CDM

U.S. Environmental Protection Agency Region III

Borit Asbestos Superfund Site, Operable Unit 1
Montgomery County,
Ambler, Pennsylvania

June 18, 2010

Phase 1 Data Evaluation Report

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June 18, 2010

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Dear Ms. Pratt:

CDM Federal Programs Corporation (CDM) is pleased to submit this brief Phase 1 Data Evaluation Report that presents data tables and figures summarizing the results of the Operable Unit 1 (OU-1) Phase 1 field investigation at the Borit Asbestos Site (the Site) in Ambler, PA. EPA authorized CDM to prepare this rudimentary Data Evaluation Report to support EPA's scoping process for the Phase 2 field investigation at the Site. EPA has not yet authorized CDM's preparation of the remedial investigation (RI) report, the feasibility study (FS) report, the human health risk assessment (HHRA), or the screening level ecological risk assessment (SLERA) for this Site. CDM understands that these detailed reports will be prepared after the results from the Phase 2 field investigation are available. This Phase 1 Data Evaluation Report was prepared under work assignment 029-RICO-A3EN of CDM's contract number EP-S3-07-06 with EPA Region 3.

If you have any questions or comments regarding this submittal, please feel free to call me at (717) 560-7500. We look forward to meeting with you at your earliest convenience to discuss the Phase 1 results and determine the approach for the Phase 2 field investigation.

Very truly yours,

Lucinda Pype

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Response Action Contract
for Remedial Planning and Oversight Activities at Sites
in EPA Region III

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Phase 1 Data Evaluation Report
for
Borit Asbestos Superfund Site
Operable Unit 1
Ambler, Pennsylvania

Work Assignment No.: 029-RICO-A3EN
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Section 1
Scope of the Phase 1 Field Investigation and Analysis

CDM Federal Programs Corporation (CDM) performed a Phase 1 field investigation at the Borit Asbestos Superfund Site Operable Unit 1 (OU-1) in Ambler PA. This work was performed under work assignment 029-RICO-A3EN of CDM's RAC 2 contract with EPA Region III (contract EP-S3-07-06). EPA authorized CDM to prepare this rudimentary Phase 1 data evaluation report to support EPA's scoping process for the Phase 2 field investigation. A Remedial Investigation (RI) report will be prepared after the next phase of field investigation is completed.

The scope of the Phase 1 field investigation activities was defined in the *Borit Site Investigation Planning Guide,* dated July 21, 2009, and investigative questions from the Planning Guide are included as **Table 1**. Sampling activities were performed in accordance with the Final Site Management Plan (SMP) (*Final Site Management Plan for Borit Asbestos Superfund Site, OU1 Remedial Investigation/Feasibility Study, November 12, 2009* by CDM). Health and safety procedures were followed according to CDM's Health and Safety Plan in Appendix B of the SMP, described above.

Phase 1 field investigation activities were conducted on November 16, 2009 through November 25, 2009, November 30, 2009 through December 18, 2009, and January 4, 2010 through January 22, 2010. The Phase 1 field investigation consisted of the following components:

- Site wide geophysical clearing of all proposed boring locations in the Park, Reservoir berm, and Asbestos Pile areas;
- Geophysical electromagnetic (EM)/metallic survey of the Park area and the Asbestos Pile area;
- Bathymetric survey (approximately 130 locations) of the Reservoir basin;
- Sediment sampling in the Reservoir basin: 15 environmental and 1 duplicate sediment samples submitted for EPA Contract Laboratory Program (CLP) target compound list (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, CLP target analyte list (TAL) metals, asbestos, grain size, and total organic carbon (TOC) analysis;
- Surface water sampling in the Reservoir basin: 5 environmental and 1 duplicate surface water samples submitted for VOCs, SVOCs, PCBs, pesticides, metals, and asbestos analysis;
- Direct push drilling technology (DPT) soil borings to characterize waste disposal down to native soil, logging of media and conditions encountered by documenting soil type, asbestos containing material observed, odor, color, staining, etc. on grids established at each area,

including 52 locations in the Park, 6 locations along the Reservoir berm, and 29 locations on the Asbestos Pile;

- Hand auger borings and logging of media and conditions encountered in areas that could not support DPT rigs, including 18 locations along the Reservoir berm and 3 locations in the Asbestos Pile;

- Collection of samples for chemical and asbestos analysis from a selected subset of boring locations and depths, including 25 soil samples at the Park, 20 soil samples at the Reservoir berm, and 24 soil samples at the Asbestos Pile submitted for VOCs, SVOCs, PCBs, pesticides, metals analyses, as well as 27 soil samples at the Park, 25 soil samples at the Reservoir berm, and 26 soil samples at the Asbestos Pile submitted for asbestos analyses;

- Piezometer installation at the 3 Park locations and 3 Asbestos Pile locations;

- Collection of groundwater grab samples from piezometers (3 environmental samples and 1 duplicate at the Park and 3 environmental samples at the Asbestos Pile submitted for VOC, SVOC, PCB, pesticide, metal and asbestos analyses);

- Floodplain soil sampling (15 environmental samples and 1 duplicate sample) along Wissahickon Creek, Tannery Run, and Rose Valley Creek (7 environmental soil samples from 0-3" and 8 environmental samples plus 1 duplicate soil sample from 6-24" submitted for VOC, SVOC, PCB, pesticide, metal, and asbestos analyses);

- Sediment sampling along Wissahickon Creek, Tannery Run, and Rose Valley Creek (11 environmental samples and 1 duplicate sediment sample submitted for VOC, SVOC, PCB, pesticide, metal, asbestos, grain size, and TOC analyses);

- Surface water sampling along Wissahickon Creek, Tannery Run, and Rose Valley Creek (8 environmental samples and 1 duplicate surface water sample submitted for VOC, SVOC, PCB, pesticide, metal, and asbestos analyses); and

- Surface soil sampling (0-3") at the Park, Reservoir, and Asbestos Pile areas, as well as on the other side of Wissahickon Creek (8 environmental samples and 1 duplicate soil sample at the Park, 9 environmental soil samples at the Reservoir berm, 8 environmental samples and 1 duplicate soil sample at the Asbestos Pile area, and 3 environmental soil samples on the other side of Wissahickon Creek submitted for VOC, SVOC, PCB, pesticide, metal, and asbestos analyses).

The Site location map is presented in **Figure 1**. The Site map depicting the three Borit parcels and the nearby former Ambler Asbestos Superfund Site is shown on **Figure 2**. A summary table showing whether the medium sampled at each parcel or area exceeds Regional Screening Levels (RSLs) for organics, inorganics, or asbestos and maximum contaminant levels (MCLs) for asbestos in groundwater and surface water is presented on **Table 2**. A summary of Phase 1 Field Investigation boring and sample locations is presented on **Table 3**. A summary of soil and groundwater sample locations is presented on **Table 4**. A summary of direct push boring locations is presented on **Table 5**. A summary of hand auger boring locations is presented on

Table 6. A summary of piezometer installations is presented on **Table 7**. A summary of depth ranges for composite and grab soil samples is presented on **Table 8**.

Section 2
Phase 1 Field Investigation Summary

November 2009 Phase 1 Field Investigation Activities - Bathymetric Survey, Reservoir Sediment and Surface Water Sampling and Geophysical Clearing

The first mobilization period in November 2009 included the site specific health and safety review for CDM staff and the geophysical subcontractor TPI Environmental (TPI). The geophysical clearing of the proposed soil boring locations at the Park, Asbestos Pile, and Reservoir, which had been previously marked out, commenced after site orientation was completed. The CDM field team laid out the grid for the bathymetric survey on Tuesday, November 17th. Wednesday the 18th through Tuesday the 24th included TPI, the geophysical subcontractor, completing the geophysical soil boring location clearing across the entire site, while the CDM field team completed the bathymetric survey and collected five surface water and fifteen sediment samples in the Reservoir. Sampling locations for soil and sediment in the Reservoir are presented on **Figure 3**.

The bathymetric survey was completed with approximately 130 individual measurement locations which included the use of a depth sounder and measurement rod. Bottom characteristics were noted with each placement of the measurement rod. **Figure 4** presents the results of the bathymetric survey, displaying bottom contours of the Reservoir. The bathymetric survey depicts a maximum Reservoir depth of twelve feet with an average depth range of four to seven feet throughout the Reservoir. The shallowest area of the Reservoir is located in the eastern end near Maple Street, and the deepest area is in the southern corner nearest Wissahickon Creek and the adjacent Asbestos Pile area.

Soft sediment was found to be present in the majority of the Reservoir, with a thickness ranging from six inches to three feet. The shallowest area of the Reservoir has a significant amount of debris with little to no soft sediment. This shallow eastern area contains a large number of discarded tires, various discarded metal debris items, concrete, brick, stone and general trash. The depth of sediment in these areas ranged from two feet to a few inches, with most of the sediment in the area at approximately one foot in depth.

December 2009 Phase 1 Field Investigation Activities – Direct Push Drilling, EM/Magnetic Survey in the Park, Piezometer Installation

The second mobilization in December 2009 was focused on the direct push soil boring effort. The November 30th mobilization day included the site specific health and safety review for the drilling subcontractor MIG Environmental (MIG) and the task specific health and safety review for the CDM staff members. This day also included the construction of the decontamination pads by MIG for their use in cleaning their drilling equipment. The direct push drilling task was conducted by utilizing two track-mounted direct push drilling rigs, each with a two-person team from MIG. Each rig and crew was managed by one CDM staff member who recorded detailed notes logging the resulting soil/debris cores. Each three-person CDM/MIG team worked together to complete each boring, record lithologic and fill waste information and

collect designated grab and composite samples (where applicable) per EPA's sample selection guidelines described in the SMP. The drilling and piezometer installation activities were completed in three weeks or fifteen working days.

There were 51 Park Area soil borings completed from December 1st through the 8th. One additional soil boring was added in the Park Area on December 18th, for a total of 52 soil borings in the Park Area. To support the composite sampling required by EPA, CDM divided the Park into five subareas. Samples collected as a composite are designated on the figures with a C, and samples collected as a grab are designated on the figures with a G. The number after the C designates the subarea from which the composite was collected. The direct push and piezometer locations drilled at the Park are presented on **Figure 5**. CDM reviewed the Park boring logs and identified three locations which showed signs of potential organic contamination. Two soil boring locations, (PKSB-3: 7.5 ft below ground surface (bgs) and PKSB-4: 8.0 inches bgs) were observed to have dark staining accompanied with photo-ionization detector (PID) readings suggesting possible VOCs or SVOCs in the soil. In a third soil boring (PKSB-45: 17 ft bgs), the rig appeared to have struck a metal pail containing a black tar-like material. Grab samples from these three boring locations were selected for chemical analysis. The Park Area statistics are presented on **Table 9**.

After the first 51 Park Area borings were completed on December 8th, the soil boring operation moved next to the Asbestos Pile and Reservoir Areas, which are adjacent and accessed from the same gate location. Due to strong winds on December 9th, the Reservoir Area soil boring operations were deferred until December 10th. Therefore the first soil borings conducted after the Park Area were located at the Asbestos Pile Area and were completed on December 9th. These locations are in the relatively flat and open areas characterized by little to no asbestos waste layer and found nearest to the fence line by Maple Street. To support the composite sampling required by EPA, CDM divided the Asbestos Pile into six subareas. The direct push and piezometer locations drilled at the Asbestos Pile are presented on **Figure 6**.

On December 10th the CDM team completed the six Reservoir berm boring locations that were accessible to the direct push rig. To support the composite sampling required by EPA, CDM divided the Reservoir into five subareas. Direct push locations drilled at the Reservoir are presented on **Figure 3**.

Following completion of the six Reservoir berm borings, the drilling operations then continued on the lower areas of the Asbestos Pile, moving up the slope until all originally planned soil borings were completed on December 15th. One additional Asbestos Pile soil boring (APSB-29) was added on December 16th, and the three Asbestos Pile piezometer locations were started. The piezometers were subsequently completed the following day, December 17th, and the DPT equipment was fully decontaminated and moved back to the Park Area.

The CDM team completed field work at the Park Area on December 18th, with the completion of one additional soil boring (PKSB-52) and the installation of three piezometers at the southern end of the Park Area. Piezometer locations were advanced farther than nearby soil boring locations in order to contact better and more consistent water bearing zones. Each piezometer installed at the Asbestos Pile and the Park Areas was advanced to between 20 and 25 feet below surface grade. **Table 9** presents the Reservoir Area and Asbestos Pile area statistics.

CDM's geophysical subcontractor, TPI was back on site on December 10, 11, 14 and 15 performing utility clearance on the additional borings at the Park and at the Asbestos Pile prior to drilling at each location. TPI also conducted the EM survey at the Park. The full TPI report is presented in **Appendix A**.

Personal air samplers, which were worn at all times by all CDM and subcontractor personnel within the exclusion zone during intrusive activities, were collected and submitted for laboratory analysis daily. Perimeter air samples were collected daily during intrusive activities and submitted for analysis the first two days of intrusive work as well as additional days per EPA's direction.

January 2010 Phase 1 Field Investigation Activities - Hand Auger Drilling at Reservoir and Floodplain, Surface Water and Sediment Collection in Creeks, EM Survey at Asbestos Pile, and Groundwater Sampling from Piezometers in all Areas

The third and final mobilization was focused on hand auger borings and creek sampling. The January 4th mobilization day included the task specific health and safety review for the CDM staff members and the start of the Wissahickon Creek stream survey to determine surface water and sediment sampling locations. While searching for the downstream sampling location, the CDM field team discovered a large transite pipe and shingle debris field which extended into the hiking trails of the Wissahickon Valley Watershed Association. CDM promptly reported this finding to the EPA Interim Work Assignment Manager, as well as the EPA On-Scene Coordinator (OSC).

Next, the CDM field team attempted to hand auger around the Reservoir berm; however, the berm soil was frozen to approximately 8 inches in depth, making traditional hand augering impossible. An automatic drill attachment for the hand auger was used in order to penetrate the top 8 inches of frozen soil.

While waiting for the automatic drill attachment for the hand auger, the CDM field team, per direction of the Interim EPA Work Assignment Manager (WAM), sampled all six piezometers in the Asbestos Pile and the Park Areas and submitted the groundwater samples for analysis. The piezometers were sampled using a bailer, acquiring a grab sample without purging. While the CDM field team began the hand auger boring locations and collected soil for analysis, MIG was on site to repair damaged piezometer caps, disassemble the decontamination pads, and spread hay over disturbed areas at the Asbestos Pile.

The CDM field team completed the hand auger borings around the Reservoir berm. Per the EPA WAM's direction, the CDM field team also completed four additional hand auger locations on the Reservoir berm closest to Rose Valley Creek, three hand auger locations on the Asbestos Pile near Tannery Run, and one hand auger location on the other side of Tannery Run from the Asbestos Pile. At this last location, CDM sampled white material protruding from the bank. Hand auger locations at the Reservoir are presented on **Figure 3** and hand auger locations at the Asbestos Pile are presented on **Figure 6**.

The CDM field team also collected surface water and sediment samples during this time, working from downstream sampling locations to upstream sampling locations. Sediment and

surface water samples collected in Rose Valley, Tannery Run, and Wissahickon Creeks, floodplain locations along Rose Valley, Tannery Run, and Wissahickon Creeks, and samples collected on the other side of Wissahickon Creek are all presented on **Figure 7**.

Prior to demobilizing, the CDM field team collected surface soil samples. Three surface soil samples were collected on the other side of Wissahickon Creek (discussed in previous paragraph), and three surface soil samples were collected for PCB analysis under fallen transformers (two additional unplanned transformer samples were added per discussions with the EPA WAM). One surface soil sample was collected for asbestos analysis at the Park, and two surface soil samples at the Asbestos Pile and three surface soil samples at the Reservoir were also collected for asbestos analysis.

Personal air samples were collected and submitted for analysis daily during all intrusive activities. Perimeter air samples were collected daily during intrusive activities and submitted for analysis the first two days of intrusive work as well as additional days per EPA's direction.

Section 3
Phase 1 Field Investigations Analytical Results

A major component of the Phase 1 field investigation involved visually characterizing all soil borings for evidence of asbestos containing material (ACM) and any other visible contamination. Because it was not feasible to perform asbestos laboratory analysis for each depth interval in each boring installed during the Phase 1 field investigation, CDM's logs of visible ACM provide critical additional information regarding the extent of asbestos contamination at the Site. This critical information is recorded in the boring logs for direct push and hand auger borings which are presented in **Appendix B**. **Figure 8** identifies the numerous direct push boring and hand auger locations across the Site which have visually observed ACM. Note that 91% of the borings across the Site presented some visual evidence of ACM. Cross sections across the Site are shown on **Figure 9**. Cross sections A-A' through C-C' (**Figures 10 through 12**) summarize direct push borings drilled at the Park. Cross sections D-D' through G-G' (**Figures 13 through 16**) summarize direct push and hand auger borings drilled at the Asbestos Pile. Cross section H-H' (**Figure 17**) summarizes direct push borings drilled along the access road between the Reservoir and the Asbestos Pile.

The average detected concentrations and the range of detected concentrations is shown on **Tables 10 through 28**. A full summary of the results can be found in **Appendix C**. Detected results tables for all areas are described below. Aqueous samples were analyzed for organics using CLP Method -SOM01.2 for trace water or low water organics, CLP Method ILM05.4-ICP-AES for inorganics, and transmission electron microscopy (TEM) EPA Method 100.2 for asbestos. Soil and sediment samples were analyzed using CLP Method SOM01.2 for low concentration organics, CLP Method ILM05.4-ICP-AES for inorganics, PLM CARB 435, 1000 point count for asbestos, SW-846 Method 9060A for TOC, and ASTM D422 for grain size. Perimeter air samples were analyzed using TEM ISO 10312 and personal air samples were analyzed using phase contrast microscopy (PCM) NIOSH 7400. Descriptions of the results summarized in each table follow:

- Results for the soil samples from the Park that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 29 through 33**, respectively.
- Results for the soil samples from the Asbestos Pile that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 34 through 38**, respectively.
- Results for the soil samples from the Reservoir berm that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 39 through 43**, respectively.
- Results for asbestos soil samples from potential future ABS locations in the Park, Asbestos Pile, and Reservoir berm are presented on **Table 44**.
- Results for the groundwater samples from the Park that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 45 through 49**, respectively.

- Results for the groundwater samples from the Asbestos Pile that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 50 through 54**, respectively.
- Results for the soil samples from the floodplain that were analyzed for asbestos, VOCs, SVOCs, metals, pesticides/PCBs, and TOC are presented on **Tables 55 through 60** for shallow samples and **on Tables 61 through 66** for deep samples, respectively.
- Results for the soil samples from the other side of Wissahickon Creek that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 67 through 71**, respectively.
- Results for sediment samples from the Reservoir that were analyzed for asbestos, VOCs, SVOCs, metals, pesticides/PCBs, TOC, and grain size are presented on **Tables 72 through 77**, respectively.
- Results for normal deposition creek sediment samples that were analyzed for asbestos, VOCs, SVOCs, metals, pesticides/PCBs, TOC, and grain size are presented on **Tables 78 through 83**, respectively.
- Results for heavy deposition creek sediment samples that were analyzed for asbestos, VOCs, SVOCs, metals, pesticides/PCBs, TOC, and grain size are presented on **Tables 84 through 89**, respectively.
- Results for surface water samples from the Reservoir that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 90 through 94**, respectively.
- Results for surface water samples from creeks that were analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 95 through 99**, respectively.
- Results for the Tannery Run bank sample that was analyzed for asbestos, VOCs, SVOCs, metals, and pesticides/PCBs are presented on **Tables 100 through 103**, respectively.
- Personal air monitoring results for the Park, Asbestos Pile, Reservoir, and floodplain sampling for asbestos are presented on **Table 104**.
- Perimeter air monitoring results for the Park, Asbestos Pile, Reservoir, and floodplain sampling for asbestos are presented on **Table 105**.

Regional Screening Levels (RSLs) provided by Oak Ridge National Laboratory (ORNL) in December 2009 were used for groundwater, soil, sediment and surface water screening. Groundwater and soil non-carcinogen RSLs were adjusted to a hazard quotient of 0.1 to account for any additive effects. For surface water screening levels, tapwater RSLs were adjusted to a risk of 1E-05 for carcinogens by multiplying by 10, while non-carcinogens were maintained at a hazard quotient of 1. For sediment screening levels, residential soil RSLs were adjusted to a risk of 1E-05 for carcinogens by multiplying by 10, while non-carcinogens were kept at a hazard quotient of 1. Figures showing exceedances by parcel and by subarea are discussed below.

3.1 Park

- Organic compounds exceeding RSLs in soil at Park Subarea 1 are shown on **Figure 18**. All samples analyzed for this subarea are: composites collected from PKSB-03, 04, 22, and 26 (SVOC and pesticide/PCB analysis only) and grabs from PKSB-03 (VOC analysis only), 22 (VOC analysis only), and 52.

- Inorganic compounds and asbestos exceeding RSLs in soil at Park Subarea 1 are shown on **Figure 19**. All samples analyzed for this subarea are: composites collected from PKSB-03, 04, 22, and 26 and grabs from PKSB-03 (asbestos only) and 52.
- Organic compounds exceeding RSLs in soil at Park Subarea 2 are shown on **Figure 20**. All samples analyzed for this subarea are: composites collected from PKSB-06, 19, 29, and 40 (SVOC and pesticide/PCB analysis only) and grabs from PKSB-19 and 40 (VOC analysis only).
- Inorganic compounds and asbestos exceeding RSLs in soil at Park Subarea 2 are shown on **Figure 21**. All samples analyzed for this subarea are: composites collected from PKSB-06, 19, 29, and 40 and a grab from PKSB-19.
- Organic compounds exceeding RSLs in soil at Park Subarea 3 are shown on **Figure 22**. All samples analyzed for this subarea are: composites collected from PKSB-08, 10, 12, and 15 (SVOC and pesticide/PCB analysis only) and a grab from PKSB-15.
- Inorganic compounds and asbestos exceeding RSLs in soil at Park Subarea 3 are shown on **Figure 23**. All samples analyzed for this subarea are: composites collected from PKSB-08, 10, 12, and 15 and grabs from PKSB-15 and 53 (asbestos analysis only).
- Organic compounds exceeding RSLs in soil at Park Subarea 4 are shown on **Figure 24**. All samples analyzed for this subarea are: composites collected from PKSB-13, 30, 33, and 35 (SVOC and pesticide/PCB analysis only) and grabs from PKSB-30 and 33 (VOC analysis only).
- Inorganic compounds and asbestos exceeding RSLs in soil at Park Subarea 4 are shown on **Figure 25**. All samples analyzed for this subarea are: composites collected from PKSB-13, 30, 33, and 35 and a grab from PKSB-30.
- Organic compounds exceeding RSLs in soil at Park Subarea 5 are shown on **Figure 26**. All samples analyzed for this subarea are: composites collected from PKSB-38, 44, 48, and 51 (SVOC and pesticide/PCB analysis only) and grabs from PKSB-38, 45, and 51 (VOC analysis only).
- Inorganic compounds and asbestos exceeding RSLs in soil at Park Subarea 5 are shown on **Figure 27**. All samples analyzed for this subarea are: composites collected from PKSB-38, 44, 48, and 51 and grabs from PKSB-38 and 45 (metals analysis only).
- Organic compounds exceeding RSLs in groundwater at the Park are shown on **Figure 28**. All samples analyzed at the Park for groundwater are: PKPZ-01, 02, and 03.
- Inorganic compounds exceeding RSLs and asbestos exceeding MCLs in groundwater at the Park are shown on **Figure 29**. All samples analyzed at the Park for groundwater are: PKPZ-01, 02, and 03. Multiple bottles were analyzed for asbestos, and only the highest RSL exceedance value is reported on Figure 29.

3.2 Asbestos Pile

- Organic compounds exceeding RSLs in soil at Asbestos Pile Subarea 1 are shown on **Figure 30**. All samples analyzed for this subarea are: composites collected from APSB-01, 02, 03, and 04 (SVOC and pesticide/PCB analysis only) and grabs from APSB-02 and 03 (VOC analysis only).
- Inorganic compounds and asbestos exceeding RSLs in soil at Asbestos Pile Subarea 1 are shown on **Figure 31**. All samples analyzed for this subarea are: composites collected from APSB-01, 02, 03, and 04 and a grab from APSB-02.

