53) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank. *SWMU 21-024(e)* is an inactive septic system that routed sewage from the former TA-21 laundry (building 21-020) and a former diesel power plant and shop (building 21-014) through a septic tank (structure 21-123) to the surface on the south rim of DP Mesa above Los Alamos Canyon. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank. *SWMU 21-024(g)* is an inactive septic system that formerly routed sewage from building 21-031 (cold work shop/electronics) through pipelines and septic tank (structure 21-125) into two drainage ditches. Engineering drawings from the 1950s indicate sewage from building 21-007 (warehouse) being tied into the system. Subsequently, the drainage ditches were no longer used and the septic tank was moved farther north outside of the fenced area to discharge on the surface of the north rim of DP Mesa. Additionally, a cut pipe exits building 21-031, directing flow into the 2-ft × 2-ft × 1-ft concrete storm drain now present in the paved parking area. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank. *SWMU 21-024(o)* is a pipeline and outfall that served the old diesel plant (building 21-046) and associated outfall. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank. *SWMU 21-027(c)* is a pipeline and outfall that exited former building 21-006 (a cafeteria and machine shop removed in 1966) and discharged to the south on DP Mesa. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines and the septic tank. *Consolidated Unit 21-024(l)-99* consists of SWMU 21-022(a), a sump and associated lines; SWMU 21-024(l), an outfall; and AOC 21-004(a), an aboveground storage tank and associated lines. The form of release was liquid and the most likely release mechanisms are seepage into the subsurface and leaks from conveyance lines, the septic tank and the aboveground storage tank.

List of Primary Impacted Media **(Indicate all that apply.)**	**Surface soil** – X **Surface water/sediment** – NA **Subsurface** – X **Groundwater** – NA **Other, explain** – None
Vegetation class based on GIS vegetation coverage **(Indicate all that apply.)**	**Water** – NA **Bare Ground/Unvegetated** – X **Spruce/fir/aspen/mixed conifer** – NA **Ponderosa pine** – A few immature pine trees can be found at the edge of the parking areas **Piñon juniper/juniper savannah** – NA **Grassland/shrubland** – NA **Developed** – Paved roads, buildings, construction areas and fences. Some forbs are coming through the cracks in the asphalt and concrete. **Burned** – NA
Is T&E Habitat Present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon and Los Alamos Canyon nor on DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata].
Provide list, of Neighboring/ Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	21-006(e)-99, 21-028(c), 21-022(i), MDA B, MDA V, MDA T, MDA A, MDA U, 21-013(c) Releases from these sites include hazardous constituents and radionuclides in liquid, vapor, and solid forms through the mechanisms of spills, dumping, drainages, outfalls, and material disposal/storage. The COPCs for the up-gradient sites include but are not limited to VOCs, SVOCs, inorganic chemicals, and radionuclides.
Surface Water Erosion Potential Information **Summarize information from SOP 2.01, including the total score and the runoff subscore (maximum of 46); terminal point of surface water transport; slope; and surface water run-on sources.**	The terminal point of surface water transport is DP canyon or Los Alamos canyon. The DP mesa ground surface is typically flat (<10% slope) with some areas gradually sloping (10-30%) toward the canyons. There are very few sites on the mesa top with steep slopes (>30%) due to rubble mounds or other disturbances. Surface water run-on sources are not present.

Part B—Site Visit Documentation

Site ID	Mesa top sites: AOC 21-002(b),Consolidated Unit 21-003-99, SWMU 21-009, SWMU 21-024(c), PCBs below SWMU 21-024(m), SWMU 21-012(b), SWMU 21-024(a), SWMU 21-024(e), SWMU 21-024(g), Consolidated Unit 21-024(l)-99, SWMU 21-024(o), SWMU 21-027(c), Consolidated Unit 21-006(c)-99, SWMU 21-022(f), Consolidated Unit 21-022(h)-99, Consolidated Unit 21-023(a)-99, SWMU 21-024(b), SWMU 21-024(d), SWMU 21-024(h), SWMU 21-024(i), SWMU 21-024(j), SWMU 21-024(k), SWMU 21-024(n), SWMU 21-027(a)
Date of Site Visit	November 4, 2009
Site Visit Conducted by	Jennifer Weidhaas, North Wind, Inc. Linda Causey, Weston Solutions Emily Day, Weston Solutions Richard Mirenda, LANL

Receptor Information:

Estimate cover	**Relative vegetative cover (high, medium, low, none)** = low to none **Relative wetland cover (high, medium, low, none)** = none **Relative structures/asphalt, etc., cover (high, medium, low, none)** = high
Field notes on the GIS vegetation class to assist in verifying the Arcview information	The mesa top sites are highly disturbed with rock, concrete, asphalt, gravel, construction debris, and structures covering the entire area. Some forbs are pushing through cracks in the asphalt in various places and some weeds can be seen at the edge of the parking lots and paved areas. A few isolated, immature Ponderosa pines can be found at the edge of the paved areas.
Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject matter expert to support the use of the site by T&E receptors.	See previous page.
Are ecological receptors present at the site? **(yes/no/uncertain)** **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	Yes. The DP Mesa contains terrestrial biota such as reptiles, small mammals, insects, birds, and plants. Deer may use the area, as deer tracks were observed during the visit at the boundary of the parking areas near the edge of the mesa. The quality of the habitat at the sites is not ideal for native plant and animal species. No aquatic community exists on DP Mesa.

Contaminant Transport Information:

Surface water transport **Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).**	The DP Mesa sites have a small potential for surface water transport. The DP Mesa ground surface is typically flat (<10% slope) with some areas gradually sloping (10-30%) toward the canyons. There are very few sites on the mesa top with steep slopes (>30%) due to rubble mounds or other disturbances. Although much of the area is highly developed, there is a large amount of demolition in the area, which contributes to poor stabilization of the surface media. This destabilization of the surface media results in a higher potential for erosion and surface water transport. Runoff is evident in some locations and may infiltrate in areas not paved, but will likely move as sheet flow down into the canyons. The terminal point of surface water transport is DP Canyon and Los Alamos Canyon.
Are there any off-site transport pathways (surface water, air, or groundwater)? **(yes/no/uncertain)** **Provide explanation**	Yes. There is potential for surface water transport off-site due to disturbance of surface soil during demolition activities. There is a potential for air transport of contamination present in surface soil as fugitive dust. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface.

Ecological Effects Information:

Physical Disturbance **(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)**	There is a high amount of disturbance on DP Mesa. There is a high amount of demolition activities making the physical disturbance of the area quite substantial.
Are there obvious ecological effects? **(yes/no/uncertain)** **Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).**	No. Only effects are the result of the physical disturbances from demolition.
Interim action needed to limit apparent ecological effects? **(yes/no/uncertain)** **Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.**	No.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport. Not applicable.

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if the maximum value was captured by existing sample data.)**	Yes. Ongoing investigations at some SWMUs, AOCs, and consolidated units will define the nature and extent of contamination.
Do existing or proposed data for the site address potential transport pathways of site contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if other sites should be aggregated to characterize potential ecological risk.)**	Yes. Ongoing investigations at some SWMUs, AOCs, and consolidated units will define the nature and extent of contamination.

Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

Question A:

Could soil contaminants reach receptors through vapors?

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >10^{-5} atm-m^3/mol and molecular weight <200 g/mol).**

Answer (likely/unlikely/uncertain): Likely

Provide explanation: Volatile contaminants were detected at low levels in the subsurface.