- Organic compounds exceeding RSLs in soil at Asbestos Pile Subarea 2 are shown on **Figure 32**. All samples analyzed for this subarea are: composites collected from APSB-09, 10, 11, and 12 (SVOC and pesticide/PCB analysis only) and grabs from APSB-10 and APTF-03 (pesticide/PCB analysis only).
- Inorganic compounds and asbestos exceeding RSLs in soil at Asbestos Pile Subarea 2 are shown on **Figure 33**. All samples analyzed for this subarea are: composites collected from APSB-09, 10, 11, and 12 and a grab from APSB-10.
- Organic compounds exceeding RSLs in soil at Asbestos Pile Subarea 3 are shown on **Figure 34**. All samples analyzed for this subarea are: composites collected from APSB-08, 13, 16, and 17 (SVOC and pesticide/PCB analysis only) and a grab from APSB-13.
- Inorganic compounds and asbestos exceeding RSLs in soil at Asbestos Pile Subarea 3 are shown on **Figure 35**. All samples analyzed for this subarea are: composites collected from APSB-08, 13, 16, and 17 and grabs from APSB-13 and 33 (asbestos analysis only).
- Organic compounds exceeding RSLs in soil at Asbestos Pile Subarea 4 through 6 are shown on **Figure 36**. All samples analyzed for Subarea 4 are: composites collected from APSB-15, 21, 23, and 25 (SVOC and pesticide/PCB analysis only) and APSB 20 and 21 (SVOC and pesticide/PCB analysis only) and a grab from APSB-20 (VOC analysis only) and 21. All samples analyzed for Subarea 5 are: composites collected from APSB-24, 26, 27, and 28 (SVOC and pesticide/PCB analysis only) and grabs from APSB-24 and APTF-01 and 02 (pesticide/PCB analysis only, collected just outside of Subarea 4). All samples analyzed for Subarea 6 are: composites collected from APSB-30, 31, and 32 (SVOC and pesticide/PCB analysis only) and a grab from APSB-32.
- Inorganic compounds and asbestos exceeding RSLs in soil at Asbestos Pile Subarea 4 are shown on **Figure 37**. All samples analyzed for this subarea are: composites collected from APSB-15, 21, 23, and 25 and APSB 20, and 21 and a grab from APSB-21.
- Inorganic compounds and asbestos exceeding RSLs in soil at Asbestos Pile Subarea 5 are shown on **Figure 38**. All samples analyzed for this subarea are: composites collected from APSB-24, 26, 27, and 28 and grabs from APSB-24 and 34 (asbestos analysis only).
- Inorganic compounds and asbestos exceeding RSLs in soil at Asbestos Pile Subarea 6 are shown on **Figure 39**. All samples analyzed for this subarea are: composites collected from APSB-30, 31, and 32 and a grab from APSB-32 (native soil composite only from APSB-31 and 32).
- Organic compounds exceeding RSLs in groundwater at the Asbestos Pile are shown on **Figure 40**. All samples analyzed at the Asbestos Pile for groundwater are: APPZ-01, APPZ-02, APPZ-03, APSB-12, and APSB-18.
- Inorganic compounds exceeding RSLs and asbestos exceeding MCLs in groundwater at the Asbestos Pile are shown on **Figure 41**. All samples analyzed at the Asbestos Pile for groundwater are: APPZ-01, APPZ-02, APPZ-03, APSB-12, and APSB-18. Multiple bottles were analyzed for asbestos, and only the highest RSL exceedance value is reported on Figure 41.

3.3 Reservoir

- Organic compounds exceeding RSLs in soil at the Reservoir Subarea 1 are shown on **Figure 42**. All samples analyzed for this subarea are: composites collected from RVSB-01, 19, and 20 (SVOC and pesticide/PCB analysis only) and a grab from RVSB-19.

- Inorganic compounds and asbestos exceeding RSLs in soil at the Reservoir Subarea 1 are shown on **Figure 43**. All samples analyzed for this subarea are: composites collected from RVSB-01, 19, and 20 and a grab from RVSB-19.
- Organic compounds exceeding RSLs in soil at the Reservoir Subarea 2 are shown on **Figure 44**. All samples analyzed for this subarea are: composites collected from RVSB-02, 03, and 04 (SVOC and pesticide/PCB analysis only) and a grab from RVSB-04.
- Inorganic compounds and asbestos exceeding RSLs in soil at the Reservoir Subarea 2 are shown on **Figure 45**. All samples analyzed for this subarea are: composites collected from RVSB-02, 03, and 04 and a grab from RVSB-04.
- Organic compounds exceeding RSLs in soil at the Reservoir Subarea 3 and 6 are shown on **Figure 46**. All samples analyzed in Subarea 3 are: composites collected from RVSB-05, 06, 07, and 08 (SVOC and pesticide/PCB analysis only) and a grab from RVSB-08. All samples analyzed in Subarea 6 are: composites collected from RVSB-21, 22, 23, and 24 (SVOC and pesticide/PCB analysis only) and a grab from RVSB-24.
- Inorganic compounds and asbestos exceeding RSLs in soil at the Reservoir Subarea 3 are shown on **Figure 47**. All samples analyzed for this subarea are: composites collected from RVSB-05, 06, 07, and 08 and a grab from RVSB-08.
- Organic compounds exceeding RSLs in soil at the Reservoir Subarea 4 are shown on **Figure 48**. All samples analyzed for this subarea are: composites collected from RVSB-09, 10, 11, and 12 (SVOC and pesticide/PCB analysis only) and a grab from RVSB-12.
- Inorganic compounds and asbestos exceeding RSLs in soil at the Reservoir Subarea 4 are shown on **Figure 49**. All samples analyzed for this subarea are: composites collected from RVSB-09, 10, 11, and 12 and grabs from RVSB-12, 25 (asbestos analysis only, collected just outside of Subarea 4), and 26 (asbestos analysis only).
- Organic compounds exceeding RSLs in soil at the Reservoir Subarea 5 are shown on **Figure 50**. All samples analyzed for this subarea are: composites collected from RVSB-15, 16, 17, and 18 (SVOC and pesticide/PCB analysis only) and a grab from RVSB-17.
- Inorganic compounds and asbestos exceeding RSLs in soil at the Reservoir Subarea 5 are shown on **Figure 51**. All samples analyzed for this subarea are: composites collected from RVSB-15, 16, 17, and 18 and grabs from RVSB-17 and 27 (asbestos analysis only, collected just outside of Subarea 5).
- Inorganic compounds and asbestos exceeding RSLs in soil at the Reservoir Subarea 6 are shown on **Figure 52**. All samples analyzed for this subarea are: composites collected from RVSB-21, 22, 23, and 24 and a grab from RVSB-24.
- Organic compounds exceeding RSLs in surface water at the Reservoir are shown on **Figure 53**. All samples analyzed at the Reservoir for surface water are: RVSW-01 through RVSW-05.
- Inorganic compounds exceeding RSLs and asbestos exceeding MCLs in surface water at the Reservoir are shown on **Figure 54**. All samples analyzed at the Reservoir for surface water are: RVSW-01 through RVSW-05. Multiple bottles were analyzed for asbestos, only the highest RSL exceedance value is reported on Figure 54.
- Organic compounds exceeding RSLS in sediment at the Reservoir are shown on **Figure 55**. All samples analyzed at the Reservoir for sediment are: RVSD-01 through RVSD-15.
- Inorganic compounds and asbestos exceeding RSLs in sediment at the Reservoir are shown on **Figure 56**. All samples analyzed at the Reservoir for sediment are: RVSD-01 through RVSD-15.

3.4 Floodplain

- Organic compounds exceeding RSLs in soil within the floodplain are shown on **Figures 57-1 and 57-2**. All samples analyzed within the floodplain for soil are: CKFP-01 through CKFP-08 (shallow and deep samples), CKSB-01, and OWSB-01 through OWSB-03.
- Inorganic compounds and asbestos exceeding RSLs in soil within the floodplain are shown on **Figures 58-1 and 58-2**. All samples analyzed within the floodplain for soil are: CKFP-01 through CKFP-08 (shallow and deep samples), CKSB-01, and OWSB-01 through OWSB-03.

3.5 Creeks

- Organic compounds exceeding RSLs in sediment in the creeks are shown on **Figure 59**. All samples analyzed in the creeks for sediment are: CKSD-01 through CKSD-08 (normal deposition) and CKSD-09, 10, and 12 (heavy deposition).
- Inorganic compounds and asbestos exceeding RSLs in sediment in the creeks are shown on **Figure 60**. All samples analyzed in the creeks for sediment are: CKSD-01 through CKSD-08 (normal deposition) and CKSD-09, 10, and 12 (heavy deposition).
- Organic compounds exceeding RSLs in surface water in the creeks are shown on **Figure 61**. All samples analyzed in the creeks for surface water are: CKSW-01 through CKSW-08.
- Inorganic compounds exceeding RSLs and asbestos exceeding MCLs in surface water in the creeks are shown on **Figure 62**. All samples analyzed in the creeks for surface water are: CKSW-01 through CKSW-08. Multiple bottles were analyzed for asbestos, only the highest RSL exceedance value is reported on Figure 62.

3.6 General Summary of Results

The Phase 1 investigation demonstrated that widespread organic, inorganic and asbestos contamination exists in the majority of the media sampled at the Borit Asbestos Site. Refer to **Table 2** for a summary of the various parcels/areas and media where RSL exceedances were identified in at least one sample for organics, inorganics and asbestos. Surface water in the Reservoir was the only area where no organic RSL was exceeded in any sample. Surface water in the creeks was the only area where no inorganic RSL was exceeded in any sample. And sediment in the creeks and the Reservoir were the only areas where the asbestos RSL was not exceeded in any sample. Additional general results follow:

- All direct push borings at the Park had some visible ACM except for PKSB-08; therefore, 98% of all direct push borings at the Park had some visible ACM.

- Asbestos waste at the Park was found to be on average approximately 13 feet thick, with the greatest thickness occurring at PKSB-38. Refusal was encountered at this location at 24.5 feet, indicating a waste layer of approximately 23 feet. In general the waste layer appears to get thicker in the Park as it approaches Wissahickon Creek from Wissahickon Ambler Alley.

- All direct push and hand auger borings at the Asbestos Pile had some visible ACM except for APSB-01, APSB-04, and APSB-19; therefore, 92% of all direct push and hand auger borings at the Park had some visible ACM.

- Asbestos waste at the Asbestos Pile was found to be on average approximately 17 feet thick with the greatest thickness occurring at APSB-08. This location is located on the topographically highest point of the Asbestos Pile and was found to have a waste layer of approximately 40 feet. At its thickest point, it appears that the waste layer extends approximately 25 feet above original grade and 15 feet below original grade.

- All direct push and hand auger borings in the Reservoir berm had some visible ACM except for RVSB-01, RVSB-12, RVSB-16, RVSB-18, RVSB-19, and RVSB-20; therefore, 75% of all direct push and hand auger borings in the Reservoir berm had some visible ACM.

- Asbestos waste in the Reservoir berm was found to be on average approximately a little more than 1 foot thick. The thickest waste layer was found at RVSB-08 and was found to have a waste layer approximately 3 feet thick. Except for RVSB-08, all Reservoir berm locations had some extent of fill covering the asbestos waste.

3.6.1 Park Results Summary

Inorganics exceeding the soil screening levels at the Park include:

- Aluminum, arsenic, cobalt, iron, lead, manganese, mercury, nickel and vanadium. Aluminum, lead, and nickel were more commonly found in waste samples; however, they were also observed at lower concentrations in the cover and native soil layers.

Asbestos exceeded the soil screening level of 1% at the Park in all samples except ten; therefore 63% exceeded the soil screening level of 1%. All native soil samples were below 1%.

- The following samples had asbestos levels above 1%: waste soil composite in C1 (PKSB-03042226), cover and waste soil composites in C2 (PKSB-06192940), cover and waste soil composites in C3 (PKSB-08101215), waste soil composite in C4 (PKSB-13303335), waste soil composite in C5 (PKSB-38444851), and cover and waste soil grabs at PKSB-52.

Organics exceeding the soil screening levels at the Park include:

- Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. One location (PKSB45-17.3) had the above listed screening level exceedances as well as: 2-methylnaphthalene, acenaphthene, benzene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorine, naphthalene, and pyrene. The boring log at this location notes that the boring appeared to intersect a buried tar bucket at a depth of 17.3 feet below ground surface.

Inorganics exceeding the groundwater screening levels at the Park include:

- Aluminum, arsenic, barium, beryllium, cadmium, cobalt, copped, iron, manganese, mercury, and vanadium. It should be noted that piezometers were not purged prior to sampling or sampled using low flow techniques. Samples were collected using a bailer and were not filtered. Samples were collected to get an idea of groundwater quality; however, these samples should not be used in any future risk assessments.

Asbestos exceeded the groundwater screening level of 7 million fibers per liter (MFL) in 100% of the groundwater samples analyzed at the Park.

- Each sample greatly exceeded the groundwater screening level.

Organics exceeding the groundwater screening levels at the Park include:

- Benzene and naphthalene.

3.6.2 Asbestos Pile Results Summary

Inorganics exceeding the soil screening levels at the Asbestos Pile include:

- Aluminum, arsenic, cobalt, iron, lead, manganese, nickel, and vanadium. There was minimal difference between inorganic analytical data from the cover, waste, and native soil samples within a single boring.

Asbestos exceeded the soil screening level of 1% at the Asbestos Pile in all samples except seven; therefore 73% exceeded the soil screening level of 1%.

- The following samples had asbestos levels above 1%: waste soil composite in C1 (APSB-01020304) and surface soil grab (APSB02-SS), waste soil composite in C3 (APSB-08131617) and surface soil grabs (APSB13-SS and APSB33-SS), waste soil composite in C4 (APSB-15212325) and surface soil grabs (APSB20-21 and APSB21-SS), waste and native soil composites in C5 (APSB-24262728) and surface soil grabs (APSB24-SS and APSB34-SS), cover, waste, and native soil composites in C6 (APSB-303132) and surface soil grab (APSB32-SS).

Organics exceeding the soil screening levels at the Asbestos Pile include:

- Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene. One aroclor also exceeded the screening value for aroclor 1260. This sample was collected beneath a fallen transformer at APTF-02.

Inorganics exceeding the groundwater screening levels at the Asbestos Pile include:

- Aluminum, arsenic, barium, beryllium, cobalt, iron, manganese, mercury, and vanadium. It should be noted that groundwater sample boreholes or piezometers were not purged prior to sampling or sampled using low flow techniques. Samples were collected using a bailer and were not filtered. Samples were collected to get an idea of groundwater quality; however, these samples should not be used in any future risk assessments.

Asbestos exceeding the groundwater screening level of 7 MFL is true for 100% of the groundwater samples analyzed at the Asbestos Pile.

- Each sample greatly exceeded the groundwater screening level.

Organics exceeding the groundwater screening levels at the Asbestos Pile include:

- Pentachlorophenol, 2-hexanone, benzene, 2-butanone, and dieldrin. All compounds that had a groundwater screening level exceedance were collected from direct push boreholes prior to backfilling, except for 2-butanone which exceeded at piezometer APPZ-03.

3.6.3 Reservoir Results Summary

Inorganics exceeding the soil screening levels at the Reservoir include:

- Aluminum, antimony, arsenic, cobalt, copper, iron, lead, manganese, mercury, vanadium, and zinc.

Asbestos exceeded the soil screening level of 1% at the Reservoir in nine of twenty six samples; therefore 35% exceeded the soil screening level of 1%. Of the nine samples exceeding 1%, two were from surface soil, two were from the cover, and five were from the waste layer.

- The following samples had asbestos levels above 1%: cover and waste soil composite in C2 (RVSB-020304), waste soil composite and surface soil grab in C3 (RVSB-05060708 and RVSB08), waste soil composite in C4 (RVSB-091011), cover and waste soil composite in

C5 (RVSB-15161718), waste soil composite in C6 (RVSB-21222324), and a surface soil grab at RVSB-26.

Organics exceeding the soil screening levels at the Reservoir include:

- benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

Inorganics exceeding the groundwater screening levels for surface water at the Reservoir include:

- Arsenic and vanadium. Samples were collected using Bomb and Kemmerer samplers and were not filtered.

Asbestos exceeded the groundwater screening level of 7 MFL at:

- RVSW-03, 04, and 05.

No organics exceeded the groundwater screening levels for surface water at the Reservoir.

Inorganics exceeding the soil screening levels for sediment at the Reservoir include:

- Arsenic and vanadium. Samples were collected using a petite ponar sampler.

No sediment samples exceeded the asbestos screening level of 1%.

Organics exceeding the soil screening levels for sediment at the Reservoir include:

- Benzo(a)pyrene.

3.6.4 Floodplain Results Summary

Inorganics exceeding the soil screening levels within the floodplain in shallow (0 to 3 inches) and deep (6 to 24 inches) samples include:

- Aluminum, arsenic, cobalt, iron, lead, manganese, and vanadium.

No asbestos exceeded 1% in the shallow floodplain samples. Three soil samples collected from the deep floodplain (6 to 24 inches) exceeded 1% for asbestos:

- CKFP-01, 02 and 06.

Organics exceeding the soil screening levels within the floodplain in shallow soil (0 to 3 inches) include:

- benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

Organics exceeding the soil screening levels within the floodplain in deep soil (6 to 24 inches) include:

- benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

3.6.5 Creeks Results Summary

Inorganics exceeding the soil screening levels within the creeks for normal sediment deposition include:

- Arsenic, manganese, and vanadium.

Inorganics exceeding the soil screening levels within the creeks for heavy sediment deposition include:

- Arsenic and vanadium.

Inorganics exceeding the soil screening levels within the creek bank along Tannery Run include:

- Arsenic, lead, manganese, and vanadium.

No asbestos samples collected from creek sediment exceeded the screening level of 1%.

Organics exceeding the soil screening level at the creek for normal and heavy sediment deposition include:

- Benzo(a)pyrene.

No inorganics exceeded the groundwater screening levels for surface water at the creek.
Asbestos exceeded the groundwater screening level of 7 MFL at two surface water locations within the creek: CKSW-05 and 07.
Organics exceeding the groundwater screening level at the creek for surface water include:

- Dibezo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

3.6.6 Personal Air Results Summary

No personal air samples exceeded the 30 minute PCM concentration (greater than 1.0 fiber/cubic centimeter (cc)) or 8 hour time weighted average (TWA) PCM concentration (greater than 0.1 fibers/cc). Personal air limits are set based on Occupational Safety and Health Administration (OSHA) standard 29 CFR 1926.1101. Personal air samples were analyzed using the PCM method.

3.6.7 Perimeter Air Results Summary

No perimeter air samples had more than two structures/cc reported on the analytical data reports. Perimeter air samples were analyzed using the TEM ISO 10312 method. Perimeter air samples were collected daily during intrusive activities. Perimeter air samples were submitted for analysis for the first two days of intrusive activities and archived after the first two days. Because of the heterogeneity of the waste at the Site and public concern, 15 days of perimeter air samples were submitted for analysis.

3.7 Quality Control Summary

Soil, sediment, surface water, groundwater, and air samples were collected in accordance with procedures specified in the SMP. Quality control samples were collected and tracked as part of the Phase 1 field investigation and will be discussed in detail in the Remedial Investigation Report for OU-1. All data quality objective (DQO)-definitive data collected during Phase 1 was validated by EPA Region III Environmental Services Assistance Team (ESAT) using EPA Contract Laboratory Program (CLP) data validation procedures. The inorganic analytical data validation was performed according to Region III Modifications to the National Functional Guidelines for Inorganic Data Review, Level IM2. The organic analytical data validation was performed according to Region III Modifications to the National Functional Guidelines for Low Concentration Organic Data Review, Level M3. Definitions for the qualifier flags used by ESAT to qualify the data are provided as footnotes on **Tables 29 through 105.** A full discussion of validation results will be included in the RI Report for OU-1. The asbestos laboratory analyzed every container submitted, even when two containers had been submitted for one sample. These additional results will be evaluated in the RI Report for OU-1.

3.8 Deviations from the SMP

The SMP specifies the performance of both a magnetic survey and an electromagnetic survey for the buried metal survey. The magnetic survey was shown to be redundant and was consequently determined not to be required. Where possible, CDM's geophysical survey subcontractor, TPI, used an EM61-MK2 (high sensitivity metal detector capable of detecting both ferrous and non-ferrous metal) in lieu of the EM31. The time saved by eliminating the magnetic survey was utilized to tighten up the EM grids in both the Park Area and the Asbestos Pile Area. The 100-foot by 100-foot grid planned for the Park Area was altered to approximately

a 5-foot by 5-foot grid for more complete EM coverage. In addition, the 25-foot by 25-foot planned Asbestos Pile grid was altered to a 25-foot by 10-foot grid for more comprehensive coverage.

Per the EPA Interim WAM's approval, grab samples were acquired from all six piezometers installed during Phase 1 activities using a bailer and without purging and then submitted for analysis.

Per the EPA WAM's approval, four additional hand auger locations were added at the Reservoir along the berm closest to Rose Valley Creek, three hand auger locations were added on the Asbestos Pile closest to Tannery Run, and one hand auger location was added on the other side of Tannery Run from the Asbestos Pile to sample white material protruding from the bank. All samples at the Reservoir and the Asbestos Pile were submitted for chemical and asbestos analysis.

Section 4
Recommendations for Additional Field Investigation

Based upon the results from the Phase 1 Field Investigation as described in this report and summarized in **Table 2**, and the additional questions raised from those results, CDM recommends that EPA include the following activities in the Phase 2 Field Investigation:

- CDM recommends that EPA evaluate asbestos concentrations in soil in areas downgradient from the Park and Asbestos Pile, outside of the Site fence, between the fence and the sidewalk, to determine whether asbestos may be migrating offsite via surface water runoff.

- CDM recommends that EPA evaluate asbestos concentrations in air using activity-based sampling at the three Borit parcels, at residential properties located adjacent to the Site and on the other side of Wissahickon Creek, and along the Green Ribbon Trail on the other side of Wissahickon Creek and downstream of the Site on the Green Ribbon Trail where CDM observed ACM on the walking trail.

- CDM recommends that EPA install and sample groundwater monitoring wells at the Site to evaluate Site contaminants in groundwater as well as to perform water level elevation surveys to determine groundwater flow direction.

- CDM recommends that EPA install staff gauges in the Reservoir and in the creeks to evaluate the hydraulic connection of surface water to groundwater.

- There were several small metal debris anomalies identified at the Park and numerous metallic objects and a debris pit identified at the Asbestos Pile from the EM survey. Twenty anomalies were identified in the Park. The Asbestos Pile has an apparent pit with debris near Tannery Run which should be further evaluated and the former fire training area was noted to have numerous metallic objects. Several metallic objects are also visible at the surface in this area. Further investigation of the subsurface in these areas is recommended.

- CDM recommends that EPA perform a geotechnical analysis at the Park and the Asbestos Pile to determine slope stability in support of FS alternative evaluation. A geotechnical analysis is not recommended for the Reservoir parcel until additional information is obtained regarding the Reservoir bottom and berm construction.

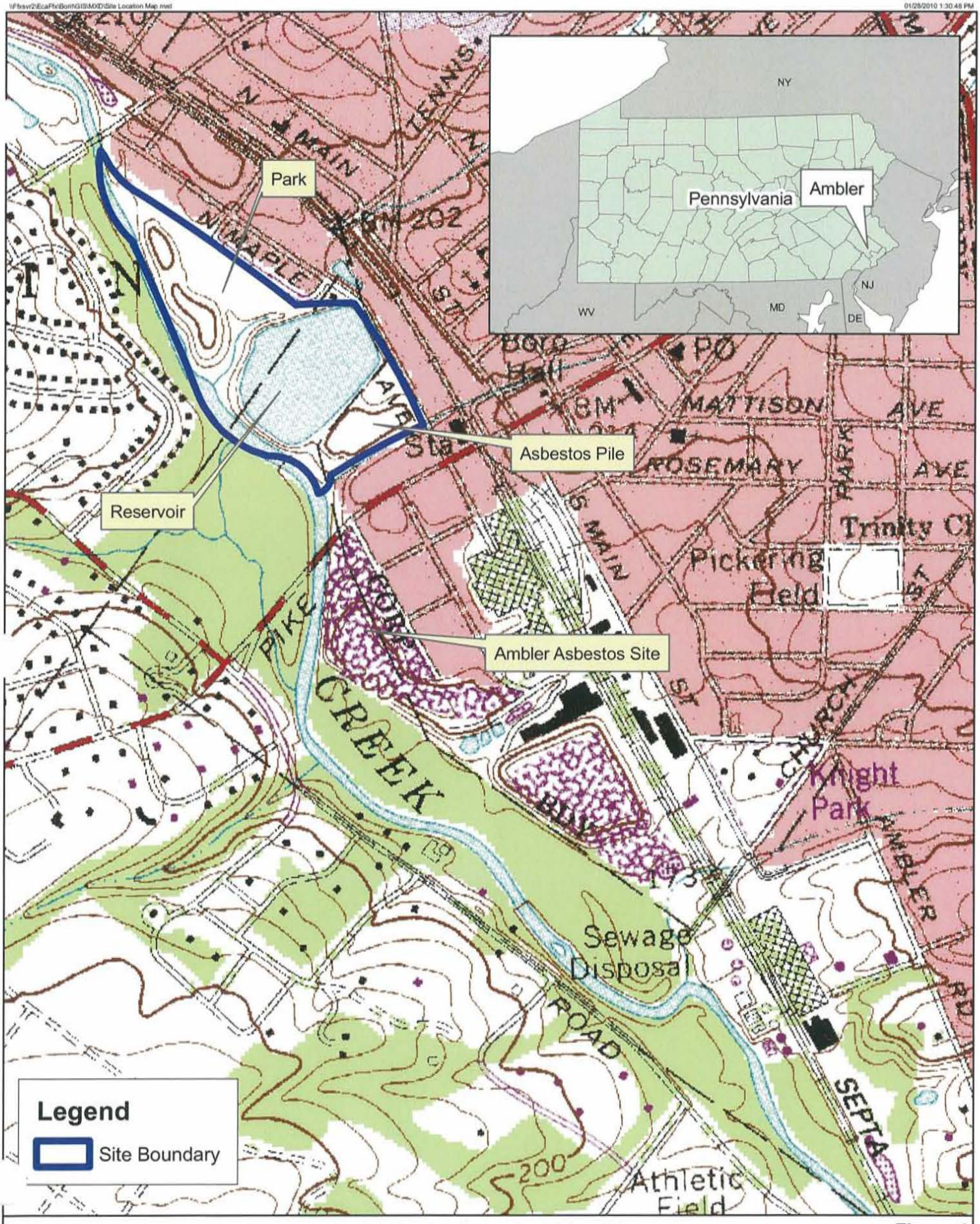
- CDM recommends that EPA sample slag at the Asbestos Pile, observed at the surface during Phase 1 investigations.