Question B:

Could the soil contaminants reach receptors through fugitive dust carried in air?

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

Answer (likely/unlikely/uncertain): Likely in some areas, unlikely in paved SWMUs and AOCs

Provide explanation: Potential soil contaminants reaching receptors through fugitive dust is likely in areas with demolition disturbance, which could bring contaminants to the surface and in areas where

burrowing is likely. However, it is unlikely that soil contaminants will reach receptors as fugitive dust from SWMUs that are paved.

Question C:

Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no aquatic ecological communities on or within close proximity to the sites and there is limited runoff from the sites.

Question D:

Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no seeps, springs or perched groundwater present on or near the sites. The depth of groundwater is greater than 1000 ft below ground surface.

Question E:

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**

- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

Question F:

Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no perched aquifers on or near these sites. While erosion potential is high in some of the outfall areas, there is no evidence of mass wasting events in these areas.

Question G:

Could airborne contaminants interact with receptors through the respiration of vapors?

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 1

Terrestrial Animals: 2

Provide explanation: Demolition activities and burrowing in the outfall areas and along conveyance lines may bring receptors in contact with vapors.

Question H:

Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Demolition activities and burrowing in the outfall areas and along conveyance lines may bring receptors in contact with particulates.

Question I:

Could contaminants interact with plants through root uptake or rain splash from surficial soils?

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Provide explanation: Low concentrations of COPCs were detected in surface soil.

Question J:

Could contaminants interact with receptors through food-web transport from surficial soils?

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

Question K:

Could contaminants interact with receptors through the incidental ingestion of surficial soils?

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs were found in surface soil.

Question L:

Could contaminants interact with receptors through dermal contact with surficial soils?

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: Lipophilic chemicals were detected at low concentrations at these sites.

Question M:

Could contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Gamma-emitting radionuclides were detected infrequently.

Question N:

Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Provide explanation: There are no aquatic environments on-site

Question O:

Could contaminants interact with receptors through food-web transport from water and sediment?

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question P:

Could contaminants interact with receptors through the ingestion of water and suspended sediments?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question Q:

Could contaminants interact with receptors through dermal contact with water and sediment?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question R:

Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question S:

Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Plants/Emergent Vegetation: 0

Provide explanation: There are no aquatic environments on-site

Question T:

Could contaminants bioconcentrate in sedimentary or water-column organisms?

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question U:

Could contaminants bioaccumulate in sedimentary or water column organisms?

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

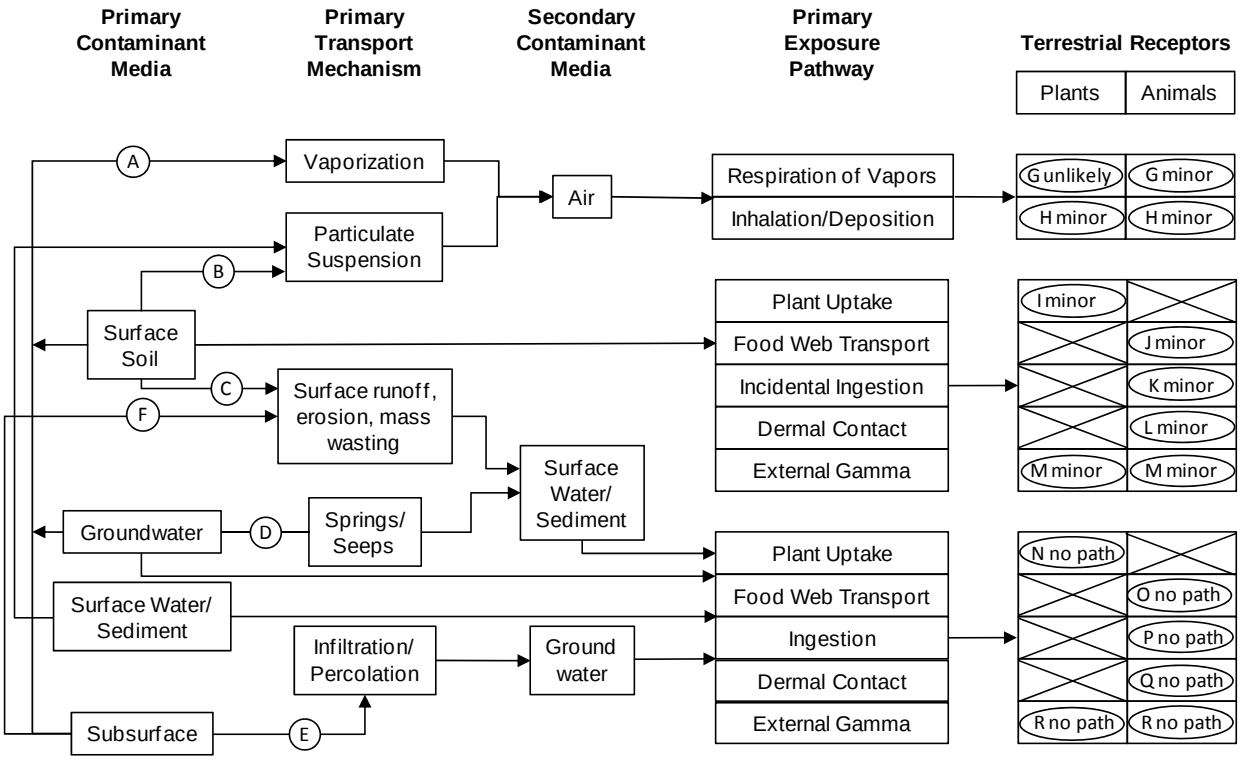
Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

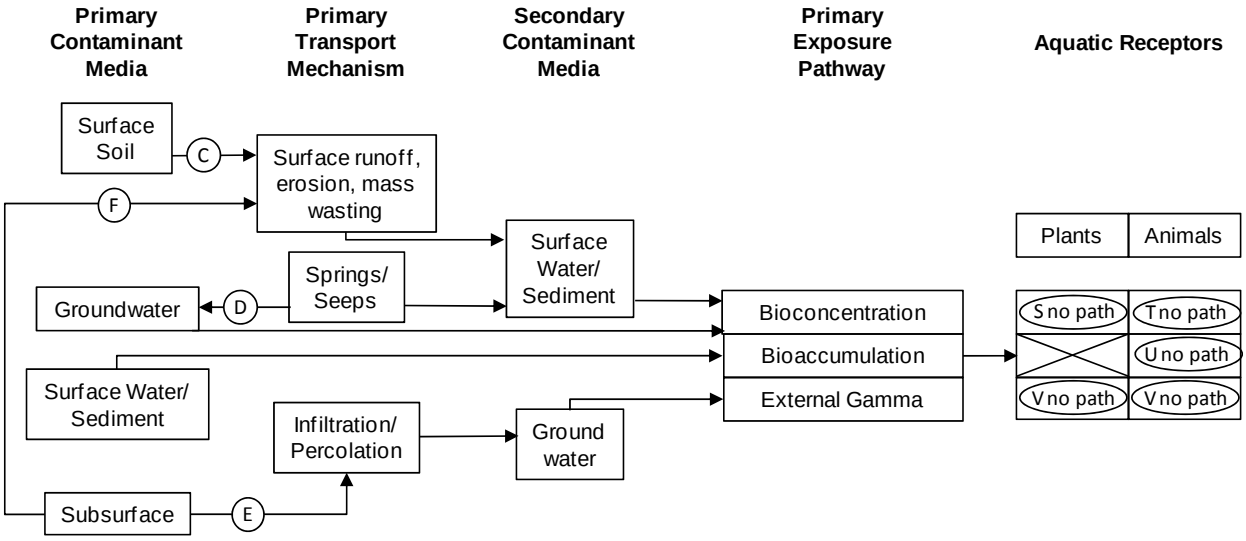
Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions of the Scoping Checklist



Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions of the Scoping Checklist



Signatures and certifications:

Checklist completed by (provide name, organization and phone number):

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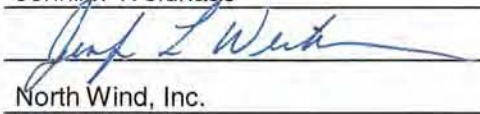
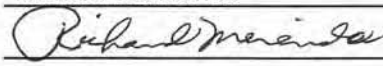
Name (signature): 
Organization: North Wind, Inc.
Phone number: 208-528-8718

Verification by another party (provide name, organization and phone number):

Name (printed): Richard J. Mirenda
Name (signature): 
Organization: Los Alamos National Laboratory, EP-WES-EDA
Phone number: 505-665-6953

H2-2.0 ECOLOGICAL SCOPING CHECKLIST FOR CANYON OUTFALL SITES

Part A—Scoping Meeting Documentation

Site ID	Canyon outfall sites:
Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.	From 1945 to 1978, TA-21 was used for plutonium research and metal production. The site has been used for various administrative and chemical research activities since 1978. The following sections describe each consolidated units and SWMUs along with known or suspected mechanisms of release.
List of Primary Impacted Media **(Indicate all that apply.)**	**Surface soil** – X **Surface water/sediment** – NA **Subsurface** – X **Groundwater** – NA **Other, explain** – None
Vegetation class based on GIS vegetation coverage **(Indicate all that apply.)**	**Water** – NA **Bare Ground/Unvegetated** – NA **Spruce/fir/aspen/mixed conifer** – X **Ponderosa pine** – X **Piñon juniper/juniper savannah** – X **Grassland/shrubland** – NA **Developed** – NA **Burned** – NA
Is T&E Habitat Present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon and Los Alamos Canyon nor on DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata].
Provide list, of Neighboring/Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	SWMU 21-006(e)-99, SWMU 21-028(c), SWMU 21-022(i), SWMU 21-009, SWMU 21-021(b), Consolidated Unit 21-024(l)-99, SWMU 21-023(a)-99, MDA B, MDA V, MDA T, MDA A, MDA U, 21-013(c) Releases from these sites include hazardous constituents and radionuclides in liquid, vapor, and solid forms through the mechanisms of spills, dumping, drainages, outfalls, and material disposal/storage. The COPCs for the up-gradient sites include, but are not limited to, VOCs, SVOCs, inorganic chemicals, and radionuclides.
Surface Water Erosion Potential Information **Summarize information from SOP 2.01, including the total score and the runoff subscore (maximum of 46); terminal point of surface water transport; slope; and surface water run-on sources.**	The terminal point of surface water transport is DP canyon or Los Alamos canyon. The canyons are typically steep (>30% slope) with some areas extending into the canyon very steeply (>75% slope). Runoff is evident in some locations.

Part B—Site Visit Documentation

Site ID	Canyon outfall sites
Date of Site Visit	November 4, 2009
Site Visit Conducted by	Jennifer Weidhaas, North Wind, Inc. Linda Causey, Weston Solutions Emily Day, Weston Solutions Richard Mirenda, LANL

Receptor Information:

Estimate cover	**Relative vegetative cover (high, medium, low, none)** = medium to high **Relative wetland cover (high, medium, low, none)** = none **Relative structures/asphalt, etc., cover (high, medium, low, none)** = none to low
Field notes on the GIS vegetation class to assist in verifying the Arcview information	The canyon sites are relatively undisturbed and the vegetation is typical of the native vegetation and habitats of the canyons. Native vegetation includes piñon-juniper woodlands, and stands of Gambel's oak, Russian Olive Trees, one-seed juniper, elm trees, and ponderosa pine trees.
Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject matter expert to support the use of the site by T&E receptors.	See previous page.
Are ecological receptors present at the site? **(yes/no/uncertain)** **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	Yes. The DP Canyon and Los Alamos Canyon contains terrestrial biotia such as reptiles, small mammals, insects, birds, and plants. Deer may use the area, as deer track was observed during the visit at the boundary of the parking areas near the edge of the mesa. Various songbirds were observed in the trees and circling raptors were observed. Evidence of burrowing was observed in the area. Other large mammals, such as deer, elk, coyotes and raccoons, may be in the area. Plant life is abundant and healthy. No aquatic community exists in the SWMUs and consolidated units affected by the canyon sites.

Contaminant Transport Information:

Surface water transport **Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).**	The sites have a potential for surface water transport. The canyons are typically steep (>30% slope) with some areas extending into the canyons very steeply (>75% slope). Runoff is evident in some locations. Runoff may infiltrate in areas not paved, but will likely move as sheet flow down into canyons in most developed areas of the DP mesa. The terminal point of surface water transport is DP and Los Alamos Canyons.
Are there any off-site transport pathways (surface water, air, or groundwater)? **(yes/no/uncertain)** **Provide explanation**	Yes. There is potential for surface water transport off-site. There is little potential for air transport of contamination present in surface soil as fugitive dust due to vegetation cover. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface.

Ecological Effects Information:

Physical Disturbance **(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)**	There is minimal disturbance in the outfall site areas as the extreme slope precludes accessibility in most cases. There is some erosion evident in various locations.
Are there obvious ecological effects? **(yes/no/uncertain)** **Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).**	No.
Interim action needed to limit apparent ecological effects? **(yes/no/uncertain)** **Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.**	No.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport. Not applicable.

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if the maximum value was captured by existing sample data.)**	Yes. Ongoing investigations at some SWMUs and consolidated units will define the nature and extent of contamination.
Do existing or proposed data for the site address potential transport pathways of site contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if other sites should be aggregated to characterize potential ecological risk.)**	Yes. Ongoing investigations at some SWMUs and consolidated units will define the nature and extent of contamination.

Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

Question A:

Could soil contaminants reach receptors through vapors?

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >10^{-5} atm-m^3/mol and molecular weight <200 g/mol).**

Answer (likely/unlikely/uncertain): Likely

Provide explanation: Volatile contaminants were detected at low levels in the subsurface.

Question B:

Could the soil contaminants reach receptors through fugitive dust carried in air?

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

Answer (likely/unlikely/uncertain): Likely in some areas

Provide explanation: Potential soil contaminants reaching receptors through fugitive dust is likely in areas where burrowing occurs (e.g., in Los Alamos and DP Canyons).

Question C:

Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no aquatic ecological communities on or within close proximity to the sites and there is limited runoff from the sites.

Question D:

Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no seeps, springs or perched groundwater present on or near the sites. The depth of groundwater is greater than 1000 ft below ground surface.

Question E:

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

Question F:

Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no perched aquifers on or near these sites. While erosion potential is high in some of the outfall areas in Los Alamos and DP Canyons, there is no evidence of mass wasting events in these areas.

Question G:

Could airborne contaminants interact with receptors through the respiration of vapors?

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 1

Terrestrial Animals: 2

Provide explanation: Burrowing in the outfall areas and along conveyance lines may bring receptors in contact with vapors.

Question H:

Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Burrowing in the outfall areas and along conveyance lines may bring receptors in contact with particulates.