- CDM recommends that EPA sample the former fire training area at the Asbestos Pile for dioxins.

- CDM recommends that EPA perform an elevation survey across the Site to obtain elevations for piezometers, monitoring wells, and staff gauges installed during Phase 1 and Phase 2 field activities.

- CDM recommends that EPA consider collecting background samples for metals to evaluate background metals concentrations for the risk assessment.

Figures



Notes:
Source: Topographic map data acquired from the Pennsylvania Spatial data Access website, 2010.

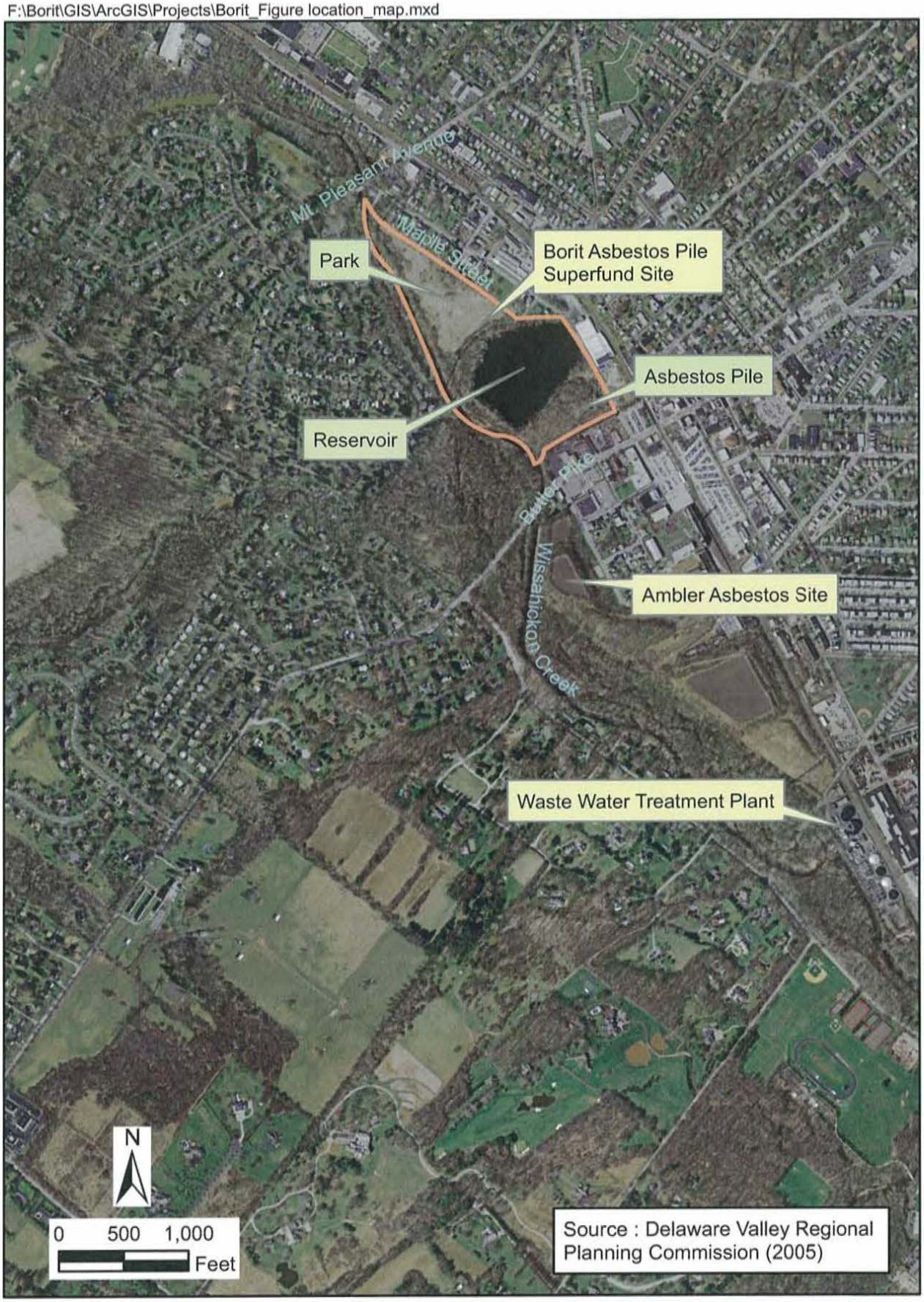
Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

Figure 1
Site Location Map

0 250 500 1,000 Feet

CDM

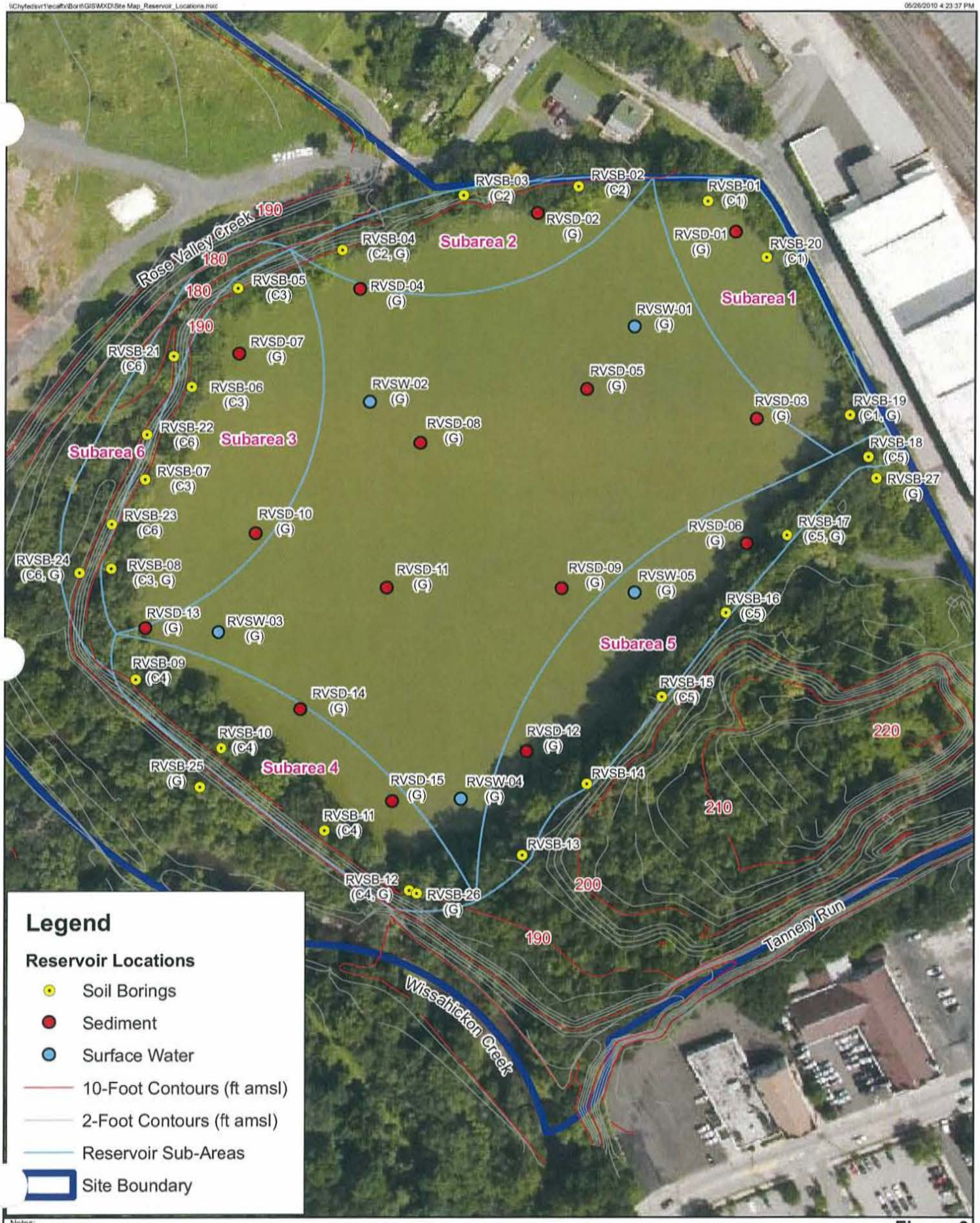
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CDM

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

Figure 2
Site Map



Legend

Reservoir Locations

- Soil Borings
- Sediment
- Surface Water
- 10-Foot Contours (ft amsl)
- 2-Foot Contours (ft amsl)
- Reservoir Sub-Areas
- Site Boundary

Notes:
RV = Reservoir
SB = Soil Boring
SD = Sediment
SW = Surface Water
G = grab sample
C = composite sample group within parcel sub-areas
Elevations are measured in feet above mean sea level (ft amsl)
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 250 500 Feet

Figure 3
Reservoir Sub-Area Sampling Locations

CDM

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Legend

- Bathymetric Survey Location

Sample Location

- Piezometer
- Soil Boring
- Transformer
- Floodplain

Maple Street

Chestnut Street

RVSB-01 (C1)
RVSB-20 (C1)
RVSB-19 (C1, G)
RVSB-18 (C5)
RVSB-27 (G)
RVSB-02 (C2)
APSB-01 (C1)
RVSB-03 (C2)
RVSB-17 (C5, G)
APTF-03 (G)
APSB-11 (C2)
APSB-10 (C2, G)
RVSB-04 (C2, G)
RVSB-16 (C5)
APSB-18 (gw)
APSB-34 (G)
RVSB-15 (C5)
RVSB-05 (C3)
APSB-19
RVSB-21 (C6)
RVSB-06 (C3)
RVSB-14
APSB-24 (C5, G)
CKFP-06
RVSB-22 (C6)
RVSB-13
RVSB-07 (C3)
RVSB-23 (C6)
APSB-28 (C5)
RVSB-08 (C3, G)
RVSB-26 (G)
APPZ-03 (gw)
RVSB-24 (C6, G)
APTF-01 (G)
RVSB-12 (C4, G)
RVSB-10 (C4)
RVSB-11 (C4)
APTF-02 (G)
RVSB-09 (C4)
RVSB-25 (G)
CKFP-03D (C3)
CKFP-04D (C4)
CKFP-04E (C4)
CKFP-04A (C4)
CKFP-04C (C4, G)
CKFP-03A (C3)
CKFP-04B (C4)
CKFP-03B (C3)
CKFP-03C (C3)
CKFP-03E (C3, G)

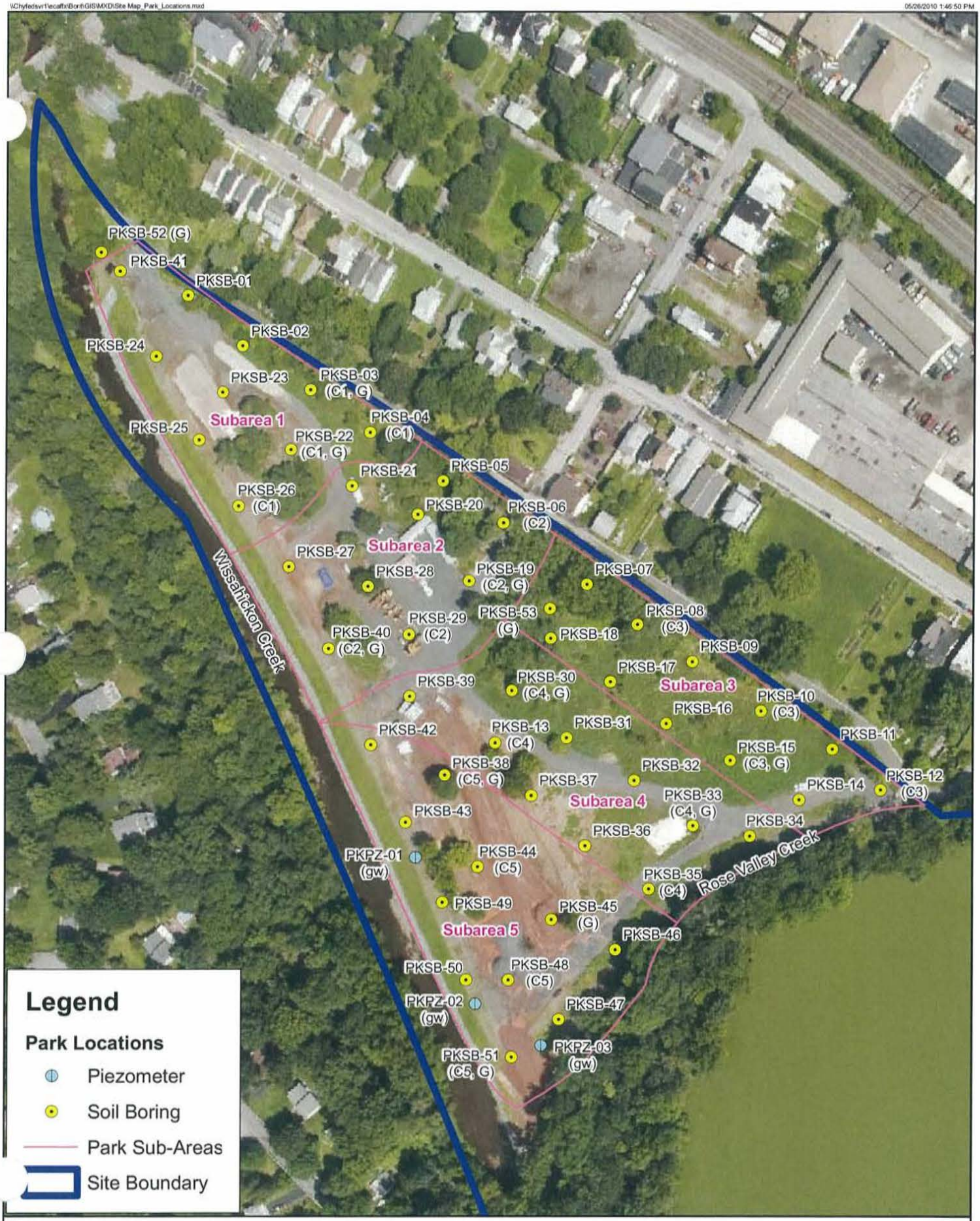
Notes:
1. The measured depth of the reservoir (blue text) is listed adjacent to the bathymetric survey locations.
2. Depth units are feet below water surface.
G = grab sample
gw = ground water sample
C = composite sample group
Aerial photo curtesy of Salvatore A. Boccuti

Borit Asbestos Superfund Site, OU1
Ambler, Pennsylvania

Figure 4
Bathymetric Survey Results

0 250 500 Feet

CDM



Legend

Park Locations

- Piezometer
- Soil Boring
- Park Sub-Areas
- Site Boundary

Notes:
PK = Park
PZ = Piezometer
SB = Soil Boring
G = grab sample
gw = ground water sample
C = composite sample group within parcel sub-areas
Aerial photo courtesy of Salvatore A. Boccuti.
Boundary lines are estimated.

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

N W E S

0 250 500 Feet

Figure 5
Park Sub-Area Sampling Locations

CDM



Notes:
AP = Asbestos Pile
PZ = Piezometer
SB = Soil Boring
TF = Transformer
G = grab sample
gw = ground water sample
C = composite sample group within parcel sub-areas
Elevations are measured in feet above mean sea level (ft amsl)
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

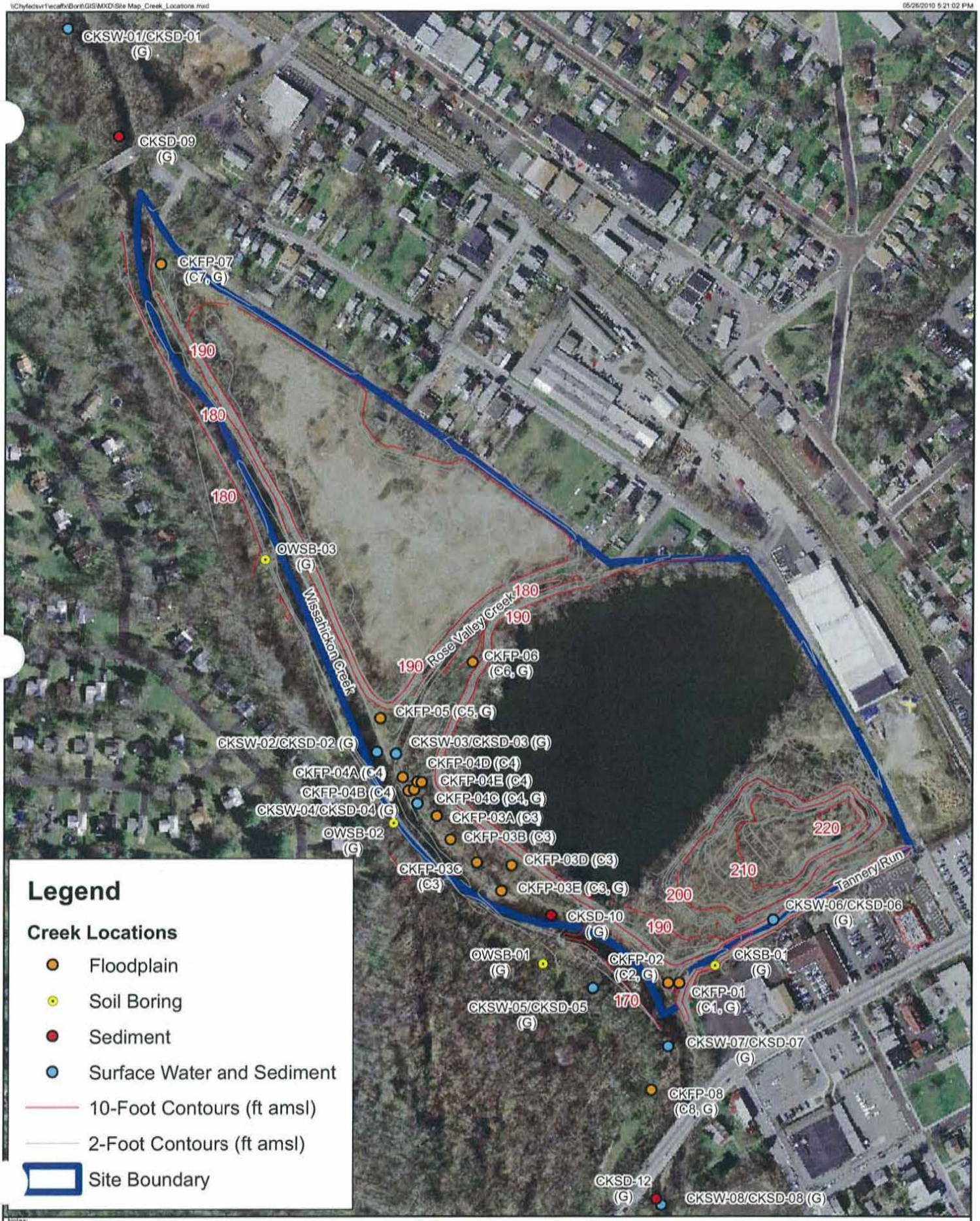
N
W E
S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 250 500 Feet

Figure 6
Asbestos Pile Sub-Area Sampling Locations

CDM



Legend

Creek Locations

- Floodplain
- Soil Boring
- Sediment
- Surface Water and Sediment
- 10-Foot Contours (ft amsl)
- 2-Foot Contours (ft amsl)
- Site Boundary

Notes:
CK = Creek
FP = Flood Plain
OW = Other side of the Wissahickon
SB = Soil Boring
SD = Sediment
SW = Surface Water
G = grab sample
C = composite sample group within parcel sub-areas
Elevations are measured in feet above mean sea level (ft amsl)
Boundary lines are estimated
Aerial photo courtesy of Delaware Valley Regional Planning Commission (DVRPC), Digital Color Orthoimagery for Montgomery County, Pennsylvania, 2005.

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 250 500 Feet

Figure 7
Creek Sampling Locations

CDM

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Legend

Sample Location

- Piezometer
- Soil Boring
- Transformer
- Floodplain
- Reservoir Sub-Areas
- Park Sub-Areas
- Asbestos Pile Sub-Areas
- Site Boundary

CKFP-07 (C7, G)
PKSB-52 (G)
PKSB-41
PKSB-01
PKSB-02
PKSB-24
PKSB-23
PKSB-03 (C1, G)
Subarea 1
PKSB-25
PKSB-22 (C1, G)
PKSB-04 (C1)
PKSB-21
PKSB-05
PKSB-26 (C1)
PKSB-20
PKSB-06 (C2)
Subarea 2
PKSB-27
PKSB-19 (C2, G)
PKSB-28
PKSB-07
PKSB-53 (G)
PKSB-08 (C3)
PKSB-29 (C2)
PKSB-18
PKSB-40 (C2, G)
PKSB-09
PKSB-17
PKSB-39
PKSB-30 (C4, G)
Subarea 3
PKSB-16
PKSB-10 (C3)
PKSB-42
PKSB-31
PKSB-11
PKSB-13 (C4)
Subarea 4
PKSB-15 (C3, G)
PKSB-32
OWSB-03 (G)
PKSB-38 (C5, G)
PKSB-37
PKSB-14
PKSB-12 (C3)
PKSB-33 (C4, G)
PKSB-43
PKSB-36
PKSB-34
PKPZ-01 (gw)
PKSB-44 (C5)
PKSB-35 (C4)
PKSB-49
PKSB-45 (G)
Subarea 5
PKSB-46
PKSB-50
PKSB-48 (C5)
CKFP-06 (C6, G)
PKPZ-02 (gw)
PKSB-47
PKPZ-03 (gw)
PKSB-51 (C5, G)
Subarea 6
Subarea 3
CKFP-05 (C5, G)
RVSB-24 (C6, G)
RVSB-08 (C3, G)
CKFP-04D (C4)
CKFP-04A (C4)
CKFP-04E (C4)
CKFP-04B (C4)
CKFP-04C (C4, G)
RVSB-09 (C4)
CKFP-03A (C3)
OWSB-02 (G)
CKFP-03B (C3)
RVSB-25 (G)
Subarea 4
CKFP-03D (C3)
CKFP-03C (C3)
RVSB-11 (C4)
RVSB-12 (C4, G)
CKFP-03E (C3, G)
RVSB-26 (G)
APTF-01 (G)
APTF-02 (G)
OWSB-01 (G)
RVSB-10 (C4)
RVSB-02 (C2)
RVSB-01 (C1)
RVSB-03 (C2)
Subarea 2
RVSB-04 (C2, G)
RVSB-20 (C1)
RVSB-05 (C3)
Subarea 1
RVSB-21 (C6)
RVSB-06 (C3)
RVSB-19 (C1, G)
RVSB-22 (C6)
RVSB-18 (C5)
RVSB-27 (G)
RVSB-07 (C3)
APSB-01 (C1)
RVSB-17 (C5, G)
RVSB-23 (C6)
APSB-02 (C1, G)
Subarea 1
APSB-11 (C2)
APTF-03 (G)
RVSB-16 (C5)
Subarea 5
APSB-10 (C2, G)
APSB-03 (C1, G)
APSB-18 (gw)
Subarea 2
APSB-09 (C2)
APSB-34 (G)
RVSB-15 (C5)
APSB-12 (gw, G)
APSB-04 (C1)
APSB-08 (C3)
APSB-19
APSB-17 (C3)
Subarea 3
RVSB-14
APSB-13 (C3, G)
APSB-07
APSB-05
APSB-20 (G)
APSB-16 (C3)
APSB-33 (G)
APSB-24 (C5, G)
APSB-06
APSB-23 (C4)
APSB-14
RVSB-13
APSB-21 (C4, G)
Subarea 5
Subarea 4
APSB-25 (C4)
APSB-15 (C4)
APSB-22
APSB-28 (C5)
APSB-30 (C6)
APPZ-03A
APSB-31 (C6)
APPZ-03 (gw)
APSB-26 (C5)
Subarea 6
APSB-32 (C6, G)
APSB-27 (C5)
APPZ-02 (gw)
APSB-29/APPZ-01 (gw)
CKSB-01 (G)
CKFP-02 (C2, G)
CKFP-01 (C1, G)
CKFP-08 (C8, G)
Wissahickon Creek
Rose Valley Creek
Tannery Run

Notes:
1. Sample locations bolded and highlighted in red were observed to have:
   a. bulk asbestos containing materials (BACM),
   b. bulk asbestos containing sand (BACS), or
   c. apparent asbestos product waste (AAPW).
2. Sample locations bolded and highlighted in blue are surface samples collected at 0 - 0.25 feet bgs with no asbestos containing material (ACM) observed.
3. Sample locations in black are locations where no asbestos was visually observed.
4. C = composite sample group within parcel sub-areas
5. Aerial photo courtesy of Delaware Valley Regional Planning Commission (DVRPC). Digital Color Orthoimagery for Montgomery County, Pennsylvania. 2005.