Question I:

Could contaminants interact with plants through root uptake or rain splash from surficial soils?

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Provide explanation: Low concentrations of COPCs were detected in surface soil.

Question J:

Could contaminants interact with receptors through food-web transport from surficial soils?

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

Question K:

Could contaminants interact with receptors through the incidental ingestion of surficial soils?

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs were found in surface soil.

Question L:

Could contaminants interact with receptors through dermal contact with surficial soils?

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: Lipophilic chemicals were detected at low concentrations at these sites.

Question M:

Could contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Gamma-emitting radionuclides were detected infrequently.

Question N:

Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Provide explanation: There are no aquatic environments on-site

Question O:

Could contaminants interact with receptors through food-web transport from water and sediment?

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question P:

Could contaminants interact with receptors through the ingestion of water and suspended sediments?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question Q:

Could contaminants interact with receptors through dermal contact with water and sediment?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question R:

Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question S:

Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Plants/Emergent Vegetation: 0

Provide explanation: There are no aquatic environments on-site

Question T:

Could contaminants bioconcentrate in sedimentary or water-column organisms?

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question U:

Could contaminants bioaccumulate in sedimentary or water column organisms?

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

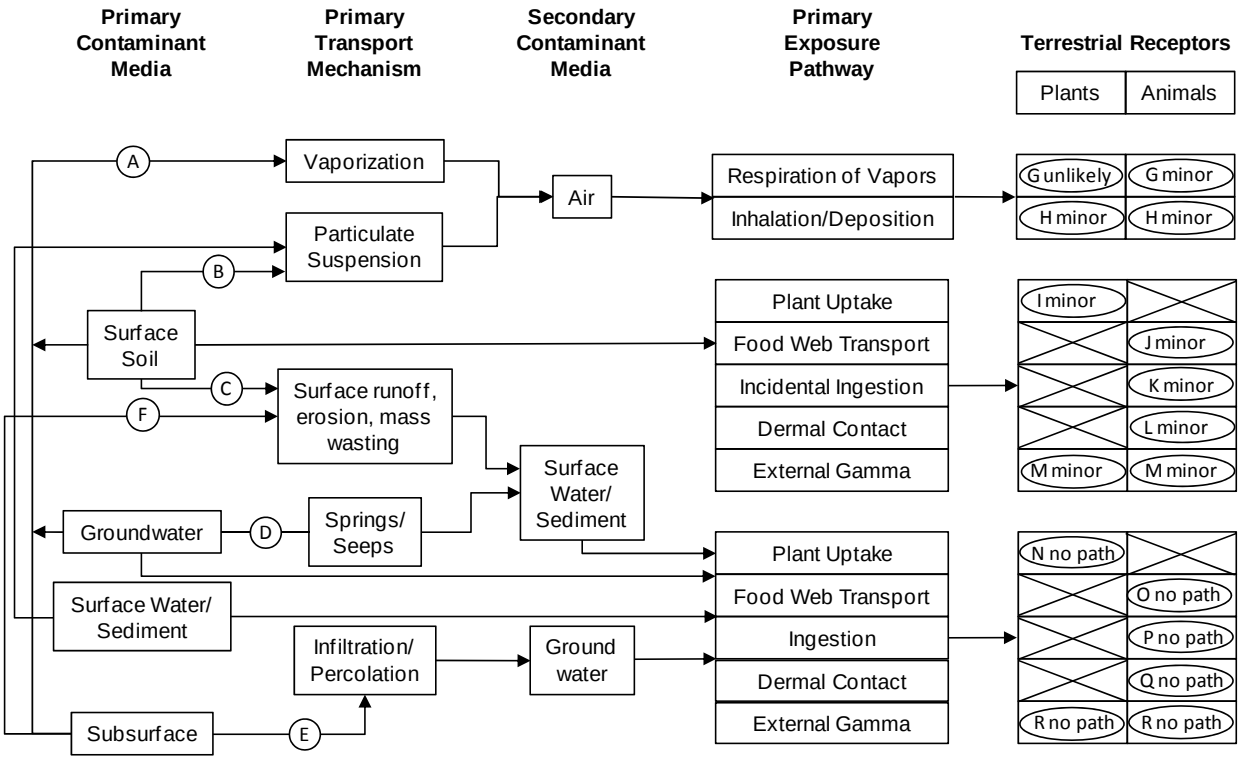
Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions of the Scoping Checklist



Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
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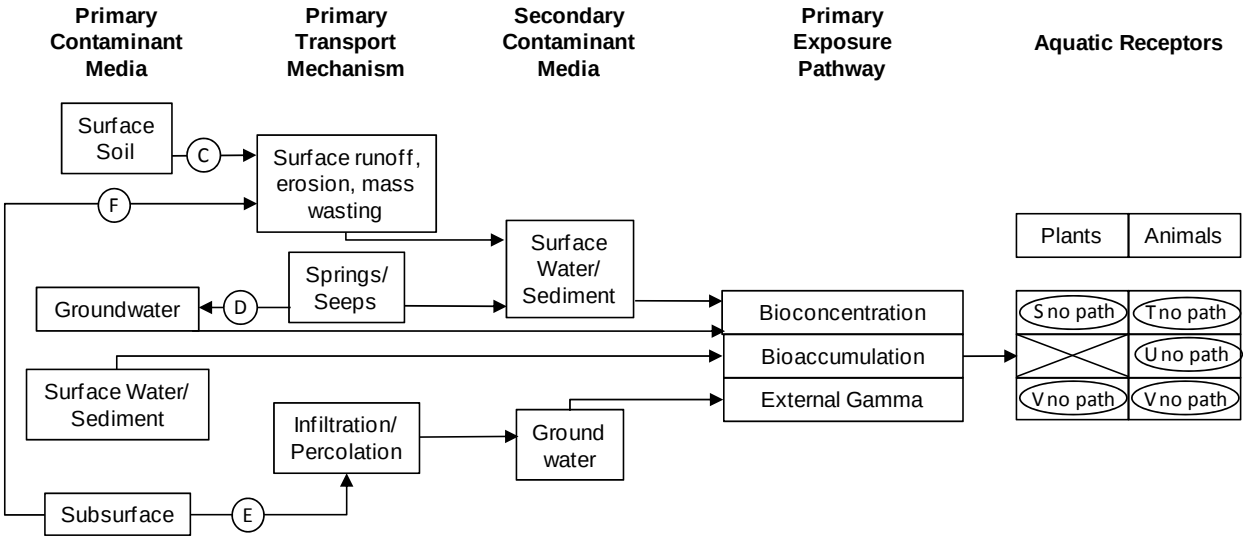
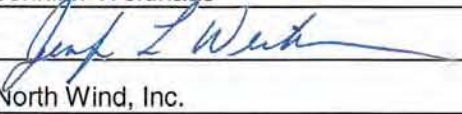
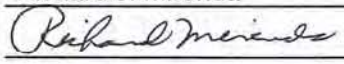


Signatures and certifications:

Checklist completed by (provide name, organization and phone number):

Name (printed): Jennifer Weidhaas
Name (signature): 
Organization: North Wind, Inc.
Phone number: 208-528-8718

Verification by another party (provide name, organization and phone number):

Name (printed): Richard J. Mirenda
Name (signature): 
Organization: Los Alamos National Laboratory, EP-WES-EDA
Phone number: 505-665-6953

H2-3.0 ECOLOGICAL SCOPING CHECKLIST FOR SWMU 21-013(c)

Part A—Scoping Meeting Documentation

Site ID	SWMU 21-013(c)
Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.	SWMU 21-013(c) is a former disposal area located at the eastern end of DP Mesa. The site consisted of mounds of earth, an excavated trench and an earthen berm that contained scattered concrete, asphalt and metal debris. Four large concrete pylons and several piles of soil, asphalt, and concrete also were located on the site. Other surface debris included glass, scrap metal, wood, cans, paper, and plastic. The SWMU had been disturbed in the past and appeared to contain only building materials. It is not known when the materials were disposed of at the site.
List of Primary Impacted Media **(Indicate all that apply.)**	**Surface soil** – X **Surface water/sediment** – NA **Subsurface** – X **Groundwater** – NA **Other, explain** – None
Vegetation class based on GIS vegetation coverage **(Indicate all that apply.)**	**Water** – NA **Bare Ground/Unvegetated** – X; ground/canopy cover=medium (25-75%); mixed vegetation (native trees, shrubs, and weeds) with some barren areas, no gravel was observed **Spruce/fir/aspen/mixed conifer** – X **Ponderosa pine** – X **Piñon juniper/juniper savannah** – X **Grassland/shrubland** – X; shrub vegetation dominated by chamisa (*Chrysothamnus nauseosus*) **Developed** – NA **Burned** – NA
Is T&E Habitat Present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon, Los Alamos Canyon nor on DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata].
Provide list, of Neighboring/ Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	SWMU 21-022(f), SWMU 21-024(i), SWMU 21-024(m), SWMU 21-024(n), MDA U Releases from these sites and the MDA include hazardous constituents and radionuclides in liquid, vapor, and solid forms through spills, dumping, drainages, outfalls, and material disposal/storage. The COPCs for the up-gradient sites include but are not limited to VOCs, SVOCs, inorganic chemicals, and radionuclides.
Surface Water Erosion Potential Information	Erosion potential is low and the terminal point of surface water transport is DP Canyon.

Part B—Site Visit Documentation

Site ID	SWMU 21-013(c)
Date of Site Visit	November 4, 2009
Site Visit Conducted by	Jennifer Weidhaas, North Wind, Inc. Linda Causey, Weston Solutions Emily Day, Weston Solutions Richard Mirenda, LANL

Receptor Information:

Estimate cover	**Relative vegetative cover (high, medium, low, none)** = medium to high **Relative wetland cover (high, medium, low, none)** = none **Relative structures/asphalt, etc., cover (high, medium, low, none)** = none to low, a fence bounds the SWMU.
Field notes on the GIS vegetation class to assist in verifying the Arcview information	The SWMU is disturbed, although native grasses, weeds, and trees have revegetated some areas of the site.
Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject matter expert to support the use of the site by T&E receptors.	See previous page.
Are ecological receptors present at the site? **(yes/no/uncertain)** **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	Yes. DP Canyon, Los Alamos Canyon, and the mesa top contain terrestrial biota, such as reptiles, small mammals, insects, birds, and plants. Deer may use the area, as deer track was observed during the visit. Various songbirds were observed in the trees and circling raptors were observed. Evidence of burrowing was observed in this area. Other large mammals, such as elk, coyotes and raccoons, may be in the area. Plant life is abundant. No aquatic community exists in the SWMU and canyon area potentially affected by the SWMU.

Contaminant Transport Information:

Surface water transport **Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).**	Runoff was not evident, although the slope of the site indicates that runoff is possible. Runoff may infiltrate or move as sheet flow down into canyon. The terminal point of surface water transport is DP Canyon.
Are there any off-site transport pathways (surface water, air, or groundwater)? **(yes/no/uncertain)** **Provide explanation**	Yes. There is potential for surface water transport off-site. There is minimal potential for air transport of contamination present in surface soil as fugitive dust due to vegetation cover. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface.

Ecological Effects Information:

Physical Disturbance **(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)**	The site is disturbed due to surface disposal activities; however native grasses, weeds, and trees have re-vegetated the site.
Are there obvious ecological effects? **(yes/no/uncertain)** **Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).**	No.
Interim action needed to limit apparent ecological effects? **(yes/no/uncertain)** **Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.**	No.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport. Not applicable.

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if the maximum value was captured by existing sample data.)**	Yes. Ongoing investigations at the SWMU will define the nature and extent of contamination.
Do existing or proposed data for the site address potential transport pathways of site contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if other sites should be aggregated to characterize potential ecological risk.)**	Yes. Ongoing investigations at the SWMU will define the nature and extent of contamination.

Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

Question A:

Could soil contaminants reach receptors through vapors?

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >10^{-5} atm-m^3/mol and molecular weight <200 g/mol).**

Answer (likely/unlikely/uncertain): Likely

Provide explanation: Volatile contaminants were detected at low levels in the subsurface.

Question B:

Could the soil contaminants reach receptors through fugitive dust carried in air?

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

Answer (likely/unlikely/uncertain): Likely

Provide explanation: Potential soil contaminants reaching receptors through fugitive dust is likely in burrowing areas.

Question C:

Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no aquatic ecological communities on or within close proximity to the site and no erosion was observed.

Question D:

Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no seeps, springs or perched groundwater present on or near the site. The depth of groundwater is greater than 1000 ft below ground surface.

Question E:

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

Question F:

Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no perched aquifers on or near the site. Erosion potential is low and there is no evidence of mass wasting events at the SWMU.

Question G:

Could airborne contaminants interact with receptors through the respiration of vapors?

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 1

Terrestrial Animals: 2

Provide explanation: Burrowing may bring receptors in contact with vapors.

Question H:

Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Burrowing may bring receptors in contact with particulates.

Question I:

Could contaminants interact with plants through root uptake or rain splash from surficial soils?

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Provide explanation: Low concentrations of COPCs were detected in surface soil.

Question J:

Could contaminants interact with receptors through food-web transport from surficial soils?

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

Question K:

Could contaminants interact with receptors through the incidental ingestion of surficial soils?

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs were found in surface soil.

Question L:

Could contaminants interact with receptors through dermal contact with surficial soils?

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: Lipophilic chemicals were detected at low concentrations at the site.

Question M:

Could contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Gamma-emitting radionuclides were detected infrequently.

Question N:

Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Provide explanation: There are no aquatic environments on-site

Question O:

Could contaminants interact with receptors through food-web transport from water and sediment?

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question P:

Could contaminants interact with receptors through the ingestion of water and suspended sediments?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question Q:

Could contaminants interact with receptors through dermal contact with water and sediment?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question R:

Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question S:

Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Plants/Emergent Vegetation: 0

Provide explanation: There are no aquatic environments on-site

Question T:

Could contaminants bioconcentrate in sedimentary or water-column organisms?

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question U:

Could contaminants bioaccumulate in sedimentary or water column organisms?