N W E S

0 250 500 1,000 Feet

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

Figure 8
Locations with Visually Observed ACM

CDM

Legend

Sample Location

- Soil Boring
- Sediment
- Surface Water
- Transformer
- Piezometer
- Cross Section
- Asbestos Pile Sub-Areas
- Park Sub-Areas
- Reservoir Sub-Areas
- Site Boundary

Notes:
PK = Park
PZ = Piezometer
SB = Soil Boring
G = grab sample
gw = ground water sample
C = composite sample group within parcel sub-areas
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

N W E S

0 250 500 1,000 Feet

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

Figure 9
Cross Sections - All Parcels
Draft

CDM

Northwest **A** — **A'** **Southeast**

Elevation (feet above mean sea level)

PKSB-52 PKSB-41 PKSB-24 PKSB-25 PKSB-26 PKSB-27 PKSB-40 PKSB-39 PKSB-38 PKSB-44 PKSB-45 PKSB-47

1.2 (G) 1.2 (G) 0.2 (G) ND (C1) 15 (C1) 0.4 (C1) 1.2 (C2) 15 (C2) 1.1 (C2) ND (G) 0.1 (C5) 15 (C5) 15 (C5) 0.1 (C5) 15 (C5) 0.2 (C5) ND (G)

Distance Along Baseline (ft)

LEGEND:

Cross Section Location

PKSB-52 PKSB-41 PKSB-24 PKSB-25 PKSB-26 PKSB-27 PKSB-40 PKSB-39 PKSB-38 PKSB-44 PKSB-45 PKSB-47

N

Site Map Scale 1 inch equals 515 feet

Bulk ACM debris mixed with soil

Fill (made ground)

USCS Clayey Sand

Bulk ACM debris

USCS Silt

USCS Poorly-graded Sand

USCS Low Plasticity Clay

USCS Silty Sand

GROUND SURFACE

Horizontal Scale (feet) 0 100

Vertical Scale (feet) 0 -5

Vertical Exaggeration: 17x

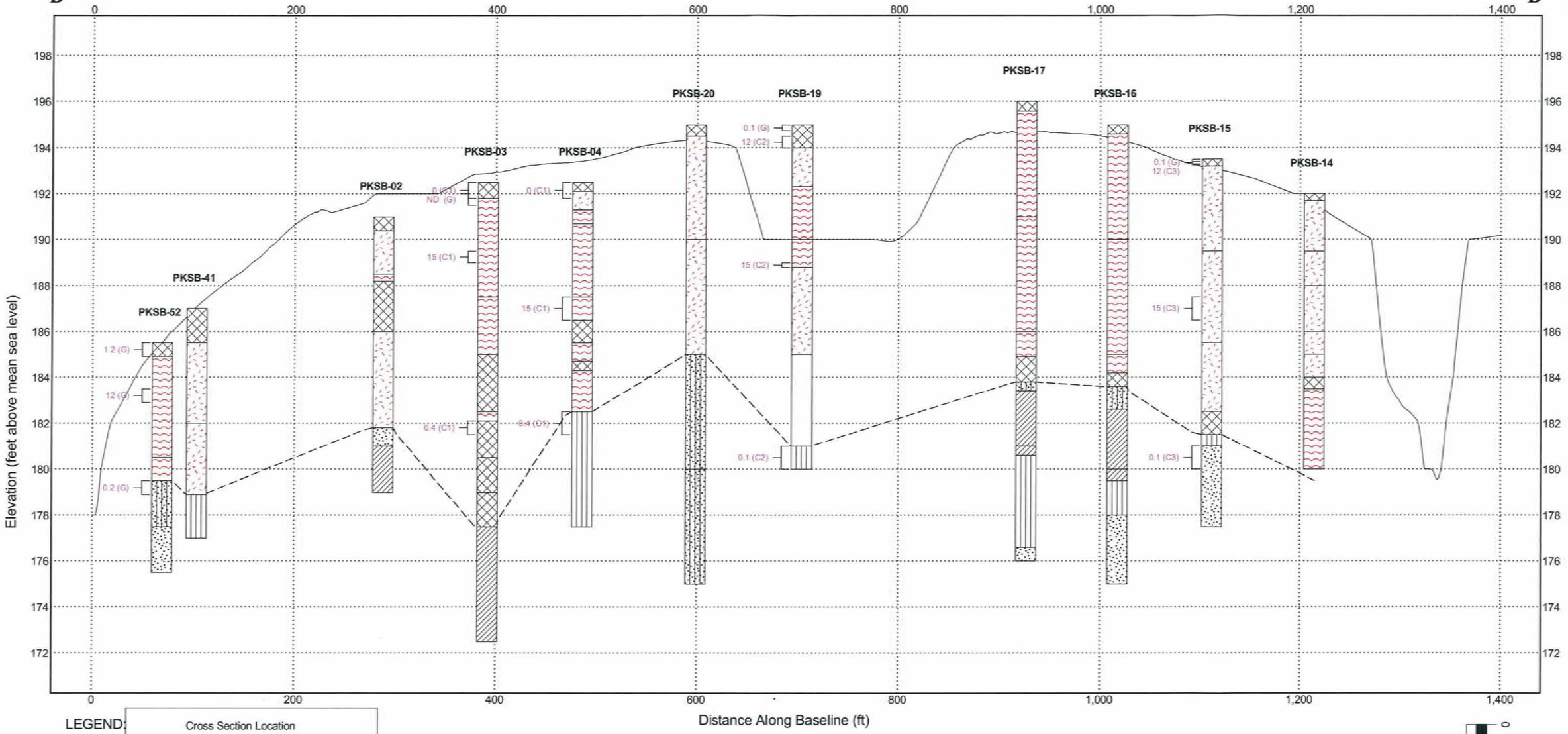
Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

Figure 10
Cross Section A-A' - Park
Borit Asbestos
Ambler, Pennsylvania

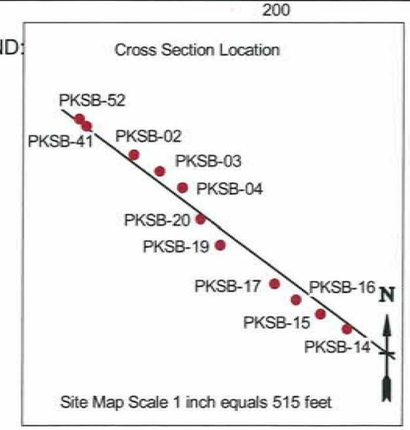
BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

BORIT_CROSS_SI

Northwest **B** — **B'** *Southeast*



LEGEND:



- Fill (made ground)
- Bulk ACM debris mixed with soil
- Bulk ACM debris
- USCS Poorly-graded Sand
- USCS Low Plasticity Clay
- USCS Silt
- USCS Silty Sand
- Void/no recovery.

GROUND SURFACE

0 — 100
Horizontal Scale (feet)

0 — 4
Vertical Scale (feet)

Vertical Exaggeration: 23x

Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

Figure 11
Cross Section B-B' - Park
Borit Asbestos
Ambler, Pennsylvania

BORIT_CROSS_SEC BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

Southwest C — *Northeast* C'

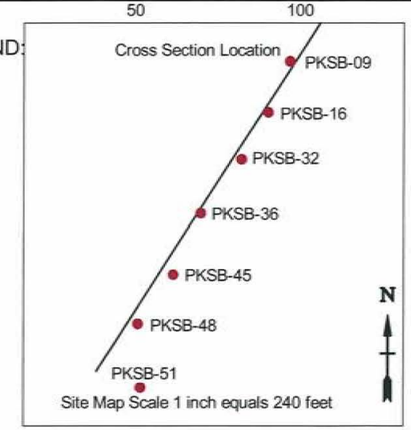
Elevation (feet above mean sea level)

Distance Along Baseline (ft)

PKSB-51 | PKSB-48 | PKSB-45 | PKSB-36 | PKSB-32 | PKSB-16 | PKSB-09

0.1 (C5) | 0.1 (C5) | 15 (C5) | ND (G) | 15 (C5) | 0.2 (C5) | 0.2 (C5)

LEGEND:



Fill (made ground)
Bulk ACM debris
USCS Low Plasticity Clay
USCS Poorly-graded Sand
USCS Silty Sand
USCS Silt
USCS Poorly-graded Gravel
USCS Clayey Gravel
Bulk ACM debris mixed with soil
USCS Poorly-graded Sand with Silt

GROUND SURFACE

0 — 47 Horizontal Scale (feet)

0 — 8 Vertical Scale (feet)

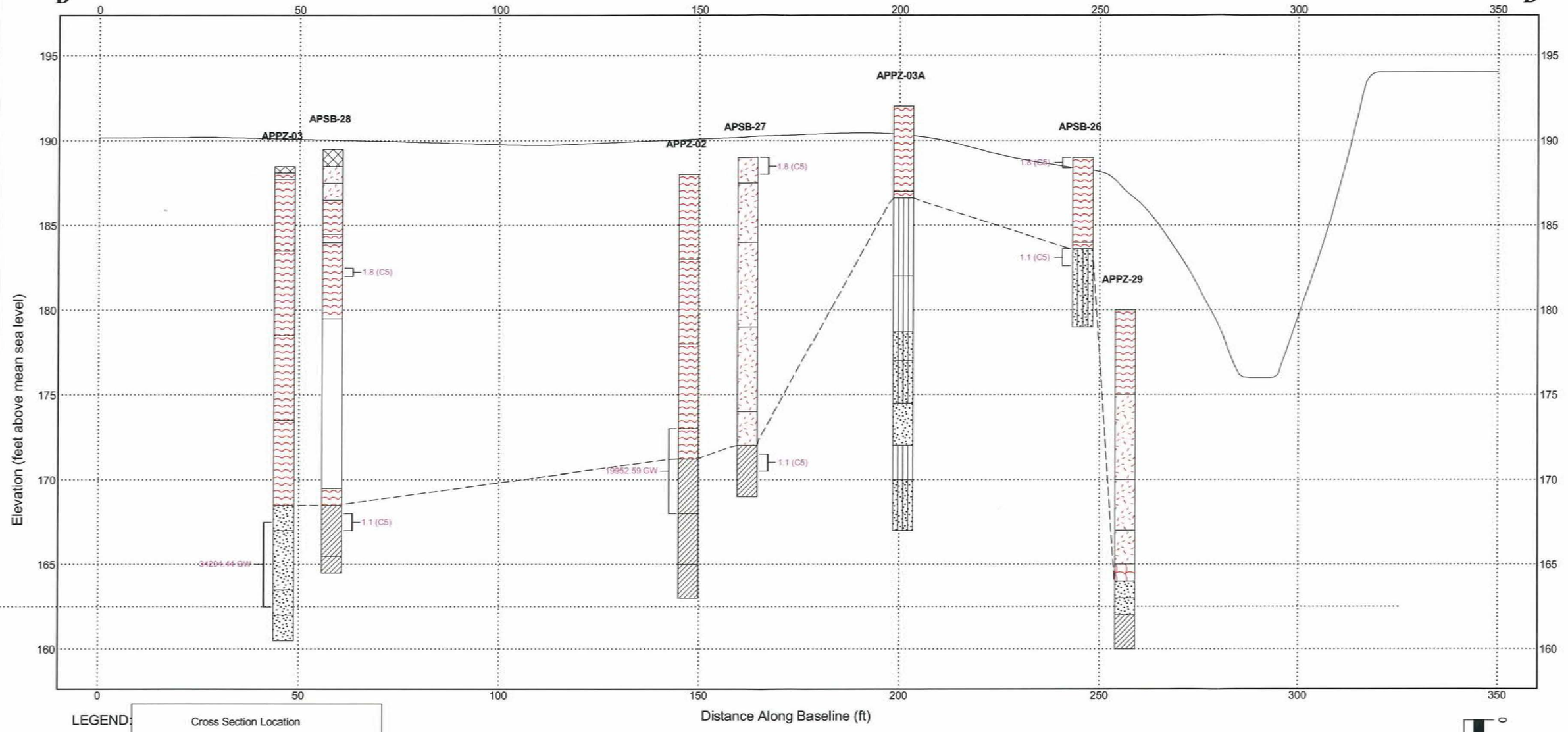
Vertical Exaggeration: 8x

Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

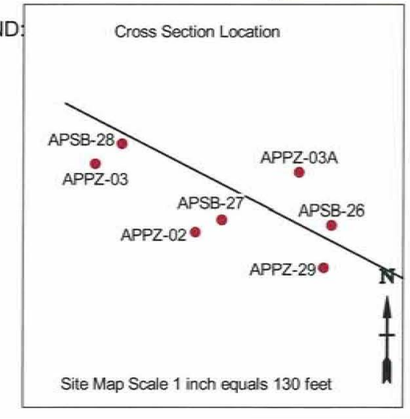
Figure 12
Cross Section C-C' - Park
Borit Asbestos
Ambler, Pennsylvania

BORIT_CROSS_SE ...IORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

Northwest **D** *Southeast* **D'**



LEGEND:



- Bulk ACM debris
- USCS Low Plasticity Clay
- Fill (made ground)
- USCS Poorly-graded Sand
- USCS Silt
- USCS Silty Sand
- Bulk ACM debris mixed with soil
- Apparent Asbestos Process Waste
- Void/no recovery.

GROUND SURFACE

0 25
Horizontal Scale (feet)

0 6
Vertical Scale (feet)

Vertical Exaggeration: 4.5x

Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

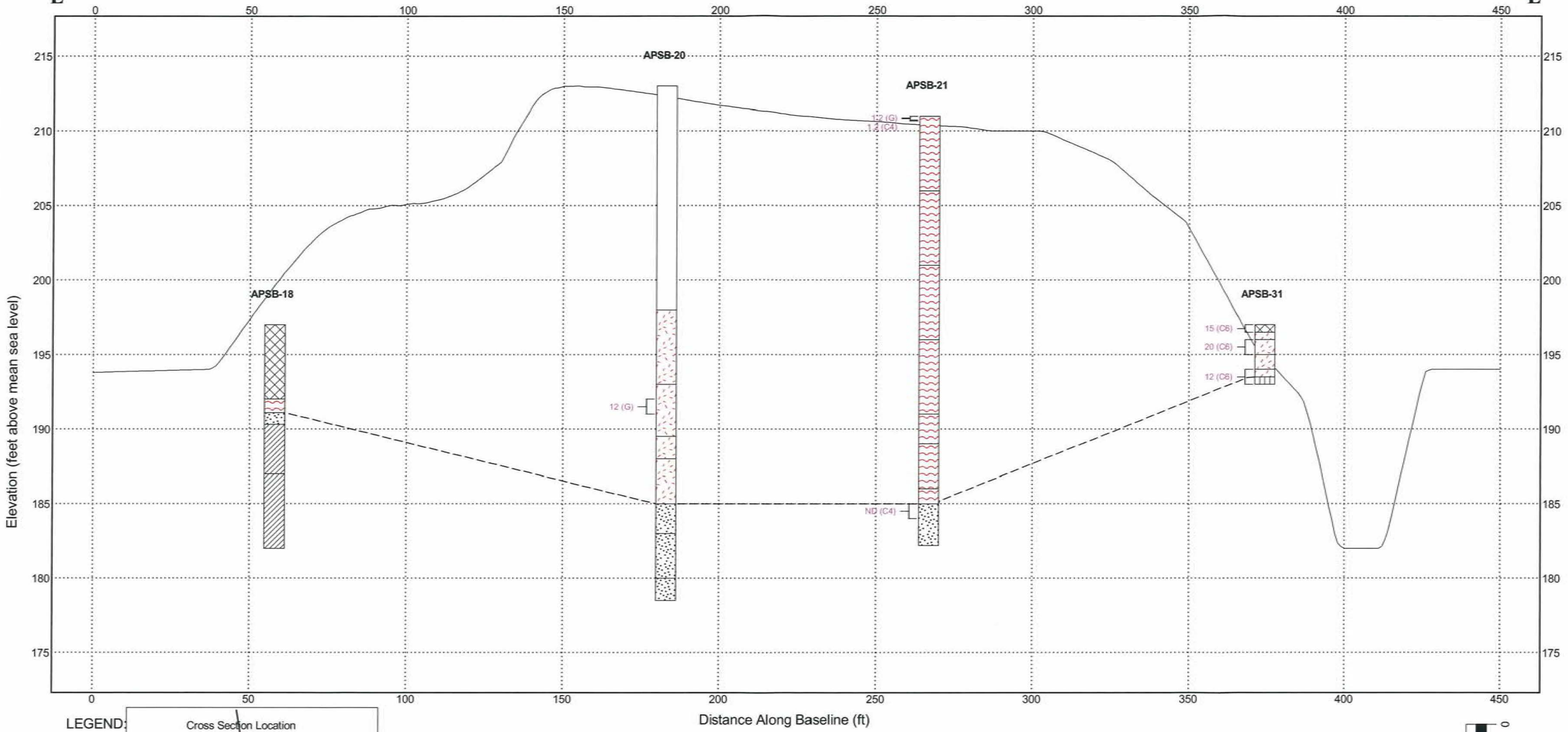
Figure 13
Cross Section D-D' - Asbestos Pile
Borit Asbestos
Ambler, Pennsylvania

BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

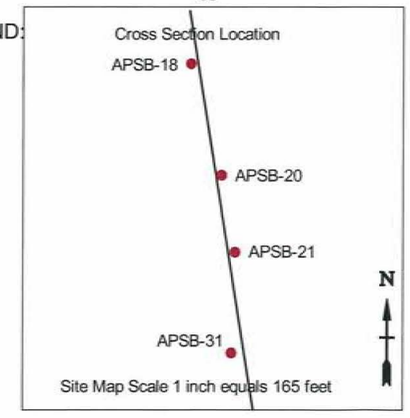
BORIT_CROSS_SE

North E

South E'



LEGEND:



Fill (made ground)

Void/no recovery.

Bulk ACM debris

Bulk ACM debris mixed with soil

USCS Poorly-graded Sand

USCS Silt

USCS Low Plasticity Clay

GROUND SURFACE

0 32

Horizontal Scale (feet)

0 2

Vertical Scale (feet)

Vertical Exaggeration: 5x

Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

Figure 14
Cross Section E-E' - Asbestos Pile
Borit Asbestos
Ambler, Pennsylvania

BORIT_CROSS_SE ...ORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

Northwest **F** — *Southeast* **F'**

Elevation (feet above mean sea level)

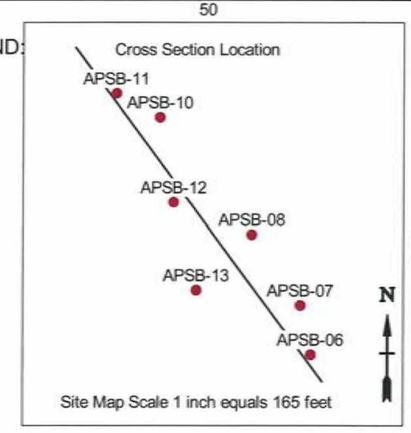
Distance Along Baseline (ft)

APSB-11 · APSB-10 · APSB-12 · APSB-08 · APSB-13 · APSB-07 · APSB-06

0.4 (C2) · 0.8 (C2) · 0.4 (C2) · 0.8 (C2) · 0.1 (C2) · 0.1 (C2) · 0.4 (C2) · 0.8 (C2) · 0.1 (C2) · 1.5 (C3) · 1.3 (G) · 1.5 (C3) · 0.1 (C3) · 0.1 (C3)

LEGEND:

Cross Section Location



- Fill (made ground)
- Bulk ACM debris mixed with soil
- USCS Silty Sand
- Bulk ACM debris
- USCS Poorly-graded Sand
- USCS Low Plasticity Clay
- USCS Poorly-graded Gravel
- USCS High Plasticity Clay
- USCS Silt
- Apparent Asbestos Process Waste

GROUND SURFACE

Horizontal Scale (feet): 0 — 32

Vertical Scale (feet): 0 — 8

Vertical Exaggeration: 4x

Groundwater Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
ND - not detected.
G - grab sample
C# - composite sample (sample number)

Figure 15
Cross Section F-F' - Asbestos Pile
Borit Asbestos
Ambler, Pennsylvania

BORIT_CROSS_SE ...ORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

Southwest G

Northeast G'

Elevation (feet above mean sea level)

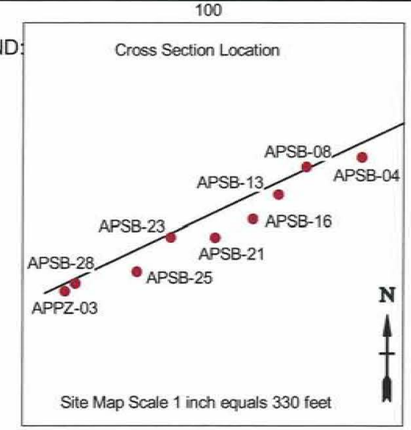
Distance Along Baseline (ft)

APPZ-03 APSB-28 APSB-25 APSB-23 APSB-21 APSB-16 APSB-13 APSB-08 APSB-04

1.8 (G5) 1.1 (G5) 24/34.44 GW 1.2 (C4) U (C4) ND (C4) ND (C4) 1.2 (G) 1.2 (C4) 1.5 (C3) 0.1 (C3) 1.3 (G) 1.5 (C3) 0.1 (C3) 1.5 (C3) 0.1 (C3) 0.3 (C1) 12 (C1) 0.1 (C1)

LEGEND:

Cross Section Location



Site Map Scale 1 inch equals 330 feet

- Fill (made ground)
- Bulk ACM debris
- USCS Poorly-graded Sand
- USCS Poorly-graded Gravel
- Bulk ACM debris mixed with soil
- Apparent Asbestos Process Waste
- USCS Silt
- Void/no recovery.
- USCS Low Plasticity Clay

GROUND SURFACE

Horizontal Scale (feet) 0 65

Vertical Scale (feet) 0 11

Vertical Exaggeration: 6x

Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per Liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

Figure 16
Cross Section G-G' - Asbestos Pile
Borit Asbestos
Ambler, Pennsylvania

BORIT_CROSS_SE ...ORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

Southwest **H** — *Northeast* **H'**

Elevation (feet above mean sea level)

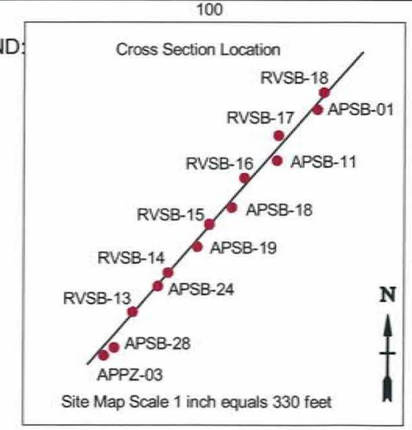
Distance Along Baseline (ft)

APPZ-03 · APSB-28 · RVSB-13 · APSB-24 · RVSB-14 · APSB-19 · RVSB-15 · APSB-18 · RVSB-16 · APSB-11 · RVSB-17 · APSB-01 · RVSB-18

1.8 (C5) · 1.1 (G) · 1.1 (C5) · 1.1 (C5) · 12 (C5) · ND (C5) · 1.1 (C5) · ND (C5) · 0.4 (C2) · 0.8 (C2) · 0.1 (C2) · ND (G) · 1.1 (C5) · 12 (C5) · ND (C5) · 0.3 (C1) · 12 (C1) · 0.1 (C1) · 1.1 (C5) · ND (C5) · 1.1 (G) · 94204-44-GW

LEGEND:

Cross Section Location



Site Map Scale 1 inch equals 330 feet

Fill (made ground) · Bulk ACM debris · USCS Poorly-graded Sand · USCS Silt

Void/no recovery. · Bulk ACM debris mixed with soil · USCS High Plasticity Clay · USCS Low Plasticity Clay