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

- External irradiation effects are most relevant for gamma-emitting radionuclides.
- The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

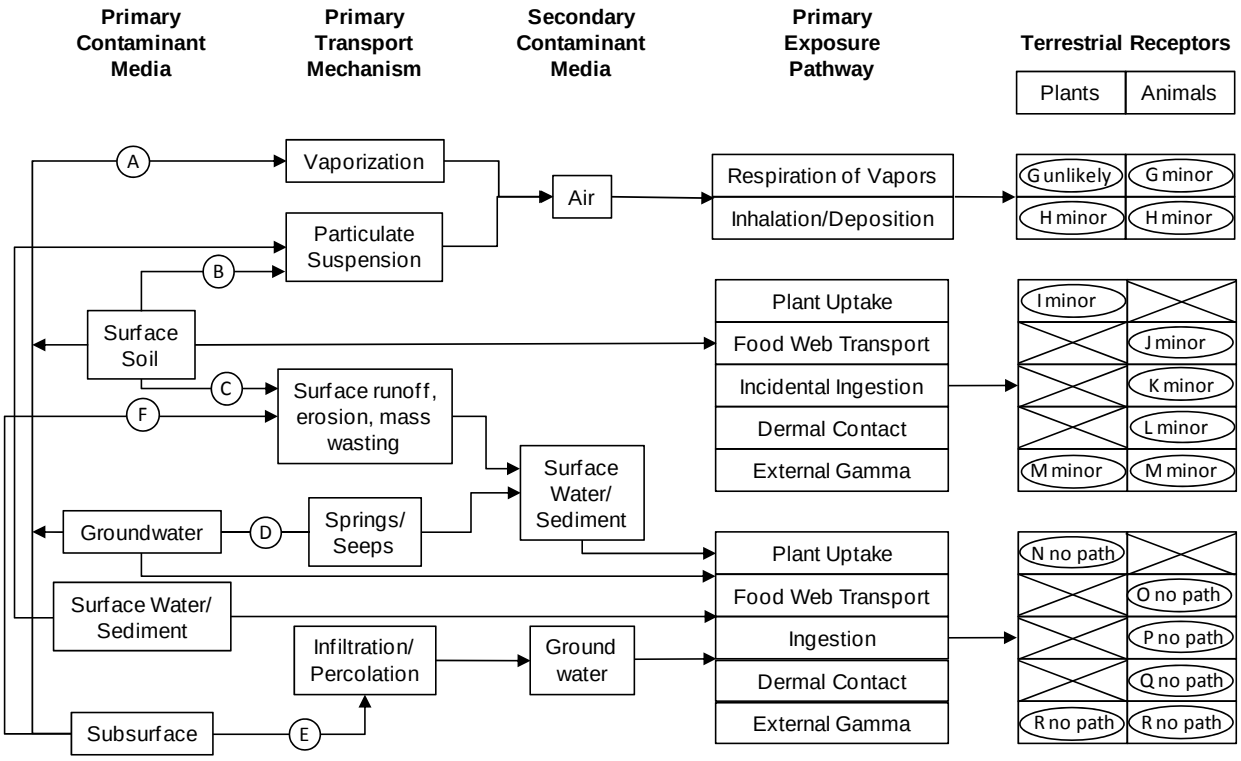
Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

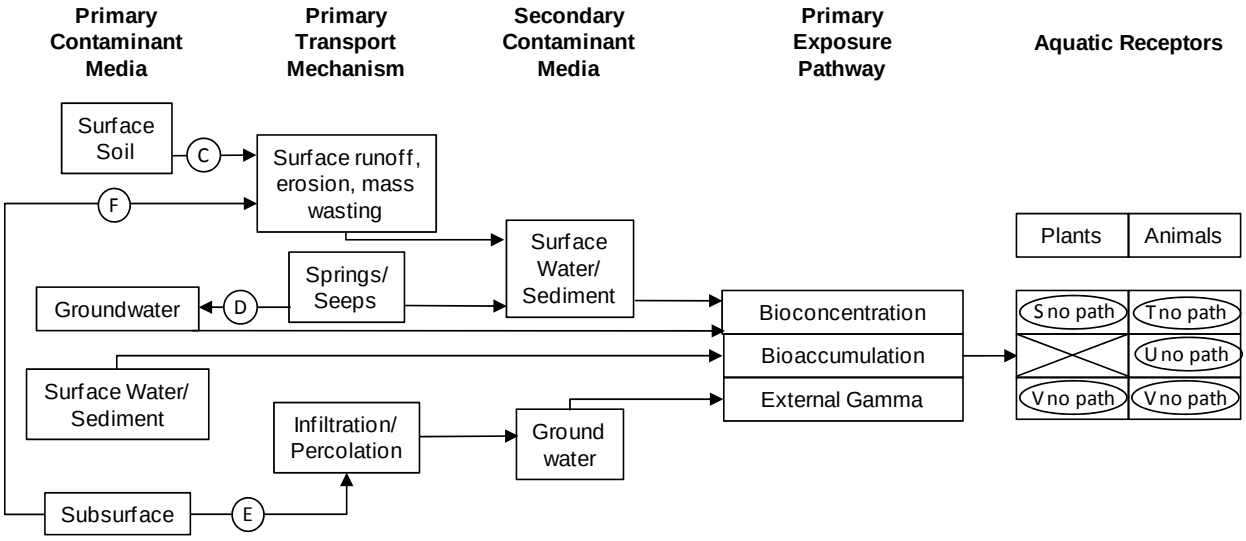
Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions of the Scoping Checklist



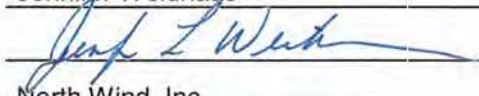
Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions of the Scoping Checklist

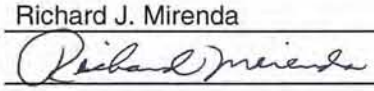


Signatures and certifications:

Checklist completed by (provide name, organization and phone number):

Name (printed): Jennifer Weidhaas
Name (signature): 
Organization: North Wind, Inc.
Phone number: 208-528-8718

Verification by another party (provide name, organization and phone number):

Name (printed): Richard J. Mirenda
Name (signature): 
Organization: Los Alamos National Laboratory, EP-WES-EDA
Phone number: 505-665-6953

H2-4.0 ECOLOGICAL SCOPING CHECKLIST FOR CONSOLIDATED UNIT 21-026(a)-99

Part A—Scoping Meeting Documentation

Site ID	Consolidated Unit 21-026(a)-99
Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate.	Sewage treatment plant consisting of SWMUs 21-013(a), surface disposal area; 21-026(a), sewage treatment plant; 21-026(b), four sludge drying/sand filter beds; and AOCs 21-026(c), a dosing siphon chamber; and 21-026(d), an outfall SWMU 21-026(a) consists of an inactive sewage treatment plant housed in building 21-227. The plant is located at the eastern end of DP Mesa. The treatment plant replaced the original septic tank/filter fields and septic tank/surface discharge systems throughout TA-21. The treatment plant was an extended aeration sanitary waste treatment plant with a grit chamber, comminuter, digester, aeration tank, and clarifier. The plant treated sanitary wastes and cooling water from TA-21 facilities and received water from decontamination activities, janitor's scrub water, and waste from other TA-21 operations. Originally, treated effluent leaving building 21-227 was released at a concrete spill pad located on the southern edge of DP Canyon [AOC 21-026(d)]. Later, effluent was discharged via a dosing siphon chamber to sand filter/sludge drying beds. SWMU 21-026(b) consists of four sludge drying/sand filter beds; each is 14.5-ft by 23-ft with 4-ft deep concrete walls. AOC 21-026(c) consists of a dosing siphon chamber that was a 5-ft wide × 7-ft long × 8-ft-deep concrete tank (structure 21-348). The dosing siphon chamber received effluent until the chamber was full and then was pumped to the two westernmost sand filter beds. AOC 21-026(d) consists of an outfall. Discharge from the sewage treatment plant flowed through an 8-in.-diameter VCP into a concrete channel on the north edge of DP Mesa and ran down a natural drainage to a tributary of DP Canyon. SWMU 21-013(a) consists of a surface disposal area, approximately 45 ft^2.
List of Primary Impacted Media **(Indicate all that apply.)**	**Surface soil** – X **Surface water/sediment** – NA **Subsurface** – X **Groundwater** – NA **Other, explain** – None
Vegetation class based on GIS vegetation coverage **(Indicate all that apply.)**	**Water** – NA **Bare Ground/Unvegetated** – 21-013(a) Ground/Canopy Cover = medium (25-75%) 21-026(a) Ground/Canopy Cover = thick (>75%) 21-026(b) Ground/Canopy Cover = medium (25-75%) 21-026(d) Ground/Canopy Cover = medium (25-75%) **Spruce/fir/aspen/mixed conifer** – NA **Ponderosa pine** – NA

	Piñon juniper/juniper savannah – NA **Grassland/shrubland** – 21-026(d) groundcover in the outfall portion consists of thick vegetation of native grasses, forbs and pines 21-013(a) some forbs and native grasses 21-026(a) vegetation around site consists of native grasses and forbs 21-026(b) forbs, native grasses (about 30%) **Developed** – Groundcover on the mesa top portion consists of a base coarse driveway, facility structures, and sparse vegetation. 21-013(a) ground cover consists of mostly base coarse 21-026(a) built on a concrete foundation, base coarse driveway on north side of facility 21-026(b) some base coarse around drying beds **Burned** – NA
Is T&E Habitat Present? **If applicable, list species known or suspected of using the site for breeding or foraging.**	The only threatened or endangered (T&E) species known to frequent the LANL area is the Mexican spotted owl. The owl's primary habitat is densely forested canyons and it has not been observed to roost in DP Canyon or Los Alamos Canyon, nor on the DP Mesa; however, the owl may use the canyon and surrounding area as foraging habitat [personnel communication, WES-EDA-GIS Team, Areas of Environmental Interest Metadata].
Provide list, of Neighboring/ Contiguous/ Upgradient sites, includes a brief summary of COPCs and the form of releases for relevant sites and reference a map as appropriate. **(Use this information to evaluate the need to aggregate sites for screening.)**	None. The nearest site, 21-013(c) is over 300 feet away.
Surface Water Erosion Potential Information	Erosion is likely and the terminal point of surface water transport is DP canyon or Los Alamos canyon.

Part B—Site Visit Documentation

Site ID	Consolidated Unit 21-026(a)-99
Date of Site Visit	November 4, 2009
Site Visit Conducted by	Jennifer Weidhaas, North Wind, Inc. Linda Causey, Weston Solutions Emily Day, Weston Solutions Richard Mirenda, LANL

Receptor Information:

Estimate cover	Relative vegetative cover (high, medium, low, none) = medium to high Relative wetland cover (high, medium, low, none) = none Relative structures/asphalt, etc., cover (high, medium, low, none) = none to low, a fence bounds the SWMU.
Field notes on the GIS vegetation class to assist in verifying the Arcview information	The SWMU on the mesa top is disturbed, although native grasses, weeds and pines have revegetated some areas of the site. The outfall area in the DP Canyon has native vegetation including ponderosa and piñon pine.
Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject matter expert to support the use of the site by T&E receptors.	See previous page.
Are ecological receptors present at the site? **(yes/no/uncertain)** **Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.**	Yes. The DP Canyon and the mesa top contain terrestrial biota, such as reptiles, small mammals, insects, birds, and plants. Deer use the area, as deer track was observed during the visit. Various songbirds were observed in the trees and circling raptors were observed. Evidence of burrowing was observed in this area. Other large mammals, such as elk, coyotes and raccoons, may be in the area. Plant life is abundant in the outfall area. No aquatic community exists in the SWMU and canyon area potentially affected by the SWMU.

Contaminant Transport Information:

Surface water transport **Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable).**	Minor runoff was evident. Runoff may infiltrate or move as sheet flow down into canyon. The terminal point of surface water transport is DP Canyon.
Are there any off-site transport pathways (surface water, air, or groundwater)? **(yes/no/uncertain)** **Provide explanation**	Yes. There is potential for surface water transport off-site. There is little potential for air transport of contamination present in surface soil as fugitive dust due to vegetative cover. There is no potential for groundwater contamination as the depth to groundwater at TA-21 is ~1,100 ft below ground surface.

Ecological Effects Information:

Physical Disturbance **(Provide list of major types of disturbances, including erosion and construction activities, review historical aerial photos where appropriate.)**	The site on the mesa top is disturbed due to construction and demolition activities; however native grasses, weeds, and trees have re-vegetated the site.
Are there obvious ecological effects? **(yes/no/uncertain)** **Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).**	There is distressed vegetation (e.g., dead pine trees) in the outfall area.
Interim action needed to limit apparent ecological effects? **(yes/no/uncertain)** **Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP.**	No. The outfall has not received effluent from the treatment plant (building 21-227) since 1992.

No Exposure/Transport Pathways:

If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport. Not applicable.

Adequacy of Site Characterization:

Do existing or proposed data provide information on the nature and extent of contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if the maximum value was captured by existing sample data.)**	Yes. Ongoing investigations at the consolidated unit will define the nature and extent of contamination.
Do existing or proposed data for the site address potential transport pathways of site contamination? **(yes/no/uncertain)** **Provide explanation** **(Consider if other sites should be aggregated to characterize potential ecological risk.)**	Yes. Ongoing investigations at the consolidated unit will define the nature and extent of contamination.

Part C—Ecological Pathways Conceptual Exposure Model

Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model

Question A:

Could soil contaminants reach receptors through vapors?

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >10^{-5} atm-m^3/mol and molecular weight <200 g/mol).**

Answer (likely/unlikely/uncertain): Likely

Provide explanation: Volatile contaminants were detected at low levels in the subsurface.

Question B:

Could the soil contaminants reach receptors through fugitive dust carried in air?

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

Answer (likely/unlikely/uncertain): Likely

Provide explanation: Potential soil contaminants reaching receptors through fugitive dust is likely in burrowing areas.

Question C:

Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (* note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).**
- **If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no aquatic ecological communities on or within close proximity of the sites and no erosion was observed.

Question D:

Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no seeps, springs or perched groundwater present on or near the sites. The depth of groundwater is greater than 1000 ft below ground surface.

Question E:

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- **The potential for contaminants to migrate to groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: Contaminants are unlikely to migrate to the regional aquifer given the depth to groundwater. The lack of a significant hydraulic driver (e.g., no standing surface water) facilitating infiltration also mitigates the potential for contaminants reaching groundwater.

Question F:

Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

Answer (likely/unlikely/uncertain): Unlikely

Provide explanation: There are no perched aquifers on or near these sites. Erosion potential is low and there is no evidence of mass wasting events at the sites.

Question G:

Could airborne contaminants interact with receptors through the respiration of vapors?

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 1

Terrestrial Animals: 2

Provide explanation: Burrowing may bring receptors in contact with vapors.

Question H:

Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Burrowing may bring receptors in contact with particulates.

Question I:

Could contaminants interact with plants through root uptake or rain splash from surficial soils?

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Provide explanation: Low concentrations of COPCs were detected in surface soil.

Question J:

Could contaminants interact with receptors through food-web transport from surficial soils?

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs known to bioaccumulate were found in low concentrations in surface soil, indicating that food web transport is a minor pathway

Question K:

Could contaminants interact with receptors through the incidental ingestion of surficial soils?

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: COPCs were found in surface soil.

Question L:

Could contaminants interact with receptors through dermal contact with surficial soils?