USCS Silty Sand · Asphalt

GROUND SURFACE

Horizontal Scale (feet) 0 65

Vertical Scale (feet) 0 7

Vertical Exaggeration: 9.5x

Sample Results
Asbestos
Soil results in %.
Groundwater results in million fibers per liter (mfL).
GW - groundwater result.
ND - not detected.
G - grab sample
C# - composite sample (sample number)

Figure 17
Cross Section H-H' -
Asbestos Pile and Reservoir
Borit Asbestos
Ambler, Pennsylvania

BORIT_CROSS_SEC BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	PKSB52-CW	
Benzo(a)pyrene	110 J	15
Benzo(b)fluoranthene	150 J	150
Waste Layer		
Sample ID	PKSB52-WA	
Benzo(a)anthracene	290 J	150
Benzo(a)pyrene	420 J	15
Benzo(b)fluoranthene	340 J	150
Indeno(1,2,3-cd)pyrene	170 J	150

Analyte	Result and Flag	RSL (ug/kg)
Waste Layer		
Sample ID	PKSB03042226-WA	
Benzo(a)pyrene	140 J	15
Dibenzo(a,h)anthracene	32 J	15
Native Soil		
Sample ID	PKSB03042226-NS	
Benzo(a)pyrene	70 J	15

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

PKSB-52 (G), PKSB-41, PKSB-01, PKSB-02, PKSB-24, Subarea 1, PKSB-23, PKSB-03 (C1, G), PKSB-04 (C1), PKSB-25, PKSB-22 (C1, G), PKSB-21, PKSB-05, PKSB-26 (C1), PKSB-20, Subarea 2, PKSB-06 (C2), PKSB-27, PKSB-19 (C2, G), PKSB-28, PKSB-07, PKSB-53 (G), PKSB-08 (C3), PKSB-29 (C2), PKSB-18, PKSB-40 (C2, G), PKSB-09, PKSB-17, Subarea 3, PKSB-39, PKSB-30 (C4, G), PKSB-10 (C3), PKSB-16, PKSB-31, PKSB-42, PKSB-11, PKSB-13 (C4), Subarea 4, PKSB-15 (C3, G), PKSB-32, PKSB-38 (C5, G), PKSB-37, PKSB-14, PKSB-12 (C3), PKSB-43, PKSB-36, PKSB-33 (C4, G), PKSB-34, PKSB-44 (C5), PKPZ-01 (gw), PKSB-35 (C4), PKSB-49, PKSB-45 (G), Subarea 5, PKSB-46, PKSB-50, PKSB-48 (C5), PKPZ-02 (gw), PKSB-47, PKPZ-03 (gw), PKSB-51 (C5, G), Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
PK = Park
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 18
Organics Exceeding Soil Screening Levels in Park Subarea 1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	PKSB03042226-CW	
ARSENIC	4.2 L	0.39
COBALT	22.8	2.3
IRON	24900 J	5500
MANGANESE	1180 J	180
VANADIUM	27.7	0.55
Waste Layer		
Sample ID	PKSB03042226-WA	
ALUMINUM	7980 J	7700
ARSENIC	3 L	0.39
COBALT	15.7	2.3
IRON	7400 J	5500
LEAD	1290	40
NICKEL	188	150
VANADIUM	10.8	0.55
ZINC	2350	2300
Native Soil		
Sample ID	PKSB03042226-NS	
ARSENIC	2.7 L	0.39
COBALT	4.7 J	2.3
IRON	13400 J	5500
VANADIUM	20.1	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	PKSB03042226-WA	
Asbestos,chrysotile	15	1

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	PKSB52-CW	
ARSENIC	2.9	0.39
COBALT	17.8	2.3
IRON	15900	5500
MANGANESE	893	180
VANADIUM	23.5	0.55
Waste Layer		
Sample ID	PKSB52-WA	
ALUMINUM	13200	7700
ARSENIC	1.9	0.39
COBALT	13.4	2.3
IRON	10300	5500
LEAD	190 K	40
MANGANESE	257	180
NICKEL	177	150
VANADIUM	18.7	0.55
Native Soil		
Sample ID	PKSB52-NS	
ARSENIC	2.7	0.39
COBALT	7.1	2.3
IRON	7710	5500
VANADIUM	22.7	0.55
Analyte	**Result and Flag**	**RSL (%)**
Cover Waste Interface		
Sample ID	PKSB52-CW	
Asbestos,chrysotile	1.2	1
Waste Layer		
Sample ID	PKSB52-WA	
Asbestos,chrysotile	12	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PK = Park
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 19
Inorganics and Asbestos Exceeding Soil Screening Levels in Park Subarea 1

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06/17/2010 11:06:08 AM

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	PKSB19-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	150 J	15
Benzo(b)fluoranthene	150 J	150

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	PKSB06192940-CW	
Benzo(a)anthracene	350 J	150
Benzo(a)pyrene	690 J	15
Benzo(b)fluoranthene	480 J	150
Dibenzo(a,h)anthracene	150 J	15
Indeno(1,2,3-cd)pyrene	240 J	150
Waste Layer		
Sample ID	PKSB06192940-WA	
Benzo(a)anthracene	1100	150
Benzo(a)pyrene	1500	15
Benzo(b)fluoranthene	1800	150
Dibenzo(a,h)anthracene	310 J	15
Indeno(1,2,3-cd)pyrene	950 J	150

PKSB-52 (G), PKSB-41, PKSB-01, PKSB-24, PKSB-02, PKSB-23, PKSB-03 (C1, G), PKSB-04 (C1), PKSB-25, PKSB-22 (C1, G), PKSB-21, PKSB-05, PKSB-26 (C1), PKSB-20, PKSB-06 (C2), PKSB-27, PKSB-19 (C2, G), PKSB-28, PKSB-07, PKSB-53 (G), PKSB-08 (C3), PKSB-29 (C2), PKSB-18, PKSB-40 (C2, G), PKSB-09, PKSB-17, PKSB-39, PKSB-30 (C4, G), PKSB-10 (C3), PKSB-16, PKSB-31, PKSB-11, PKSB-13 (C4), PKSB-15 (C3, G), PKSB-32, PKSB-38 (C5, G), PKSB-37, PKSB-14, PKSB-12 (C3), PKSB-43, PKSB-36, PKSB-33 (C4, G), PKSB-34, PKSB-44 (C5), PKSB-35 (C4), PKSB-49, PKSB-45 (G), PKSB-46, PKSB-50, PKSB-48 (C5), PKPZ-02 (gw), PKSB-47, PKPZ-03 (gw), PKSB-51 (C5, G)

Subarea 1, Subarea 2, Subarea 3, Subarea 4, Subarea 5

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
PK = Park
SB = Soil Boring
SS = surface soil sample
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 70 140 280 Feet

Figure 20
Organics Exceeding Soil Screening Levels in Park Subarea 2

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	PKSB19-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	8260 J	7700
ARSENIC	5.8 L	0.39
COBALT	16.1	2.3
IRON	18900 J	5500
LEAD	164	40
MANGANESE	655 J	180
MERCURY	1.1	0.56
VANADIUM	23.9	0.55

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	PKSB06192940-CW	
ALUMINUM	7910 J	7700
ARSENIC	4.2 L	0.39
COBALT	14.3	2.3
IRON	17300 J	5500
LEAD	126	40
MANGANESE	510 J	180
VANADIUM	25.3	0.55
Waste Layer		
Sample ID	PKSB06192940-WA	
ALUMINUM	11800 J	7700
ARSENIC	1.5 L	0.39
COBALT	10.9	2.3
IRON	11600 J	5500
LEAD	60.2	40
MANGANESE	208 J	180
VANADIUM	16.2	0.55
Native Soil		
Sample ID	PKSB06192940-NS	
ALUMINUM	8160 J	7700
ARSENIC	3.2 L	0.39
COBALT	10.7	2.3
IRON	13700 J	5500
LEAD	383 J	180
MANGANESE	383 J	180
VANADIUM	22.5	0.55
Analyte	**Result and Flag**	**RSL (%)**
Cover Waste Interface		
Sample ID	PKSB06192940-CW	
Asbestos,chrysotile	12	1
Waste Layer		
Sample ID	PKSB06192940-WA	
Asbestos,chrysotile	15	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PK = Park
SB = Soil Boring
SS = Surface Sample
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 21
Inorganics and Asbestos Exceeding Soil Screening Levels in Park Subarea 2

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	PKSB08101215-CW	
Benzo(a)anthracene	310 J	150
Benzo(a)pyrene	350 J	15
Benzo(b)fluoranthene	350 J	150
Waste Layer		
Sample ID	PKSB08101215-WA	
Benzo(a)anthracene	1100 J	150
Benzo(a)pyrene	1800	15
Benzo(b)fluoranthene	1100 J	150
Indeno(1,2,3-cd)pyrene	460 J	150

Sample ID	PKSB15-SS	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	86 J	15

PKSB-52 (G), PKSB-41, PKSB-01, Subarea 1, PKSB-02, PKSB-24, PKSB-23, PKSB-03 (C1, G), PKSB-04 (C1), PKSB-25, PKSB-22 (C1, G), PKSB-21, PKSB-05, PKSB-26 (C1), Subarea 2, PKSB-20, PKSB-06 (C2), PKSB-27, PKSB-19 (C2, G), PKSB-28, PKSB-07, PKSB-53 (G), Subarea 3, PKSB-08 (C3), PKSB-18, PKSB-29 (C2), PKSB-40 (C2, G), PKSB-09, PKSB-17, PKSB-39, PKSB-30 (C4, G), Subarea 4, PKSB-10 (C3), PKSB-16, PKSB-31, PKSB-42, PKSB-13 (C4), PKSB-11, PKSB-15 (C3, G), PKSB-32, PKSB-38 (C5, G), PKSB-37, PKSB-14, PKSB-12 (C3), PKSB-43, PKSB-36, PKSB-33 (C4, G), PKSB-34, PKSB-44 (C5), PKSB-35 (C4), Subarea 5, PKSB-49, PKSB-45 (G), PKSB-46, PKSB-50, PKSB-48 (C5), PKPZ-02 (gw), PKSB-47, PKPZ-03 (gw), PKSB-51 (C5, G)

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
PK = Park
SB = Soil Boring
SS = surface soil sample
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 55 110 220 Feet

Figure 22
Organics Exceeding Soil Screening Levels in Park Subarea 3

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	PKSB15-SS	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	2.8 L	0.39
COBALT	22.9	2.3
IRON	16900 J	5500
MANGANESE	1370 J	180
VANADIUM	16.6	0.55

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	PKSB08101215-CW	
ARSENIC	1.4 L	0.39
COBALT	23.1	2.3
IRON	6480 J	5500
MANGANESE	569 J	180
VANADIUM	6 J	0.55
Waste Layer		
Sample ID	PKSB08101215-WA	
ALUMINUM	9480 J	7700
ARSENIC	5.7 L	0.39
COBALT	12.5	2.3
IRON	12900 J	5500
LEAD	204	40
MANGANESE	375 J	180
MERCURY	0.79	0.56
VANADIUM	21.1	0.55
Native Soil		
Sample ID	PKSB08101215-NS	
ARSENIC	3.1 L	0.39
COBALT	4.5 J	2.3
IRON	7410 J	5500
VANADIUM	12.8	0.55
Analyte	**Result and Flag**	**RSL (%)**
Cover Waste Interface		
Sample ID	PKSB08101215-CW	
Asbestos,chrysotile	12	1
Waste Layer		
Sample ID	PKSB08101215-WA	
Asbestos,chrysotile	15	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PK = Park
SB = Soil Boring
SS = Surface Sample
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 23
Inorganics and Asbestos Exceeding Soil Screening Levels in Park Subarea 3

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	PKSB13303335-CW	
Benzo(a)pyrene	31 J	15
Waste Layer		
Sample ID	PKSB13303335-WA	
Benzo(a)anthracene	520 J	150
Benzo(a)pyrene	390 J	15
Benzo(b)fluoranthene	320 J	150
Native Soil		
Sample ID	PKSB13303335-NS	
Benzo(a)pyrene	58 J	15

PKSB-52 (G)
PKSB-41
PKSB-01
Subarea 1
PKSB-02
PKSB-24
PKSB-23
PKSB-03 (C1, G)
PKSB-25
PKSB-04 (C1)
PKSB-22 (C1, G)
PKSB-21
PKSB-05
PKSB-26 (C1)
PKSB-20
Subarea 2
PKSB-06 (C2)
PKSB-27
PKSB-19 (C2, G)
PKSB-28
PKSB-07
PKSB-53 (G)
PKSB-08 (C3)
PKSB-29 (C2)
PKSB-18
PKSB-40 (C2, G)
PKSB-09
PKSB-17
PKSB-39
PKSB-30 (C4, G)
PKSB-10 (C3)
Subarea 4
PKSB-16
PKSB-31
PKSB-42
Subarea 3
PKSB-11
PKSB-13 (C4)
PKSB-15 (C3, G)
PKSB-38 (C5, G)
PKSB-32
PKSB-37
PKSB-14
PKSB-12 (C3)
PKSB-43
PKSB-36
PKSB-33 (C4, G)
PKSB-34
PKSB-44 (C5)
PKPZ-01 (gw)
Subarea 5
PKSB-35 (C4)
PKSB-49
PKSB-45 (G)
PKSB-46
PKSB-50
PKSB-48 (C5)
PKPZ-02 (gw)
PKSB-47
PKPZ-03 (gw)
PKSB-51 (C5, G)
Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
PK = Park
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 24
Organics Exceeding Soil Screening Levels in Park Subarea 4

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	PKSB30-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ARSENIC	6.4 L	0.39
COBALT	13.2	2.3
IRON	17300 J	5500
MANGANESE	919 J	180
VANADIUM	19.6	0.55

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	PKSB13303335-CW	
ARSENIC	3.2 L	0.39
COBALT	25.7	2.3
IRON	24400 J	5500
MANGANESE	1580 J	180
VANADIUM	22.7	0.55
Waste Layer		
Sample ID	PKSB13303335-WA	
ALUMINUM	11200 J	7700
ARSENIC	2.1 L	0.39
COBALT	13.3	2.3
IRON	10700 J	5500
MANGANESE	201 J	180
NICKEL	172	150
VANADIUM	20.1	0.55
Native Soil		
Sample ID	PKSB13303335-NS	
ARSENIC	4.7 L	0.39
COBALT	5.9 J	2.3
IRON	16700 J	5500
LEAD	54.1	40
VANADIUM	18.7	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	PKSB13303335-WA	
Asbestos,chrysotile	17	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PK = Park
SB = Soil Boring
SS = Surface Sample
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 25
Inorganics and Asbestos Exceeding Soil Screening Levels in Park Subarea 4

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	PKSB45-17.3	
Analyte	**Result and Flag**	**RSL (ug/kg)**
2-Methylnaphthalene	3100000	31000
Acenaphthene	930000	340000
Benzene	310000	1100
Benzo(a)anthracene	1400000	150
Benzo(a)pyrene	1300000	15
Benzo(b)fluoranthene	1200000	150
Benzo(k)fluoranthene	450000	1500
Chrysene	1600000	15000
Fluoranthene	1600000	230000
Fluorene	930000	230000
Indeno(1,2,3-cd)pyrene	430000 J	150
Naphthalene	3200000	3600
Pyrene	2600000	170000

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	PKSB38444851-CW	
Benzo(a)anthracene	810	150
Benzo(a)pyrene	790	15
Benzo(b)fluoranthene	990	150
Dibenzo(a,h)anthracene	150 J	15
Indeno(1,2,3-cd)pyrene	430 J	150
Waste Layer		
Sample ID	PKSB38444851-WA	
Benzo(a)anthracene	920 J	150
Benzo(a)pyrene	1200 J	15
Benzo(b)fluoranthene	750 J	150
Indeno(1,2,3-cd)pyrene	490 J	150
Native Soil		
Sample ID	PKSB38444851-NS	
Benzo(a)pyrene	43 J	15

PKSB-52 (G), PKSB-41, PKSB-01, PKSB-02, PKSB-24, Subarea 1, PKSB-23, PKSB-03 (C1, G), PKSB-04 (C1), PKSB-25, PKSB-22 (C1, G), PKSB-21, PKSB-05, PKSB-26 (C1), PKSB-20, Subarea 2, PKSB-06 (C2), PKSB-27, PKSB-19 (C2, G), PKSB-28, PKSB-07, PKSB-53 (G), PKSB-08 (C3), PKSB-29 (C2), PKSB-18, PKSB-40 (C2, G), PKSB-09, PKSB-17, Subarea 3, PKSB-39, PKSB-30 (C4, G), PKSB-10 (C3), PKSB-16, PKSB-31, PKSB-42, PKSB-11, PKSB-13 (C4), PKSB-15 (C3, G), PKSB-32, PKSB-38 (C5, G), PKSB-37, PKSB-14, PKSB-12 (C3), Subarea 4, PKSB-43, PKSB-36, PKSB-33 (C4, G), PKSB-34, PKSB-44 (C5), PKSB-35 (C4), PKSB-49, PKSB-45 (G), Subarea 5, PKSB-46, PKSB-50, PKSB-48 (C5), PKPZ-02 (gw), PKSB-47, PKPZ-03 (gw), PKSB-51 (C5, G), Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
PK = Park
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 26
Organics Exceeding Soil Screening Levels in Park Subarea 5

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	PKSB38444851-CW	
ALUMINUM	7780 J	7700
ARSENIC	4.8 L	0.39
COBALT	15.5	2.3
IRON	20000 J	5500
LEAD	41.2	40
MANGANESE	922 J	180
VANADIUM	24.1	0.55
Waste Layer		
Sample ID	PKSB38444851-WA	
ALUMINUM	8900 J	7700
ARSENIC	1.5 J	0.39
COBALT	22.6	2.3
IRON	12300 J	5500
MANGANESE	289 J	180
NICKEL	357	150
VANADIUM	12.5	0.55
Native Soil		
Sample ID	PKSB38444851-NS	
ARSENIC	2.9 L	0.39
COBALT	8.3	2.3
IRON	13600 J	5500
MANGANESE	335 J	180
VANADIUM	21.4	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	PKSB38444851-WA	
Asbestos,chrysotile	15	1

Sample ID	PKSB38-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	8010 J	7700
ARSENIC	3.4 L	0.39
COBALT	12	2.3
IRON	15500 J	5500
MANGANESE	755 J	180
VANADIUM	21.2	0.55

Sample ID	PKSB45-17.3	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ARSENIC	2	0.39
LEAD	644 K	40

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PK = Park
SB = Soil Boring
SS = Surface Sample
G = grab sample
C = composite sample group within parcel subareas
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

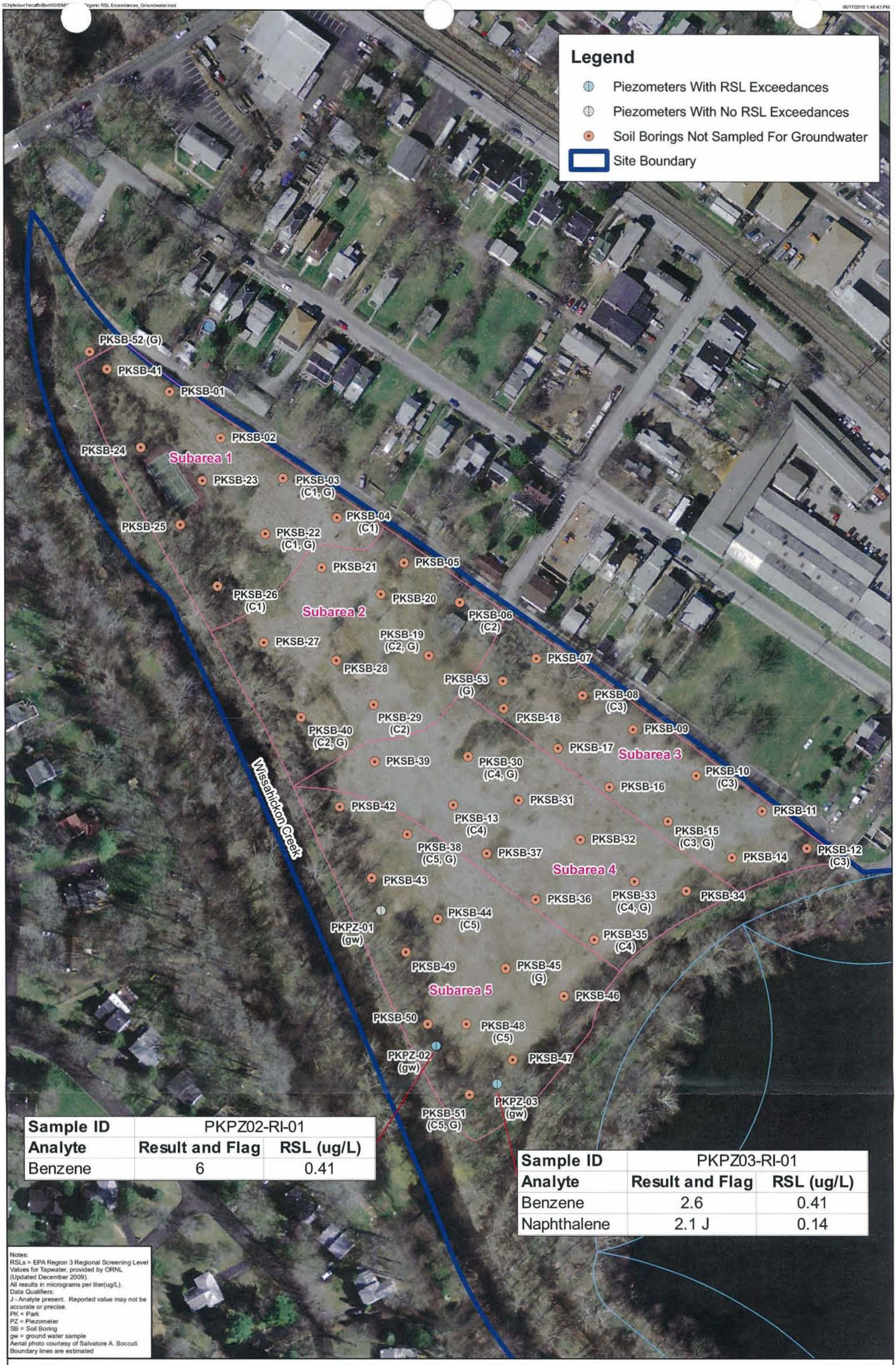
CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 27
Inorganics and Asbestos Exceeding Soil Screening Levels in Park Subarea 5



Sample ID	PKPZ02-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
Benzene	6	0.41

Sample ID	PKPZ03-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
Benzene	2.6	0.41
Naphthalene	2.1 J	0.14

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
All results in micrograms per liter(ug/L).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
PK = Park
PZ = Piezometer
SB = Soil Boring
gw = ground water sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

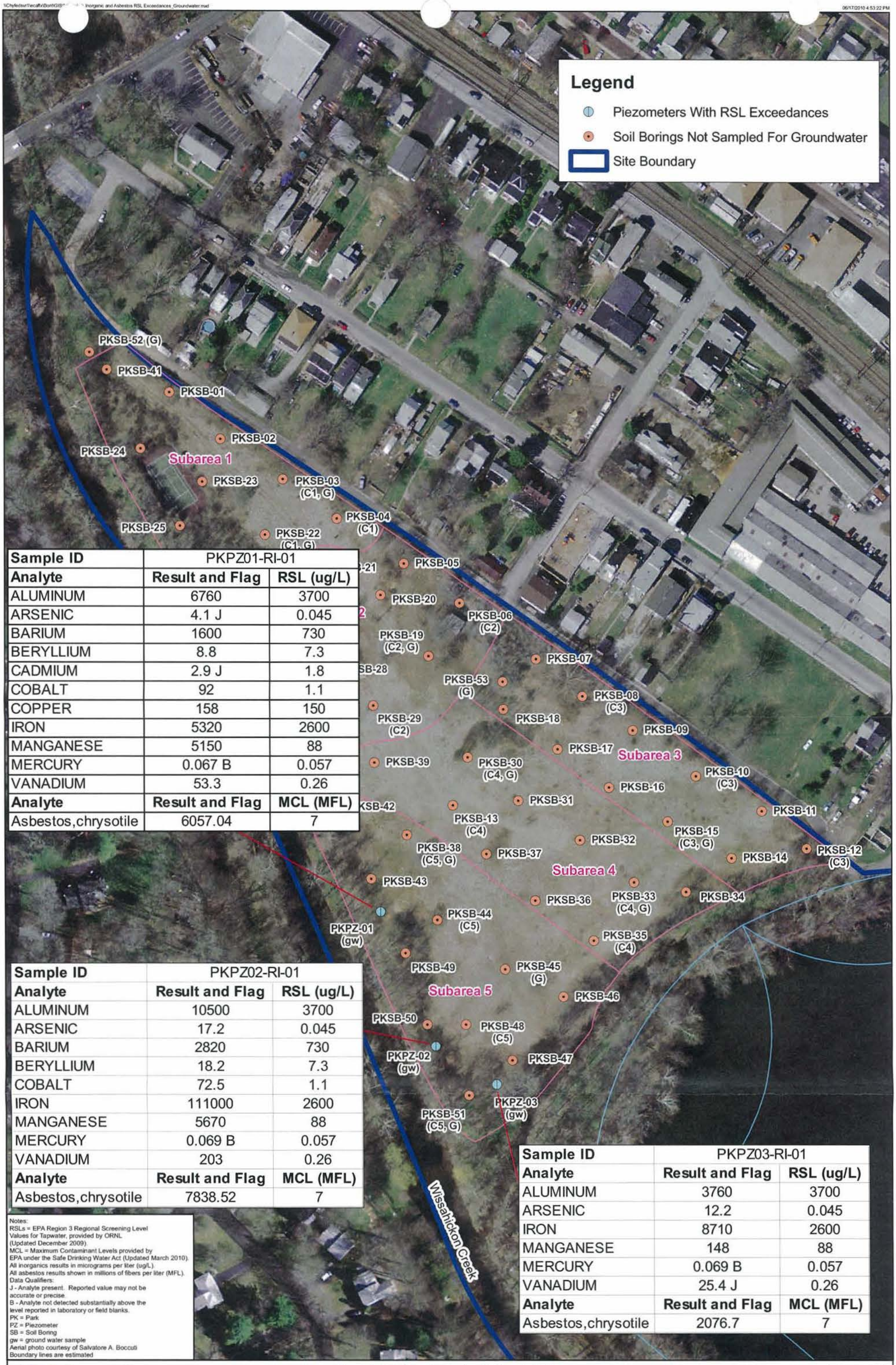
CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 28
Organics Exceeding Groundwater Screening Levels in Park



Sample ID	PKPZ01-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ALUMINUM	6760	3700
ARSENIC	4.1 J	0.045
BARIUM	1600	730
BERYLLIUM	8.8	7.3
CADMIUM	2.9 J	1.8
COBALT	92	1.1
COPPER	158	150
IRON	5320	2600
MANGANESE	5150	88
MERCURY	0.067 B	0.057
VANADIUM	53.3	0.26
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos,chrysotile	6057.04	7

Sample ID	PKPZ02-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ALUMINUM	10500	3700
ARSENIC	17.2	0.045
BARIUM	2820	730
BERYLLIUM	18.2	7.3
COBALT	72.5	1.1
IRON	111000	2600
MANGANESE	5670	88
MERCURY	0.069 B	0.057
VANADIUM	203	0.26
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos,chrysotile	7838.52	7

Sample ID	PKPZ03-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ALUMINUM	3760	3700
ARSENIC	12.2	0.045
IRON	8710	2600
MANGANESE	148	88
MERCURY	0.069 B	0.057
VANADIUM	25.4 J	0.26
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos,chrysotile	2076.7	7

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
MCL = Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
All inorganics results in micrograms per liter (ug/L).
All asbestos results shown in millions of fibers per liter (MFL).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
PK = Park
PZ = Piezometer
SB = Soil Boring
gw = ground water sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 65 130 260 Feet

Figure 29
Inorganics and Asbestos Exceeding Groundwater Screening Levels in Park

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	APSB02-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)anthracene	550	150
Benzo(a)pyrene	560	15
Benzo(b)fluoranthene	780	150
Indeno(1,2,3-cd)pyrene	280 J	150

APSB-01 (C1)
APSB-02 (C1, G)
Subarea 1
APSB-11 (C2)
APTF-03 (G)
Subarea 2
APSB-10 (C2, G)
APSB-03 (C1, G)
APSB-18 (gw)
APSB-09 (C2)
APSB-34 (G)
APSB-12 (gw, C2)
APSB-04 (C1)
APSB-08 (C3)
APSB-17 (C3)
APSB-19
Subarea 3
APSB-13 (C3, G)
APSB-07
APSB-05
APSB-20 (G)
APSB-33 (G)
APSB-16 (C3)
APSB-24 (C5, G)
APSB-23 (C4)
APSB-06
APSB-21 (C4, G)
APSB-14
Subarea 5
Subarea 4
APSB-15 (C4)
APSB-25 (C4)
APSB-22
APTF-01 (G)
APSB-28 (C5)
APTF-02 (G)
APPZ-03 (gw)
APPZ-03A
APSB-26 (C5)
APSB-32 (C6, G)
APSB-27 (C5)
APPZ-02 (gw)
Wissahickon Creek
APSB-29/APPZ-01 (gw)
Subarea 6

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	APSB01020304-CW	
Benzo(a)anthracene	4100 J	150
Benzo(a)pyrene	4800	15
Benzo(b)fluoranthene	4800 J	150
Benzo(k)fluoranthene	2700	1500
Indeno(1,2,3-cd)pyrene	2200 J	150
Waste Layer		
Sample ID	APSB01020304-WA	
Benzo(a)anthracene	630	150
Benzo(a)pyrene	400	15
Benzo(b)fluoranthene	830	150
Indeno(1,2,3-cd)pyrene	290 J	150
Native Soil		
Sample ID	APSB01020304-NS	
Benzo(a)pyrene	45 J	15

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 60 120 240 Feet

Figure 30
Organics Exceeding Soil Screening Levels in Asbestos Pile Subarea 1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	APSB02-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	9300	7700
ARSENIC	3.8	0.39
COBALT	12.2	2.3
IRON	22500 J	5500
LEAD	40.7	40
MANGANESE	488 J	180
VANADIUM	37.5	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	1.1	1

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	APSB01020304-CW	
ARSENIC	4.9	0.39
COBALT	8.3	2.3
IRON	14200 J	5500
LEAD	94.5	40
MANGANESE	339 J	180
VANADIUM	25.1	0.55
Waste Layer		
Sample ID	APSB01020304-WA	
ALUMINUM	7750	7700
ARSENIC	9	0.39
COBALT	6.1 J	2.3
IRON	21100 J	5500
LEAD	52.9	40
MANGANESE	285 J	180
VANADIUM	16.1	0.55
Native Soil		
Sample ID	APSB01020304-NS	
ALUMINUM	9400	7700
ARSENIC	1.6	0.39
COBALT	9.7	2.3
IRON	14000 J	5500
LEAD	111	40
MANGANESE	237 J	180
VANADIUM	21.3	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	APSB01020304-WA	
Asbestos, chrysotile	12	1

APSB-01 (C1)
APSB-02 (C1, G)
APSB-11 (C2)
APTF-03 (G)
Subarea 1
Subarea 2
APSB-10 (C2, G)
APSB-03 (C1, G)
APSB-18 (gw)
APSB-09 (C2)
APSB-34 (G)
APSB-12 (gw, C2)
APSB-04 (C1)
APSB-08 (C3)
APSB-17 (C3)
APSB-19
Subarea 3
APSB-13 (C3, G)
APSB-07
APSB-05
APSB-20 (G)
APSB-33
APSB-16 (C3)
APSB-24 (C5, G)
APSB-23 (C4)
APSB-21 (C4, G)
Subarea 5
Subarea 4
APSB-25 (C4)
APSB-22
APTF-01 (G)
APSB-28 (C5)
APSB-31 (C6)
APTF-02 (G)
APPZ-03 (gw)
APPZ-03A
APSB-26 (C5)
APSB-32 (C6, G)
APSB-27 (C5)
APPZ-02 (gw)
Wissahickon Creek
APSB-29/APPZ-01 (gw)
Subarea 6

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel sub-area
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania
0 50 100 200 Feet

Figure 31
Inorganics and Asbestos Exceeding Soil Screening Levels in Asbestos Pile Subarea 1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	APSB09101112-CW	
Benzo(a)anthracene	4900	150
Benzo(a)pyrene	3900	15
Benzo(b)fluoranthene	5000	150
Benzo(k)fluoranthene	2000	1500
Indeno(1,2,3-cd)pyrene	1800	150

Sample ID	APSB10-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)anthracene	1500	150
Benzo(a)pyrene	1300	15
Benzo(b)fluoranthene	1700	150
Indeno(1,2,3-cd)pyrene	730	150

APSB-02 (C1, G)
APSB-11 (C2)
APTF-03 (G)
APSB-10 (C2, G)
APSB-03 (C1, G)
APSB-09 (C2)
APSB-34 (G)
APSB-12 (gw, C2)
APSB-04 (C1)
APSB-08 (C3)
APSB-17 (C3)
APSB-19
APSB-13 (C3, G)
APSB-20 (G)
APSB-07
APSB-05
APSB-33 (G)
APSB-16 (C3)
APSB-24 (C5, G)
APSB-23 (C4)
APSB-06
APSB-21 (C4, G)
APSB-14
APSB-15 (C4)
APSB-25 (C4)
APSB-22
APSB-30 (C6)
APTF-01 (G)
APSB-28 (C5)
APSB-31 (C6)
APTF-02 (G)
APPZ-03 (gw)
APPZ-03A
APSB-26 (C5)
APSB-32 (C6, G)
APSB-27 (C5)
APPZ-02 (gw)
APSB-29/APPZ-01 (gw)

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 100 200 Feet

Figure 32
Organics Exceeding Soil Screening Levels in Asbestos Pile Subarea 2

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	APSB09101112-CW	
ALUMINUM	9850	7700
ARSENIC	3.5	0.39
COBALT	8.4	2.3
IRON	14800 J	5500
LEAD	57	40
MANGANESE	489 J	180
VANADIUM	28.2	0.55
Waste Layer		
Sample ID	APSB09101112-WA	
ALUMINUM	14900	7700
ARSENIC	2.9	0.39
COBALT	12.1 J	2.3
IRON	13200 J	5500
MANGANESE	288 J	180
VANADIUM	22.4	0.55
Native Soil		
Sample ID	APSB09101112-NS	
ALUMINUM	12700	7700
ARSENIC	3.8	0.39
COBALT	10.9	2.3
IRON	19300 J	5500
MANGANESE	409 J	180
VANADIUM	29.4	0.55

Sample ID	APSB10-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	13500	7700
ARSENIC	3.5	0.39
COBALT	5.4 J	2.3
IRON	12800 J	5500
VANADIUM	22.3	0.55

Legend

- Soil Borings With RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5

APSB-02 (C1, G)
APSB-03 (C1, G)
APSB-04 (C1)
APSB-05
APSB-06
APSB-07
APSB-08 (C3)
APSB-09 (C2)
APSB-10 (C2, G)
APSB-11 (C2)
APSB-12 (gw, C2)
APSB-13 (C3, G)
APSB-14
APSB-15 (C4)
APSB-16 (C3)
APSB-17 (C3)
APSB-18 (gw)
APSB-19
APSB-20 (G)
APSB-21 (C4, G)
APSB-22
APSB-23 (C4)
APSB-24 (C5, G)
APSB-25 (C4)
APSB-26 (C5)
APSB-27 (C5)
APSB-28 (C5)
APSB-29/APPZ-01 (gw)
APSB-30 (C6)
APSB-31 (C6)
APSB-32 (C6, G)
APSB-33 (G)
APSB-34 (G)
APTF-01 (G)
APTF-02 (G)
APTF-03 (G)
APPZ-02 (gw)
APPZ-03 (gw)
APPZ-03A

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganics results shown in milligrams per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
gw = groundwater
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 100 200 Feet

Figure 33
Inorganics and Asbestos Exceeding Soil Screening Levels in Asbestos Pile Subarea 2

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

APSB-01 (C1)
APSB-02 (C1, G)
APSB-03 (C1, G)
APSB-04 (C1)
APSB-05
APSB-06
APSB-07
APSB-08 (C3)
APSB-09 (C2)
APSB-10 (C2, G)
APSB-11 (C2)
APSB-12 (gw, C2)
APSB-13 (C3, G)
APSB-14
APSB-15 (C4)
APSB-16 (C3)
APSB-17 (C3)
APSB-18 (gw)
APSB-19
APSB-20 (G)
APSB-21 (C4, G)
APSB-22
APSB-23 (C4)
APSB-24 (C5, G)
APSB-25 (C4)
APSB-26 (C5)
APSB-27 (C5)
APSB-28 (C5)
APSB-30 (C6)
APSB-31 (C6)
APSB-32 (C6, G)
APSB-33 (G)
APSB-34 (G)
APTF-01 (G)
APTF-02 (G)
APTF-03 (G)
APPZ-02 (gw)
APPZ-03 (gw)
APPZ-03A

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Analyte	Result and Flag	RSL (ug/kg)
Native Soil		
Sample ID	APSB08131617-NS	
Benzo(a)pyrene	38 J	15

Sample ID	APSB13-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	48 J	15

Analyte	Result and Flag	RSL (ug/kg)
Waste Layer		
Sample ID	APSB13-WA	
Chloroform	630 L	290

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 100 200 Feet

Figure 34
Organics Exceeding Soil Screening Levels in Asbestos Pile Subarea 3

Analyte	Result and Flag	RSL (mg/kg)
Waste Layer		
Sample ID	APSB08131617-WA	
ALUMINUM	8550	7700
ARSENIC	1.1 J	0.39
COBALT	6.1 J	2.3
IRON	8150	5500
MANGANESE	231	180
VANADIUM	14.7	0.55
Native Soil		
Sample ID	APSB08131617-NS	
ALUMINUM	14200	7700
COBALT	20.7	2.3
IRON	12000	5500
MANGANESE	314	180
NICKEL	315	150
VANADIUM	19.1	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	APSB08131617-WA	
Asbestos, chrysotile	1.5	1

Sample ID	APSB33-SS	
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	12	1

Sample ID	APSB13-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	14800	7700
ARSENIC	3.1	0.39
COBALT	13.7	2.3
IRON	11300 J	5500
LEAD	47.5	40
MANGANESE	335 J	180
NICKEL	153	150
VANADIUM	23	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	1.3	1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

APSB-01 (C1)
Subarea 2
Subarea 1
APSB-02 (C1, G)
APSB-11 (C2)
APTF-03 (G)
APSB-10 (C2, G)
APSB-03 (C1, G)
APSB-18 (gw)
APSB-09 (C2)
APSB-34 (G)
APSB-12 (gw, C2)
APSB-04 (C1)
APSB-08 (C3)
APSB-17 (C3)
APSB-19
APSB-13 (C3, G)
APSB-07
APSB-05
APSB-20 (G)
APSB-33 (G)
APSB-16 (C3)
Subarea 3
APSB-24 (C5, G)
APSB-23 (C4)
APSB-06
APSB-21 (C4, G)
APSB-14
Subarea 5
Subarea 4
APSB-15 (C4)
APSB-25 (C4)
APSB-22
APTF-01 (G)
APSB-28 (C5)
APSB-30 (C6)
Subarea 6
APSB-31 (C6)
APTF-02 (G)
APPZ-03 (gw)
APPZ-03A
APSB-26 (C5)
APSB-32 (C6, G)
APSB-27
Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligrams per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

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Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 100 200 Feet

Figure 35
Inorganics and Asbestos Exceeding Soil Screening Levels in Asbestos Pile Subarea 3

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	APSB24-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)anthracene	1000	150
Benzo(a)pyrene	820	15
Benzo(b)fluoranthene	1100	150
Indeno(1,2,3-cd)pyrene	430	150

Sample ID	APSB20-21	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)anthracene	31000 J	150
Benzo(a)pyrene	520 J	15
Chrysene	87000 J	15000
Chloroform	300 J	290

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	APSB303132-CW	
Benzo(a)anthracene	250 J	150
Benzo(b)fluoranthene	440 J	150
Indeno(1,2,3-cd)pyrene	230 J	150

Sample ID	APTF02-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Aroclor-1260	370	220

Sample ID	APSB32-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)anthracene	290 J	150
Benzo(a)pyrene	290 J	15
Benzo(b)fluoranthene	450 J	150
Indeno(1,2,3-cd)pyrene	200 J	150

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 36
Organics Exceeding Soil Screening Levels in Asbestos Pile Subareas 4 thru 6

Legend

- Soil Borings With RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	APSB21-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	13200	7700
ARSENIC	2.3	0.39
COBALT	15.6	2.3
IRON	11500 J	5500
LEAD	58.9	40
MANGANESE	328 J	180
NICKEL	189	150
VANADIUM	24.6	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	1.2	1

Sample ID	APSB20-21	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	17600	7700
COBALT	17 J	2.3
COPPER	311	310
IRON	22100 J	5500
MANGANESE	307 J	180
NICKEL	214	150
VANADIUM	21.3 J	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	12	1

Analyte	Result and Flag	RSL (mg/kg)
	Waste Layer	
Sample ID	APSB15212325-WA	
ALUMINUM	11100	7700
ARSENIC	1.2 J	0.39
COBALT	26.2	2.3
IRON	14900 J	5500
MANGANESE	334 J	180
NICKEL	388	150
VANADIUM	17.9	0.55
	Native Soil	
Sample ID	APSB15212325-NS	
ALUMINUM	11900	7700
ARSENIC	2.9	0.39
COBALT	14.6	2.3
IRON	17200 J	5500
MANGANESE	426 J	180
VANADIUM	28.3	0.55
Analyte	**Result and Flag**	**RSL (%)**
	Waste Layer	
Sample ID	APSB15212325-WA	
Asbestos, chrysotile	1.2	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
Inorganics results shown in milligrams per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 37
Inorganics and Asbestos Exceeding Soil Screening Levels in Asbestos Pile Subarea 4

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Analyte	Result and Flag	RSL (mg/kg)
Waste Layer		
Sample ID	APSB24262728-WA	
ALUMINUM	10600	7700
ARSENIC	2.1	0.39
COBALT	11.1	2.3
IRON	13200 J	5500
LEAD	112	40
MANGANESE	252 J	180
VANADIUM	14.6	0.55
Native Soil		
Sample ID	APSB24262728-NS	
ALUMINUM	8350	7700
ARSENIC	2.7	0.39
COBALT	10.4	2.3
IRON	13800 J	5500
MANGANESE	466 J	180
VANADIUM	19.3	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	APSB24262728-WA	
Asbestos, chrysotile	1.8	1
Native Soil		
Sample ID	APSB24262728-NS	
Asbestos, chrysotile	1.1	1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings Not Sampled
- Piezometers Not Sampled For Soil
- Site Boundary

Sample ID	APSB34-SS	
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	15	1

Sample ID	APSB24-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ARSENIC	4.1	0.39
COBALT	11.9	2.3
IRON	11800 J	5500
LEAD	41.3	40
MANGANESE	217 J	180
VANADIUM	19	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	1.1	1

APSB-01 (C1)
Subarea 1
APSB-10 (C2, G)
APSB-03 (C1, G)
APSB-18 (gw)
APSB-09 (C2)
Subarea 2
APSB-34 (G)
APSB-12 (gw, C2)
APSB-04 (C1)
APSB-08 (C3)
APSB-17 (C3)
APSB-19
APSB-13 (C3, G)
APSB-07
APSB-05
APSB-20 (G)
Subarea 5
APSB-33 (G)
Subarea 3
APSB-16 (C3)
APSB-24 (C5, G)
APSB-23 (C4)
APSB-06
APSB-21 (C4, G)
APSB-14
Subarea 4
APSB-15 (C4)
APSB-25 (C4)
APSB-22
Subarea 6
APSB-30 (C6)
APTF-01 (G)
APSB-28 (C5)
APSB-31 (C6)
APTF-02 (G)
APPZ-03 (gw)
APPZ-03A
APSB-26 (C5)
APSB-32 (C6, G)
APSB-27 (C5)
APPZ-02 (gw)
Wissahickon Creek
APSB-29/APPZ-01 (gw)

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
Inorganics results shown in milligrams per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

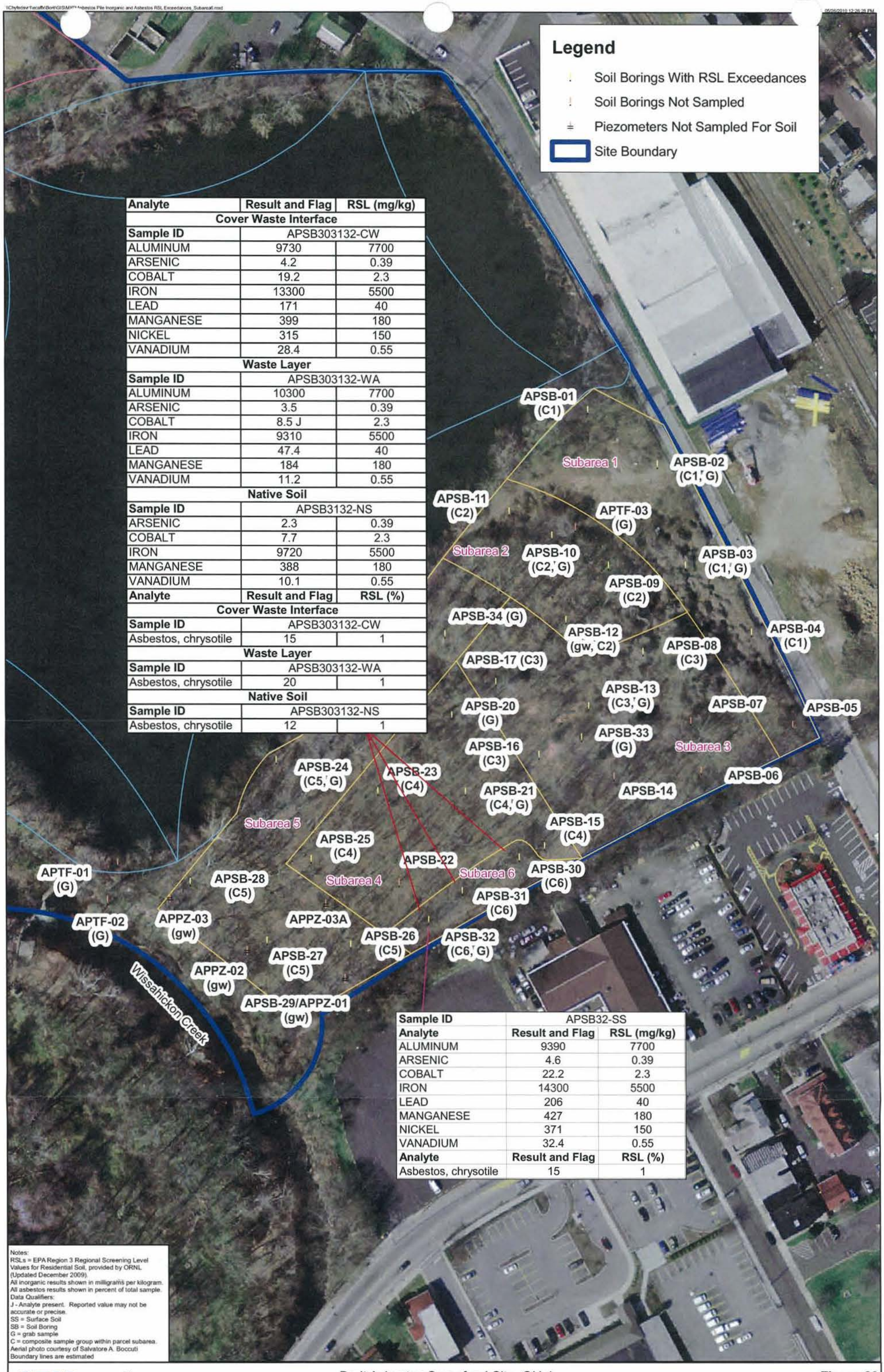
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N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 38
Inorganics and Asbestos Exceeding Soil Screening Levels in Asbestos Pile Subarea 5



Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	APSB303132-CW	
ALUMINUM	9730	7700
ARSENIC	4.2	0.39
COBALT	19.2	2.3
IRON	13300	5500
LEAD	171	40
MANGANESE	399	180
NICKEL	315	150
VANADIUM	28.4	0.55
Waste Layer		
Sample ID	APSB303132-WA	
ALUMINUM	10300	7700
ARSENIC	3.5	0.39
COBALT	8.5 J	2.3
IRON	9310	5500
LEAD	47.4	40
MANGANESE	184	180
VANADIUM	11.2	0.55
Native Soil		
Sample ID	APSB3132-NS	
ARSENIC	2.3	0.39
COBALT	7.7	2.3
IRON	9720	5500
MANGANESE	388	180
VANADIUM	10.1	0.55
Analyte	**Result and Flag**	**RSL (%)**
Cover Waste Interface		
Sample ID	APSB303132-CW	
Asbestos, chrysotile	15	1
Waste Layer		
Sample ID	APSB303132-WA	
Asbestos, chrysotile	20	1
Native Soil		
Sample ID	APSB303132-NS	
Asbestos, chrysotile	12	1

Sample ID	APSB32-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	9390	7700
ARSENIC	4.6	0.39
COBALT	22.2	2.3
IRON	14300	5500
LEAD	206	40
MANGANESE	427	180
NICKEL	371	150
VANADIUM	32.4	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	15	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligrams per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 39
Inorganics and Asbestos Exceeding Soil Screening Levels in Asbestos Pile Subarea 6