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 2

Provide explanation: Lipophilic chemicals were detected at low concentrations at these sites.

Question M:

Could contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 2

Terrestrial Animals: 2

Provide explanation: Gamma-emitting radionuclides were detected infrequently.

Question N:

Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Provide explanation: There are no aquatic environments on-site

Question O:

Could contaminants interact with receptors through food-web transport from water and sediment?

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question P:

Could contaminants interact with receptors through the ingestion of water and suspended sediments?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question Q:

Could contaminants interact with receptors through dermal contact with water and sediment?

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question R:

Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Terrestrial Plants: 0

Terrestrial Animals: 0

Provide explanation: There are no aquatic environments on-site

Question S:

Could contaminants bioconcentrate in free-floating aquatic, attached aquatic plants, or emergent vegetation?

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Plants/Emergent Vegetation: 0

Provide explanation: There are no aquatic environments on-site

Question T:

Could contaminants bioconcentrate in sedimentary or water-column organisms?

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question U:

Could contaminants bioaccumulate in sedimentary or water column organisms?

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment dwelling organisms.**

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):

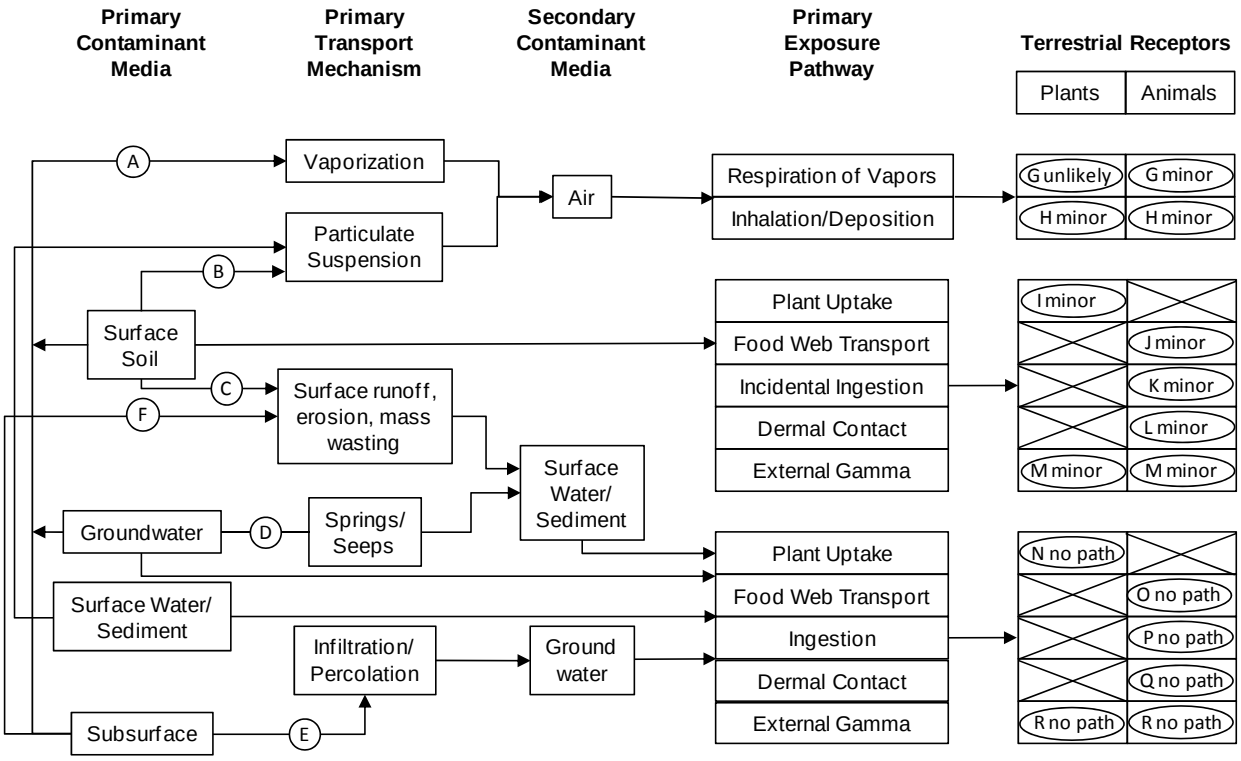
Aquatic Plants: 0

Aquatic Animals: 0

Provide explanation: There are no aquatic environments on-site

Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model

NOTE:
Letters in circles refer to questions of the Scoping Checklist



Ecological Scoping Checklist
Aquatic Receptors
Ecological Pathways Conceptual Exposure Model

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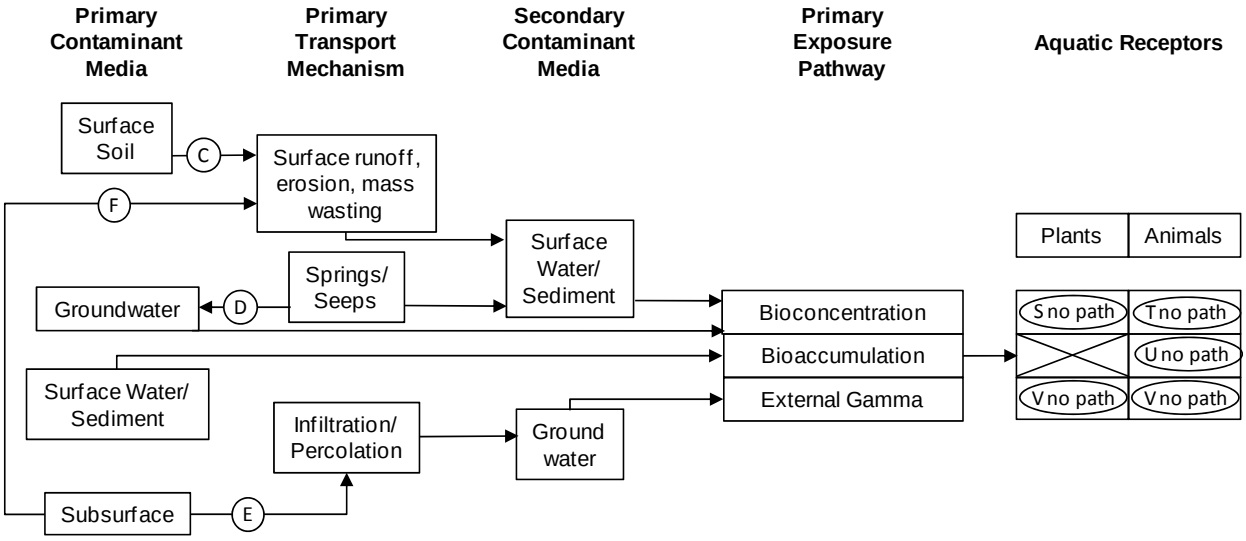
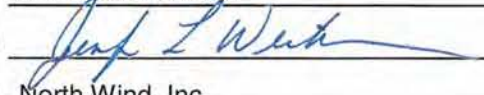
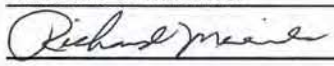


Signatures and certifications:

Checklist completed by (provide name, organization and phone number):

Name (printed): Jennifer Weidhaas
Name (signature): 
Organization: North Wind, Inc.
Phone number: 208-528-8718

Verification by another party (provide name, organization and phone number):

Name (printed): Richard J. Mirenda
Name (signature): 
Organization: Los Alamos National Laboratory, EP-WES-EDA
Phone number: 505-665-6953