Legend

- Soil Borings With RSL Exceedances
- Piezometers With RSL Exceedances
- Piezometers With No RSL Exceedances
- Soil Borings Not Sampled For Groundwater
- Site Boundary

Sample ID	APSB18-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
Pentachlorophenol	5.9 B	0.56
2-Hexanone	10	4.7
Benzene	0.54 J	0.41

Sample ID	APPZ03-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
2-Butanone	1400 L	710

Sample ID	APSB12-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
Dieldrin	0.014 J	0.0042

APSB-01 (C1)
APSB-02 (C1, G)
APSB-03 (C1, G)
APSB-04 (C1)
APSB-05
APSB-06
APSB-07
APSB-08 (C3)
APSB-09 (C2)
APSB-10 (C2, G)
APSB-11 (C2)
APSB-12 (gw, C2)
APSB-13 (C3, G)
APSB-14
APSB-15 (C4)
APSB-17 (C3)
APSB-18 (gw)
APSB-19
APSB-20
APSB-21 (C4, G)
APSB-22
APSB-25 (C4)
APSB-26 (C5)
APSB-27 (C5)
APSB-28 (C5)
APSB-29/APPZ-01 (gw)
APSB-30 (C6)
APSB-31 (C6)
APSB-32 (C6, G)
APSB-34 (G)
APTF-01 (G)
APTF-02 (G)
APTF-03 (G)
APPZ-02 (gw)
APPZ-03 (gw)
APPZ-03A
Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6
Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
All results shown in micrograms per liter.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PZ = Piezometer
SB = Soil Boring
gw = ground water sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 40
Organics Exceeding Groundwater Screening Levels in Asbestos Pile

Legend

- = Peizometers With RSL or MCL Exceedances
- . Soil Borings With RSL or MCL Exceedances
- ! Soil Borings Not Sampled
- Site Boundary

APSB-01 (C1)

Subarea 1

Sample ID	APSB18-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
MANGANESE	844	88
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	1068888.89	7

APSB-1 (C2)

APSB-10 (C2, G)

APSB-03 (C1, G)

APSB-09 (C2)

Subarea 2

APSB-34 (G)

APSB-12 (gw, C2)

APSB-04 (C1)

APSB-08 (C3)

APSB-17 (C3)

APSB-19

Subarea 3

APSB-13 (C3, G)

APSB-20

APSB-07

APSB-05

Sample ID	APPZ03-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ALUMINUM	7380	3700
ARSENIC	28.9	0.045
BARIUM	1810	730
BERYLLIUM	10.3	7.3
COBALT	42.2 J	1.1
IRON	87300	2600
MANGANESE	11500	88
MERCURY	0.064 B	0.057
VANADIUM	134	0.26
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	34204.44	7

PSB-18 (gw)

Sample ID	APSB12-RI-01	
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	24940.74	7

...24 (C5, G)

APSB-23 (C4)

APSB-21 (C4, G)

APSB-14

APSB-06

Subarea 4

APSB-15 (C4)

Subarea 5

APSB-25 (C4)

APSB-22

Subarea 6

APSB-30 (C6)

APTF-01 (G)

APSB-28 (C5)

APSB-31 (C6)

APTF-02 (G)

APPZ-03 (gw)

APPZ-03A

Sample ID	APPZ02-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ARSENIC	22.7	0.045
BARIUM	924	730
IRON	27800	2600
MANGANESE	7210	88
MERCURY	0.071 B	0.057
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	19952.59	7

APSB-26 (C5)

APSB-27 (C5)

APPZ-02 (gw)

Wissahickon Creek

APSB-29/APPZ-01 (gw)

Sample ID	APPZ01-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ARSENIC	6.3 J	0.045
IRON	19800	2600
MANGANESE	1180	88
MERCURY	0.087 B	0.057
ZINC	1280	1100
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	4008.33	7

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
MCL = Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
All inorganics results shown in micrograms per liter.
All asbestos results shown in millions of fibers per liter.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
PZ = Piezometer
SB = Soil Boring
gw = ground water sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 50 100 200 Feet

Figure 41
Inorganics and Asbestos Exceeding Groundwater Screening Levels in Asbestos Pile

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

RVSB-03 (C2)
RVSB-02 (C2)
RVSB-01 (C1)
RVSB-04 (C2,G)
Subarea 2
RVSB-20 (C1)
RVSB-05 (C3)
Subarea 1
RVSB-21 (C6)
RVSB-06 (C3)
RVSB-19 (C1,G)
RVSB-22 (C6)
RVSB-18 (C5)
Subarea 3
Subarea 6
RVSB-07 (C3)
RVSB-23 (C6)
RVSB-24 (C6,G)
RVSB-08 (C3,G)
RVSB-16 (C5)
RVSB-15 (C5)
RVSB-09 (C4)
Subarea 5
RVSB-10 (G)
RVSB-14
Subarea 4
RVSB-25 (G)
RVSB-11 (C4)
RVSB-12 (C4,G)
RVSB-26 (G)
RVSB-13
Wissahickon Creek

Sample ID	RVSB011920-CW	
Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Benzo(a)anthracene	610	150
Benzo(a)pyrene	670	15
Benzo(b)fluoranthene	910	150
Indeno(1,2,3-cd)pyrene	260 J	150

Sample ID	RVSB19-SS	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)anthracene	380 J	150
Benzo(a)pyrene	400 J	15
Benzo(b)fluoranthene	540	150
Indeno(1,2,3-cd)pyrene	170 J	150

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 42
Organics Exceeding Soil Screening Levels in Reservoir Subarea 1

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	RVSB011920-CW	
ARSENIC	5.3	0.39
COBALT	4.2 J	2.3
IRON	18600	5500
LEAD	80.4	40
VANADIUM	28.4	0.55
Native Soil		
Sample ID	RVSB011920-NS	
ARSENIC	2.2	0.39
COBALT	5.6 J	2.3
IRON	9930	5500
MANGANESE	187	180
VANADIUM	19.2	0.55

Sample ID	RVSB19-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ARSENIC	7.1	0.39
IRON	13500	5500
LEAD	153	40
VANADIUM	26.6	0.55

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

RVSB-01 (C1)
RVSB-02 (C2)
RVSB-03 (C2)
RVSB-04 (C2, G)
RVSB-05 (C3)
RVSB-06 (C3)
RVSB-07 (C3)
RVSB-08 (C3, G)
RVSB-09 (C4)
RVSB-10 (G)
RVSB-11 (C4)
RVSB-12 (C4, G)
RVSB-13
RVSB-14
RVSB-15 (C5)
RVSB-16 (C5)
RVSB-17 (C5, G)
RVSB-18 (C5)
RVSB-19 (C1, G)
RVSB-20 (C1)
RVSB-21 (C6)
RVSB-22 (C6)
RVSB-23 (C6)
RVSB-24 (C6, G)
RVSB-25 (G)
RVSB-26 (G)
RVSB-27 (G)

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligram per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 43
Inorganics and Asbestos Exceeding Soil Screening Levels in Reservoir Subarea 1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

Sample ID	RVSB04-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	160 J	15
Benzo(b)fluoranthene	240 L	150

Sample ID	RVSB020304-CW	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Cover Waste Interface		
Benzo(a)anthracene	230 J	150
Benzo(a)pyrene	260	15
Benzo(b)fluoranthene	410	150
Dibenzo(a,h)anthracene	54 J	15
Indeno(1,2,3-cd)pyrene	160 J	150

RVSB-01 (C1)
RVSB-02 (C2)
RVSB-03 (C2)
RVSB-04 (C2, G)
RVSB-05 (C3)
RVSB-06 (C3)
RVSB-07 (C3)
RVSB-08 (C3, G)
RVSB-09 (C4)
RVSB-10 (G)
RVSB-11 (C4)
RVSB-12 (C4, G)
RVSB-13
RVSB-14
RVSB-15 (C5)
RVSB-16 (C5)
RVSB-17 (C5, G)
RVSB-18 (C5)
RVSB-19 (C1, G)
RVSB-20 (C1)
RVSB-21 (C6)
RVSB-22 (C6)
RVSB-23 (C6)
RVSB-24 (C6, G)
RVSB-25 (G)
RVSB-26 (G)
RVSB-27 (G)

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 44
Organics Exceeding Soil Screening Levels in Reservoir Subarea 2

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

Sample ID	RVSB04-SS	
Analyte	Result and Flag	RSL (mg/kg)
ALUMINUM	9840	7700
ARSENIC	6.3	0.39
COBALT	11.1	2.3
IRON	22500	5500
LEAD	86.4	40
MANGANESE	719	180
VANADIUM	29.7	0.55
ZINC	2440	2300

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	RVSB020304-CW	
ARSENIC	5.9	0.39
COBALT	6.9 J	2.3
IRON	14700	5500
LEAD	148	40
MANGANESE	388	180
VANADIUM	21.4	0.55
Waste Layer		
Sample ID	RVSB020304-WA	
ALUMINUM	9500	7700
ARSENIC	10.7	0.39
COBALT	11.5	2.3
IRON	12900	5500
LEAD	50.3	40
MANGANESE	298	180
VANADIUM	26	0.55
Native Soil		
Sample ID	RVSB020304-NS	
ALUMINUM	9300	7700
ARSENIC	3.6	0.39
COBALT	7.7	2.3
IRON	13900	5500
MANGANESE	498	180
VANADIUM	24.3	0.55
Analyte	**Result and Flag**	**RSL (%)**
Cover Waste Interface		
Sample ID	RVSB020304-CW	
Asbestos, chrysotile	12	1
Waste Layer		
Sample ID	RVSB020304-WA	
Asbestos, chrysotile	15	1

RVSB-03 (C2)
RVSB-02 (C2)
RVSB-01 (C1)
RVSB-20 (C1)
RVSB-04 (C2, G)
RVSB-05 (C3)
RVSB-21 (C6)
RVSB-06 (C3)
RVSB-22 (C6)
RVSB-07 (C3)
RVSB-23 (C6)
RVSB-24 (C6, G)
RVSB-08 (C3, G)
RVSB-09 (C4)
RVSB-10 (G)
RVSB-25 (G)
RVSB-11 (C4)
RVSB-12 (C4, G)
RVSB-26 (G)
RVSB-13

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligram per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 45
Inorganics and Asbestos Exceeding Soil Screening Levels in Reservoir Subarea 2

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

Sample ID	RVSB21222324-WA	
Analyte	Result and Flag	RSL (ug/kg)
Waste Layer		
Benzo(a)pyrene	55 J	15

Sample ID	RVSB08-SS	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	140 J	15
Benzo(b)fluoranthene	210 J	150
Dibenzo(a,h)anthracene	28 J	15

RVSB-01 (C1)
RVSB-02 (C2)
RVSB-03 (C2)
RVSB-04 (C2,G)
RVSB-05 (C3)
RVSB-06 (C3)
RVSB-07 (C3)
RVSB-08 (C3,G)
RVSB-09 (C4)
RVSB-10 (G)
RVSB-11 (C4)
RVSB-12 (C4,G)
RVSB-13
RVSB-14
RVSB-15 (C5)
RVSB-16 (C5)
RVSB-17 (C5,G)
RVSB-18 (C5)
RVSB-19 (C1,G)
RVSB-20 (C1)
RVSB-21 (C6)
RVSB-22 (C6)
RVSB-23 (C6)
RVSB-24 (C6,G)
RVSB-25 (G)
RVSB-26 (G)
RVSB-27 (G)

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 46
Organics Exceeding Soil Screening Levels in Reservoir Subareas 3 and 6

Analyte	Result and Flag	RSL (mg/kg)
Waste Layer		
Sample ID	RVSB05060708-WA	
ALUMINUM	11800	7700
ARSENIC	2.8	0.39
COBALT	13	2.3
IRON	10100	5500
MANGANESE	220	180
VANADIUM	18.8	0.55
Native Soil		
Sample ID	RVSB05060708-NS	
ARSENIC	3.9	0.39
COBALT	6.3	2.3
IRON	9190	5500
MANGANESE	367	180
VANADIUM	15.4	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	RVSB05060708-WA	
Asbestos, chrysotile	12	1

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

RVSB-03 (C2)
RVSB-02 (C2)
RVSB-01 (C1)
RVSB-20 (C1)
RVSB-19 (C1, G)
RVSB-18 (C5)
RVSB-27 (G)
RVSB-17 (C5, G)
RVSB-16 (C5)
RVSB-15 (C5)
RVSB-14
RVSB-13
RVSB-05 (C3)
RVSB-21 (C6)
RVSB-06 (C3)
RVSB-22 (C6)
RVSB-07 (C3)
RVSB-23 (C6)
RVSB-24 (C6, G)
RVSB-08 (C3, G)
RVSB-09 (C4)
RVSB-10 (G)
RVSB-25 (G)

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Sample ID	RVSB050607-CW	
Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
ALUMINUM	10900	7700
ARSENIC	6.2	0.39
COBALT	10.3	2.3
IRON	19600	5500
LEAD	46.8	40
MANGANESE	499	180
VANADIUM	31.2	0.55

Sample ID	RVSB08-SS	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	3.8	0.39
COBALT	5.1 J	2.3
IRON	9410	5500
LEAD	84.5	40
MANGANESE	335	180
VANADIUM	15.2	0.55
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	1.2	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligram per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 47
Inorganics and Asbestos Exceeding Soil Screening Levels in Reservoir Subarea 3

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

RVSB-03 (C2)
RVSB-02 (C2)
RVSB-01 (C1)
RVSB-04 (C2,G)
Subarea 2
RVSB-20 (C1)
RVSB-05 (C3)
Subarea 1
RVSB-21 (C6)
RVSB-06 (C3)
RVSB-19 (C1,G)
RVSB-22 (C6)
RVSB-18 (C5)
Subarea 3
RVSB-27 (G)
Subarea 6
RVSB-07 (C3)
RVSB-23 (C6)
RVSB-17 (C5,G)
RVSB-24 (C6,G)
RVSB-08 (C3,G)

Sample ID	RVSB09101112-CW	
Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Benzo(a)pyrene	68 J	15

RVSB-16 (C5)
RVSB-09 (C4)
RVSB-15 (C5)
Subarea 5
RVSB-10 (G)
Subarea 4
RVSB-14
RVSB-25 (G)
RVSB-11 (C4)
RVSB-12 (C4,G)
RVSB-26 (G)
RVSB-13
Wissahickon Creek

Sample ID	RVSB12-SS	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	140 J	15
Benzo(b)fluoranthene	180 J	150

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 48
Organics Exceeding Soil Screening Levels in Reservoir Subarea 4

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

Sample ID	RVSB091011-WA	
Analyte	**Result and Flag**	**RSL (mg/kg)**
Waste Layer		
ALUMINUM	11500	7700
ARSENIC	3	0.39
COBALT	8.9	2.3
IRON	11400	5500
LEAD	60.9	40
MANGANESE	243	180
VANADIUM	17.2	0.55
Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	RVSB091011-WA	
Asbestos, chrysotile	12	1

Sample ID	RVSB09101112-CW	
Analyte	**Result and Flag**	**RSL (mg/kg)**
Cover Waste Interface		
ARSENIC	3.9	0.39
COBALT	7.1	2.3
IRON	10000	5500
LEAD	44.2	40
MANGANESE	321	180
VANADIUM	19.8	0.55

Sample ID	RVSB1112-NS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
Native Soil		
ARSENIC	1.8	0.39
COBALT	6.8	2.3
IRON	7230	5500
VANADIUM	18	0.55

Sample ID	RVSB12-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ARSENIC	3.3	0.39
COBALT	6.2 J	2.3
IRON	9030	5500
LEAD	66.3	40
MANGANESE	346	180
VANADIUM	15.5	0.55

Sample ID	RVSB26-SS	
Analyte	**Result and Flag**	**RSL (%)**
Asbestos, chrysotile	1.1	1

RVSB-03 (C2), RVSB-02 (C2), RVSB-01 (C1), RVSB-20 (C1), RVSB-19 (C1, G), RVSB-18 (C5), RVSB-27 (G), RVSB-17 (C5, G), RVSB-21 (C6), RVSB-06 (C3), RVSB-22 (C6), RVSB-07 (C3), RVSB-23 (C6), RVSB-24 (C6, G), RVSB-08 (C3, G), RVSB-09 (C4), RVSB-10 (G), RVSB-25 (G), RVSB-11 (C4), RVSB-12 (C4, G), RVSB-26 (G), RVSB-13, RVSB-14

Subarea 1, Subarea 2, Subarea 3, Subarea 4, Subarea 5, Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligram per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 49
Inorganics and Asbestos Exceeding Soil Screening Levels in Reservoir Subarea 4

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

RVSB-03 (C2) RVSB-02 (C2) RVSB-01 (C1) RVSB-04 (C2,G) RVSB-20 (C1) RVSB-05 (C3) RVSB-21 (C6) RVSB-06 (C3) RVSB-22 (C6) RVSB-19 (C1,G) RVSB-18 (C5) RVSB-27 (G) RVSB-07 (C3) RVSB-23 (C6) RVSB-17 (C5,G) RVSB-24 (C6,G) RVSB-08 (C3,G) RVSB-16 (C5) RVSB-09 (C4) RVSB-15 (C5) RVSB-10 (G) RVSB-14 RVSB-25 (G) RVSB-11 (C4) RVSB-12 (C4,G) RVSB-26 (G) RVSB-13

Subarea 1 Subarea 2 Subarea 3 Subarea 4 Subarea 5 Subarea 6

Wissahickon Creek

Sample ID	RVSB17-SS	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)anthracene	740	150
Benzo(a)pyrene	850	15
Benzo(b)fluoranthene	1200	150
Indeno(1,2,3-cd)pyrene	460 J	150

Analyte	Result and Flag	RSL (ug/kg)
Cover Waste Interface		
Sample ID	RVSB15161718-CW	
Benzo(a)anthracene	490	150
Benzo(a)pyrene	340	15
Benzo(b)fluoranthene	640	150
Indeno(1,2,3-cd)pyrene	240 J	150
Waste Layer		
Sample ID	RVSB15161718-WA	
Benzo(a)pyrene	35 J	15

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

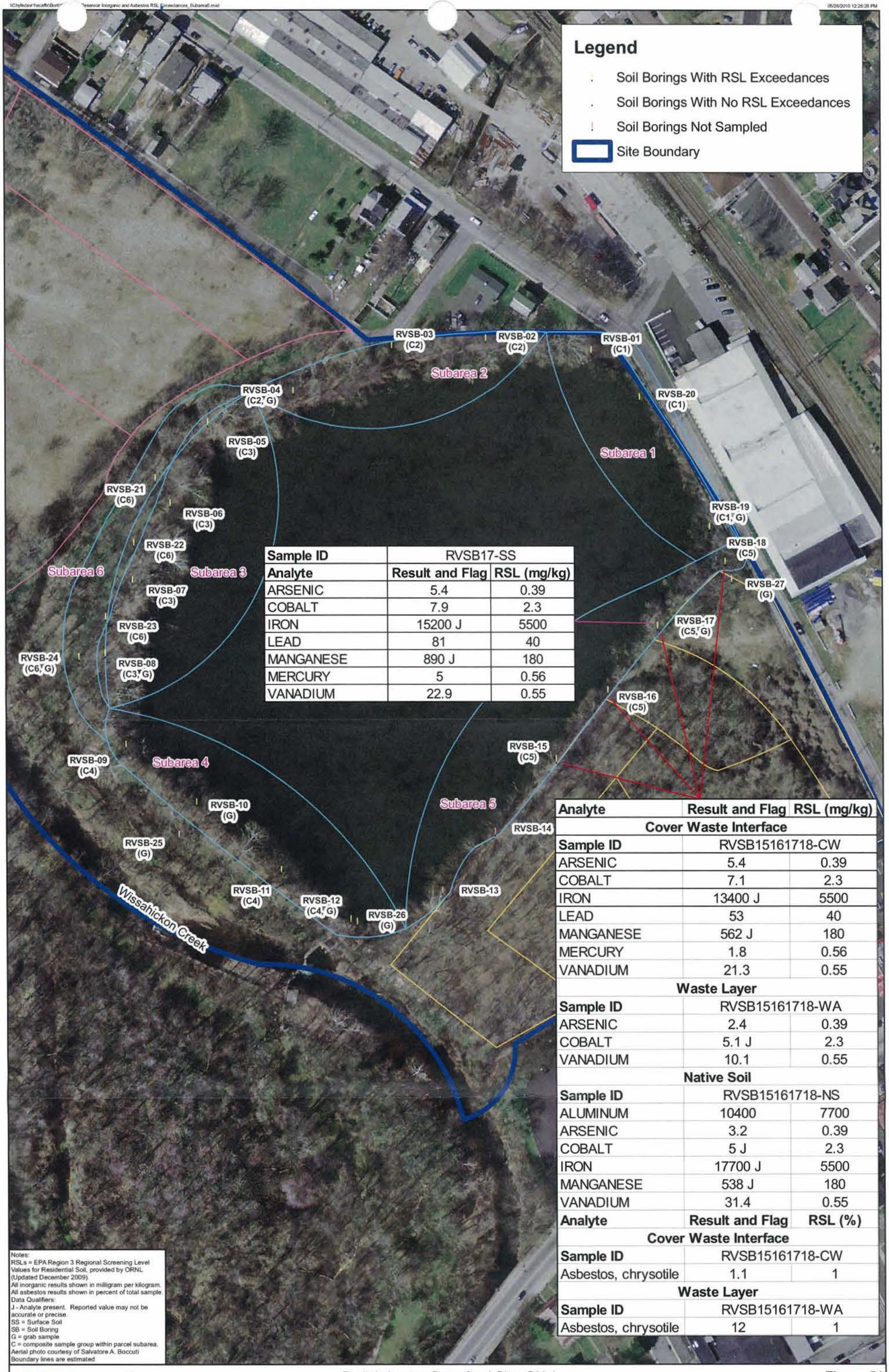
CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 50
Organics Exceeding Soil Screening Levels in Reservoir Subarea 5



Sample ID	RVSB17-SS	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	5.4	0.39
COBALT	7.9	2.3
IRON	15200 J	5500
LEAD	81	40
MANGANESE	890 J	180
MERCURY	5	0.56
VANADIUM	22.9	0.55

Analyte	Result and Flag	RSL (mg/kg)
Cover Waste Interface		
Sample ID	RVSB15161718-CW	
ARSENIC	5.4	0.39
COBALT	7.1	2.3
IRON	13400 J	5500
LEAD	53	40
MANGANESE	562 J	180
MERCURY	1.8	0.56
VANADIUM	21.3	0.55
Waste Layer		
Sample ID	RVSB15161718-WA	
ARSENIC	2.4	0.39
COBALT	5.1 J	2.3
VANADIUM	10.1	0.55
Native Soil		
Sample ID	RVSB15161718-NS	
ALUMINUM	10400	7700
ARSENIC	3.2	0.39
COBALT	5 J	2.3
IRON	17700 J	5500
MANGANESE	538 J	180
VANADIUM	31.4	0.55
Analyte	**Result and Flag**	**RSL (%)**
Cover Waste Interface		
Sample ID	RVSB15161718-CW	
Asbestos, chrysotile	1.1	1
Waste Layer		
Sample ID	RVSB15161718-WA	
Asbestos, chrysotile	12	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligram per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 51
Inorganics and Asbestos Exceeding Soil Screening Levels in Reservoir Subarea 5

Legend

- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Soil Borings Not Sampled
- Site Boundary

Sample ID	RVSB24-SS	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ALUMINUM	8350	7700
ARSENIC	5.6	0.39
COBALT	9.5	2.3
IRON	17100	5500
MANGANESE	588	180
VANADIUM	25.1	0.55

Analyte	**Result and Flag**	**RSL (mg/kg)**
Cover Waste Interface		
Sample ID	RVSB21222324-CW	
ALUMINUM	8930	7700
ARSENIC	4.9	0.39
COBALT	9.5	2.3
IRON	18500	5500
MANGANESE	643	180
VANADIUM	26.5	0.55
Waste Layer		
Sample ID	RVSB21222324-WA	
ALUMINUM	12200	7700
ANTIMONY	3.6 J	3.1
ARSENIC	35.2	0.39
COBALT	10.9	2.3
COPPER	358	310
IRON	28000	5500
LEAD	216	40
MANGANESE	296	180
VANADIUM	20.1	0.55

Analyte	**Result and Flag**	**RSL (%)**
Waste Layer		
Sample ID	RVSB21222324-WA	
Asbestos, chrysotile	15	1

RVSB-01 (C1)
RVSB-02 (C2)
RVSB-03 (C2)
RVSB-04 (C2, G)
RVSB-05 (C3)
RVSB-06 (C3)
RVSB-07 (C3)
RVSB-08 (C3, G)
RVSB-09 (C4)
RVSB-10 (G)
RVSB-16 (C5)
RVSB-17 (C5, G)
RVSB-18 (C5)
RVSB-19 (C1, G)
RVSB-20 (C1)
RVSB-21 (C6)
RVSB-22 (C6)
RVSB-23 (C6)
RVSB-24 (C6, G)
RVSB-25 (G)
RVSB-27 (G)

Subarea 1
Subarea 2
Subarea 3
Subarea 4
Subarea 5
Subarea 6

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results shown in milligram per kilogram.
All asbestos results shown in percent of total sample.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
SS = Surface Soil
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea.
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

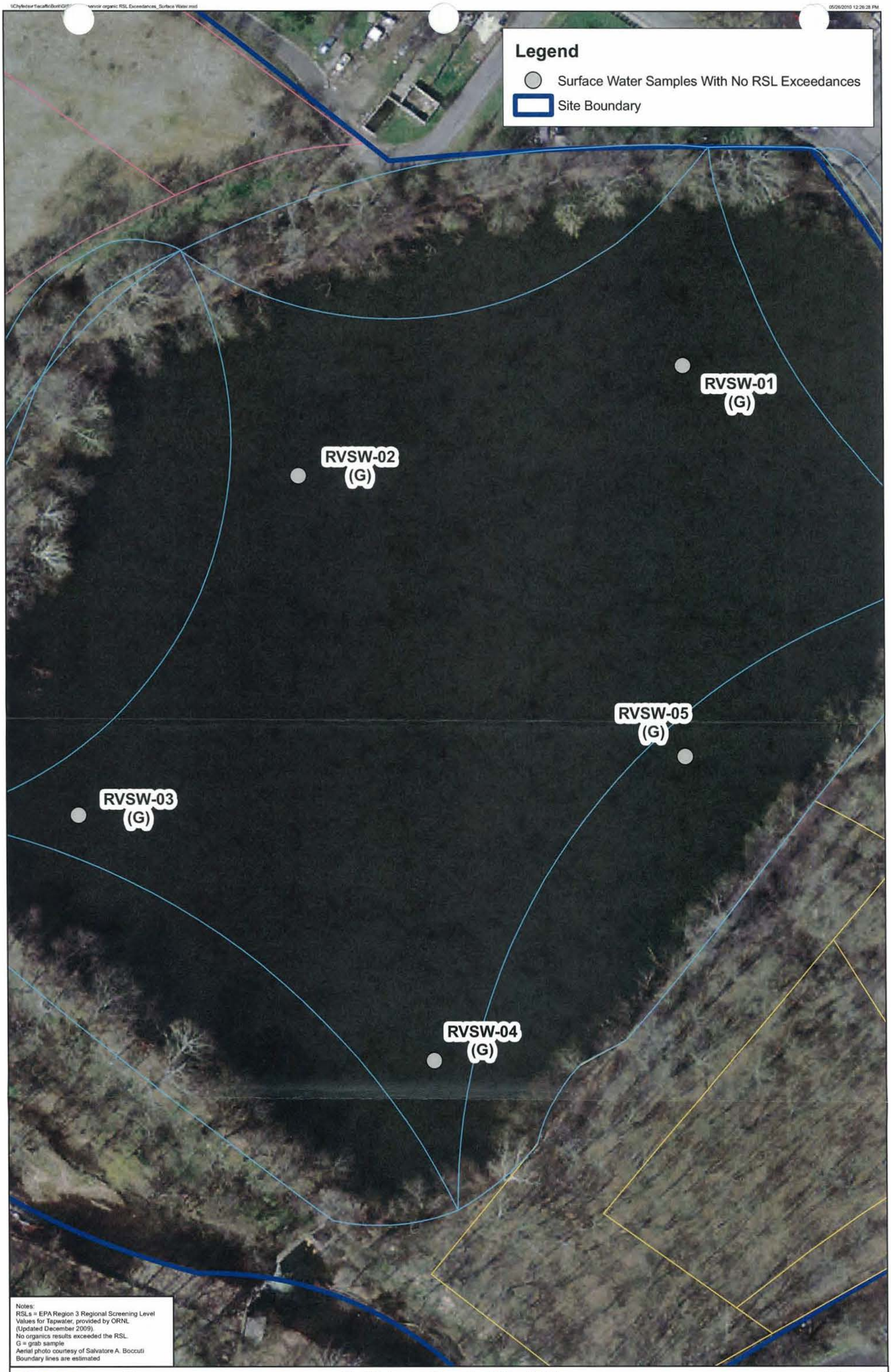
CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 200 Feet

Figure 52
Inorganics and Asbestos Exceeding Soil Screening Levels in Reservoir Subarea 6



CDM

Figure 53
Organics Exceeding Surface Water Screening Levels in Reservoir

\\Chyfedsvr1\ecaffk\Borit\GIS\MXD\Reservoir Inorganic and Asbestos RSL Exceedances_Surface Water.mxd

05/26/2010 12:26:28 PM

Legend

Sample Location

- Surface Water Samples with RSL or MCL Exceedances
- Surface Water Samples with no RSL or MCL Exceedances
- Site Boundary

Sample ID	RVSW02-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ARSENIC	3.7 J	0.45

RVSW-01 (G)

RVSW-02 (G)

Sample ID	RVSW03-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
ARSENIC	5.1 J	0.45
VANADIUM	22.3 J	2.6
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	160.33	7

RVSW-05 (G)

RVSW-03 (G)

Sample ID	RVSW05-RI-01	
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	27.5	7

Sample ID	RVSW04-RI-01	
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	635.4	7

RVSW-04 (G)

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
MCL = Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March, 2010).
All inorganic results shown in micrograms per liter.
All asbestos results shown in millions of fibers per liter.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 Feet

Figure 54
Inorganics and Asbestos Exceeding Surface Water Screening Levels in Reservoir

Legend

Sample Location

- Sediment Samples With RSL Exceedances
- Sediment Samples With No RSL Exceedances
- Site Boundary

RVSD-02 (G)
RVSD-01 (G)
RVSD-04 (G)
RVSD-07 (G)
RVSD-05 (G)
RVSD-03 (G)
RVSD-08 (G)
RVSD-06 (G)
RVSD-10 (G)
RVSD-09 (G)
RVSD-11 (G)
RVSD-13 (G)
RVSD-14 (G)
RVSD-12 (G)
RVSD-15 (G)

Sample ID	RVSD06-RI-01	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	370 J	150

Sample ID	RVSD09-RI-01	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	220 J	150

Sample ID	RVSD12-RI-01	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	210 J	150

Sample ID	RVSD15-RI-01	
Analyte	**Result and Flag**	**RSL (ug/kg)**
Benzo(a)pyrene	240 J	150

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 Feet

Figure 55
Organics Exceeding Sediment Screening Levels in Reservoir

Legend

Sample Location

- Sediment Samples With RSL Exceedances
- Sediment Samples With No RSL Exceedances
- Site Boundary

Sample ID	RVSD02-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	5.2	3.9
VANADIUM	23.5	5.5

Sample ID	RVSD04-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	5.1 J	3.9
VANADIUM	29.5 J	5.5

Sample ID	RVSD01-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	8.8	5.5

Sample ID	RVSD07-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	5.8	3.9
VANADIUM	32	5.5

Sample ID	RVSD05D-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	13.4 J	5.5

Sample ID	RVSD08-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	7.4 J	3.9
VANADIUM	32 J	5.5

Sample ID	RVSD10-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	5.6 J	3.9
VANADIUM	33.4 J	5.5

Sample ID	RVSD06-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	4	3.9
VANADIUM	11.6	5.5

Sample ID	RVSD11-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	6.8 J	3.9
VANADIUM	35 J	5.5

Sample ID	RVSD09-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	5.2 J	3.9
VANADIUM	27.4 J	5.5

Sample ID	RVSD12-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	6.6 J	3.9
VANADIUM	31.9 J	5.5

Sample ID	RVSD14-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	6.3 J	3.9
VANADIUM	31.4 J	5.5

Sample ID	RVSD15-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	7.6 J	3.9
VANADIUM	33.3 J	5.5

Sample ID	RVSD13-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	10.1 J	5.5

RVSD-01 (G)
RVSD-02 (G)
RVSD-03 (G)
RVSD-04 (G)
RVSD-05 (G)
RVSD-06 (G)
RVSD-07 (G)
RVSD-08 (G)
RVSD-09 (G)
RVSD-10 (G)
RVSD-11 (G)
RVSD-12 (G)
RVSD-13 (G)
RVSD-14 (G)
RVSD-15 (G)

Wissahickon Creek

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Soil, provided by ORNL (Updated December 2009).
All inorganics results shown in milligrams per kilogram.
No asbestos results exceeded the RSL.
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 25 50 100 150 Feet

Figure 56
Inorganics and Asbestos Exceeding Sediment Screening Levels in Reservoir

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP07-S	
Benzo(a)anthracene	2600	150
Benzo(a)pyrene	2600	15
Benzo(b)fluoranthene	3800	150
Dibenzo(a,h)anthracene	620	15
Indeno(1,2,3-cd)pyrene	1200	150
Deep Layer		
Sample ID	CKFP07-D	
Benzo(a)anthracene	7700	150
Benzo(a)pyrene	5600	15
Benzo(b)fluoranthene	7500	150
Benzo(k)fluoranthene	2800	1500
Indeno(1,2,3-cd)pyrene	2700	150

Legend

- Floodplains With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Site Boundary

CKFP-07 (C7, G)

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP05-S	
Benzo(a)anthracene	490	150
Benzo(a)pyrene	460	15
Benzo(b)fluoranthene	540	150
Indeno(1,2,3-cd)pyrene	250	150
Deep Layer		
Sample ID	CKFP05-D	
Benzo(a)anthracene	800	150
Benzo(a)pyrene	780	15
Benzo(b)fluoranthene	930	150
Indeno(1,2,3-cd)pyrene	390	150

Analyte	Result and Flag	RSL (ug/kg)
Deep Layer		
Sample ID	CKFP06-D	
Benzo(a)anthracene	5500 J	150
Benzo(a)pyrene	5400 J	15
Benzo(b)fluoranthene	4300 J	150
Benzo(k)fluoranthene	2900 J	1500
Indeno(1,2,3-cd)pyrene	2700 J	150

OWSB-03 (G)

Wissahickon Creek

Rose Valley Creek

CKFP-06 (C6, G)

CKFP-05 (C5, G)

CKFP-04A (C4)

CKFP-04D (C4)

CKFP-04E (C4)

CKFP-04B (C4)

CKFP-04C (C4, G)

CKFP-03A (C3)

OWSB-02 (G)

CKFP-03B (C3)

CKFP-03C (C3)

CKFP-03D (C3)

CKFP-03E (C3, G)

Tannery Run

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP01-S	
Benzo(a)anthracene	2000	150
Benzo(a)pyrene	1700	15
Benzo(b)fluoranthene	2800	150
Dibenzo(a,h)anthracene	400 J	15
Indeno(1,2,3-cd)pyrene	980	150

OWSB-01 (G)

CKSB-01 (G)

CKFP-02 (C2, G)

CKFP-01 (C1, G)

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP08-S	
Benzo(a)anthracene	300 L	150
Benzo(a)pyrene	220	15
Benzo(b)fluoranthene	310	150
Deep Layer		
Sample ID	CKFP08-D	
Benzo(a)anthracene	420	150
Benzo(a)pyrene	390	15
Benzo(b)fluoranthene	470	150
Indeno(1,2,3-cd)pyrene	250	150

CKFP-08 (C8, G)

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
CK = Creek
FP = Floodplain
OW = Other side of the Wissahickon
SB = Soil Boring
G = grab sample
C = composite sample group
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 130 260 520 Feet

Figure 57-1
Organics Exceeding Soil Screening Levels in Floodplain

Legend

- Floodplains With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Site Boundary

CKFP-07 (C7, G)

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP04-S	
Benzo(a)anthracene	1300	150
Benzo(a)pyrene	1100	15
Benzo(b)fluoranthene	1600	150
Indeno(1,2,3-cd)pyrene	570	150
Deep Layer		
Sample ID	CKFP04-D	
Benzo(a)anthracene	2900	150
Benzo(a)pyrene	2100	15
Benzo(b)fluoranthene	2700	150
Indeno(1,2,3-cd)pyrene	1000 J	150

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP03-S	
Benzo(a)anthracene	1700	150
Benzo(a)pyrene	1500	15
Benzo(b)fluoranthene	1900	150
Indeno(1,2,3-cd)pyrene	810	150
Deep Layer		
Sample ID	CKFP03-D	
Benzo(a)anthracene	2000	150
Benzo(a)pyrene	1500	15
Benzo(b)fluoranthene	2100	150
Indeno(1,2,3-cd)pyrene	850 J	150

OWSB-03 (G)

CKFP-06 (C6, G)

CKFP-05 (C5, G)

CKFP-04D (C4)

CKFP-04A (C4)

CKFP-04E (C4)

CKFP-04B (C4)

CKFP-04C (C4, G)

CKFP-03A (C3)

OWSB-02 (G)

CKFP-03B (C3)

CKFP-03C (C3)

CKFP-03D (C3)

CKFP-03E (C3, G)

OWSB-01 (G)

CKFP-02 (C2, G)

CKSB-01 (G)

CKFP-01 (C1, G)

CKFP-08 (C8, G)

Analyte	Result and Flag	RSL (ug/kg)
Shallow Layer		
Sample ID	CKFP02-S	
Benzo(a)anthracene	2100 L	150
Benzo(a)pyrene	2300	15
Benzo(b)fluoranthene	3500	150
Dibenzo(a,h)anthracene	400	15
Indeno(1,2,3-cd)pyrene	1100	150
Deep Layer		
Sample ID	CKFP02-D	
Benzo(a)anthracene	950	150
Benzo(a)pyrene	850	15
Benzo(b)fluoranthene	1100	150
Dibenzo(a,h)anthracene	250 J	15
Indeno(1,2,3-cd)pyrene	460 J	150

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
CK = Creek
FP = Floodplain
OW = Other side of the Wissahickon
SB = Soil Boring
G = grab sample
C = composite sample group
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 130 260 520 Feet

Figure 57-2
Organics Exceeding Soil Screening Levels in Floodplain

\\Chyfedsvr1\ecaffs\Bor\t\GIS\MXD\...ek and Floodplain Inorganic and Asbestos RSL Exceedances_Soil_1.mxd

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Legend

- Floodplains With RSL Exceedances
- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Site Boundary

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP04-S	
ARSENIC	2.2	0.39
COBALT	5.5 J	2.3
IRON	14200	5500
MANGANESE	385	180
VANADIUM	21.6	0.55
Deep Layer		
Sample ID	CKFP04-D	
ARSENIC	2.3	0.39
COBALT	6.8	2.3
IRON	15000	5500
LEAD	55.2	40
MANGANESE	267	180
VANADIUM	23.6	0.55

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP03-S	
ARSENIC	2.8	0.39
COBALT	6.3 J	2.3
IRON	13500	5500
LEAD	58.6	40
MANGANESE	537	180
VANADIUM	20.8	0.55
Deep Layer		
Sample ID	CKFP03-D	
ALUMINUM	7760	7700
ARSENIC	3	0.39
COBALT	7.8	2.3
IRON	16300	5500
LEAD	82.6	40
MANGANESE	516	180
VANADIUM	23.6	0.55

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP01-S	
ARSENIC	2.1	0.39
COBALT	5.2 J	2.3
IRON	11900	5500
LEAD	69.1	40
MANGANESE	353	180
VANADIUM	13.2	0.55
Deep Layer		
Sample ID	CKFP01-D	
ARSENIC	2.4	0.39
COBALT	5.3 J	2.3
IRON	12300	5500
LEAD	62.1	40
MANGANESE	533	180
VANADIUM	14	0.55
Analyte	**Result and Flag**	**RSL (%)**
Deep Layer		
Sample ID	CKFP01-D	
Asbestos,chrysotile	1.2	1

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP02-S	
ARSENIC	3.6	0.39
COBALT	7.9 J	2.3
IRON	13500	5500
LEAD	178	40
MANGANESE	543	180
VANADIUM	23.1	0.55
Deep Layer		
Sample ID	CKFP02-D	
ALUMINUM	11100	7700
ARSENIC	4.2	0.39
COBALT	8.3 J	2.3
IRON	13200	5500
LEAD	240	40
MANGANESE	435	180
VANADIUM	22	0.55
Analyte	**Result and Flag**	**RSL (%)**
Deep Layer		
Sample ID	CKFP02-D	
Asbestos,chrysotile	12	1

CKFP-07 (C7, G)
Wissahickon Creek
OWSB-03 (G)
Rose Valley Creek
CKFP-06 (C6, G)
CKFP-05 (C5, G)
CKFP-04D (C4)
CKFP-04A (C4)
CKFP-04E (C4)
CKFP-04B (C4)
CKFP-04C (C4, G)
OWSB-02 (G)
CKFP-03A (C3)
CKFP-03B (C3)
CKFP-03C (C3)
CKFP-03D (C3)
CKFP-03E (C3, G)
Tannery Run
OWSB-01 (G)
CKSB-01 (G)
CKFP-02 (C2, G)
CKFP-01 (C1, G)
CKFP-08 (C8, G)

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
CK = Creek
FP = Floodplain
OW = Other side of the Wissahickon
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 125 250 500 Feet

Figure 58-1
Inorganics and Asbestos Exceeding Soil Screening Levels in Floodplain

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP07-S	
ARSENIC	2.9	0.39
COBALT	7.8	2.3
IRON	13300	5500
LEAD	55.6	40
MANGANESE	508	180
VANADIUM	20.4	0.55
Deep Layer		
Sample ID	CKFP07-D	
ARSENIC	3.1	0.39
COBALT	7.6	2.3
IRON	13700	5500
LEAD	120	40
MANGANESE	638	180
VANADIUM	25.1	0.55

Legend

- Floodplains With RSL Exceedances
- Soil Borings With RSL Exceedances
- Soil Borings With No RSL Exceedances
- Site Boundary

CKFP-07 (C7, G)

Analyte	Result and Flag	RSL (mg/kg)
Deep Layer		
Sample ID	CKFP06-D	
ARSENIC	4.8	0.39
COBALT	5 J	2.3
IRON	14300	5500
LEAD	141 K	40
MANGANESE	566	180
VANADIUM	15.4	0.55
Analyte	**Result and Flag**	**RSL (%)**
Deep Layer		
Sample ID	CKFP06-D	
Asbestos,chrysotile	1.3	1

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP05-S	
ALUMINUM	7770	7700
ARSENIC	4.1	0.39
COBALT	8.8	2.3
IRON	16900	5500
LEAD	53.8 K	40
MANGANESE	574	180
VANADIUM	24.9	0.55
Deep Layer		
Sample ID	CKFP05-D	
ALUMINUM	8530	7700
ARSENIC	5.7	0.39
COBALT	10.8	2.3
IRON	20600	5500
LEAD	50.4 K	40
MANGANESE	700	180
VANADIUM	30.9	0.55

OWSB-03 (G)

Wissahickon Creek

Rose Valley Creek

CKFP-06 (C6, G)

CKFP-05 (C5, G)

CKFP-04A (C4)

CKFP-04D (C4)

CKFP-04E (C4)

CKFP-04B (C4)

CKFP-04C (C4, G)

CKFP-03A (C3)

OWSB-02 (G)

CKFP-03B (C3)

CKFP-03C (C3)

CKFP-03D (C3)

CKFP-03E (C3, G)

Tannery Run

Analyte	Result and Flag	RSL (mg/kg)
Shallow Layer		
Sample ID	CKFP08-S	
ARSENIC	3.8	0.39
COBALT	8.1	2.3
IRON	16200	5500
LEAD	101 K	40
MANGANESE	561	180
VANADIUM	22.4	0.55
Deep Layer		
Sample ID	CKFP08-D	
ARSENIC	4.1	0.39
COBALT	8.1	2.3
IRON	14700	5500
LEAD	74.5 K	40
MANGANESE	524	180
VANADIUM	21.3	0.55

OWSB-01 (G)

CKSB-01 (G)

CKFP-02 (C2, G)

CKFP-01 (C1, G)

CKFP-08 (C8, G)

Sample ID	CKSB01-WA	
Analyte	**Result and Flag**	**RSL (mg/kg)**
ARSENIC	3	0.39
LEAD	85.4	40
MANGANESE	222	180
VANADIUM	6 J	0.55

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganic results in milligrams per kilogram (mg/kg).
All asbestos results shown in percent of total sample (%).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
CK = Creek
FP = Floodplain
OW = Other side of the Wissahickon
SB = Soil Boring
G = grab sample
C = composite sample group within parcel subarea
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

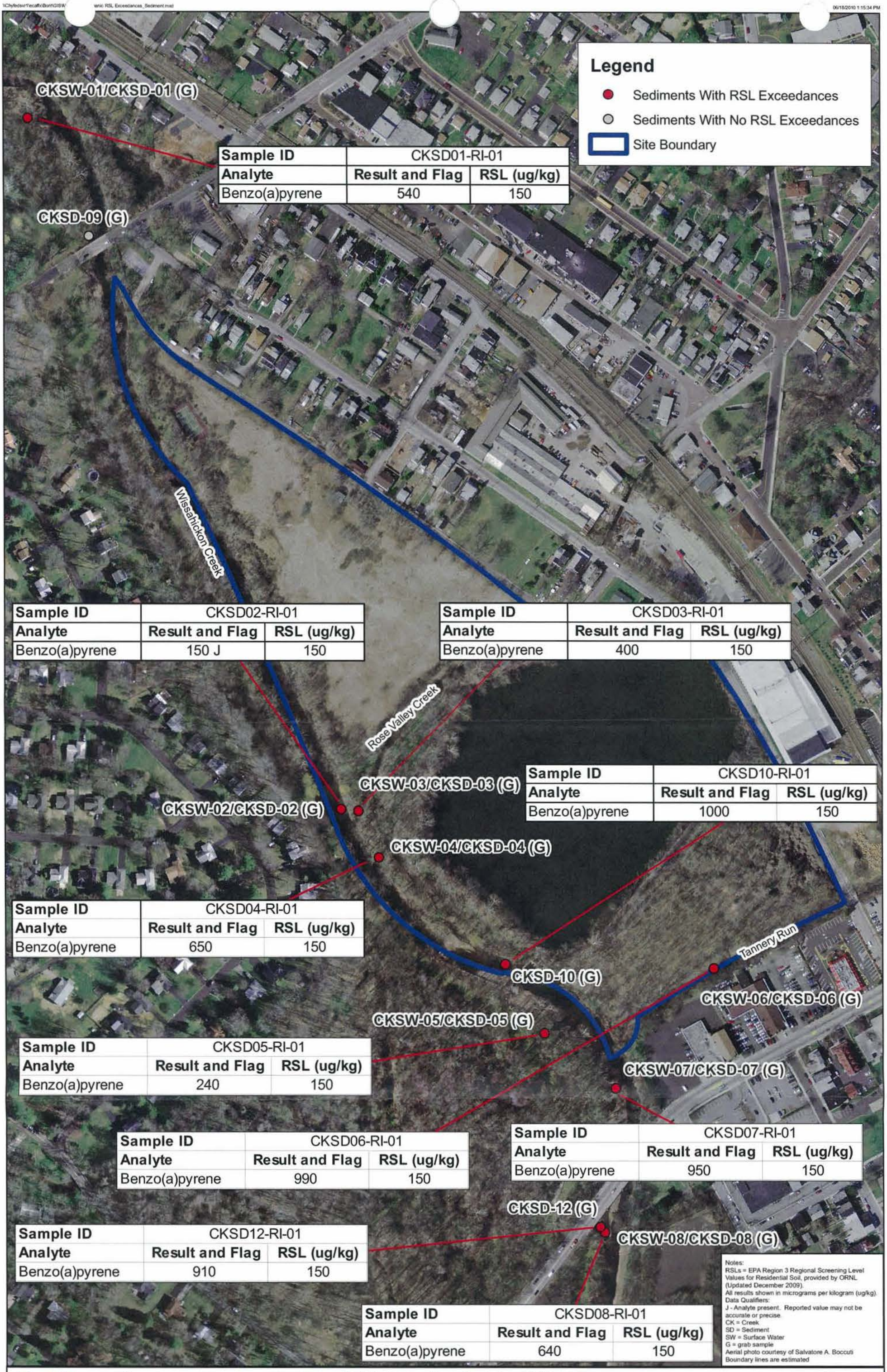
CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 125 250 500 Feet

Figure 58-2
Inorganics and Asbestos Exceeding Soil Screening Levels in Floodplain



Sample ID	CKSD01-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	540	150

Sample ID	CKSD02-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	150 J	150

Sample ID	CKSD03-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	400	150

Sample ID	CKSD10-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	1000	150

Sample ID	CKSD04-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	650	150

Sample ID	CKSD05-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	240	150

Sample ID	CKSD06-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	990	150

Sample ID	CKSD07-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	950	150

Sample ID	CKSD12-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	910	150

Sample ID	CKSD08-RI-01	
Analyte	Result and Flag	RSL (ug/kg)
Benzo(a)pyrene	640	150

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All results shown in micrograms per kilogram (ug/kg).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
CK = Creek
SD = Sediment
SW = Surface Water
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

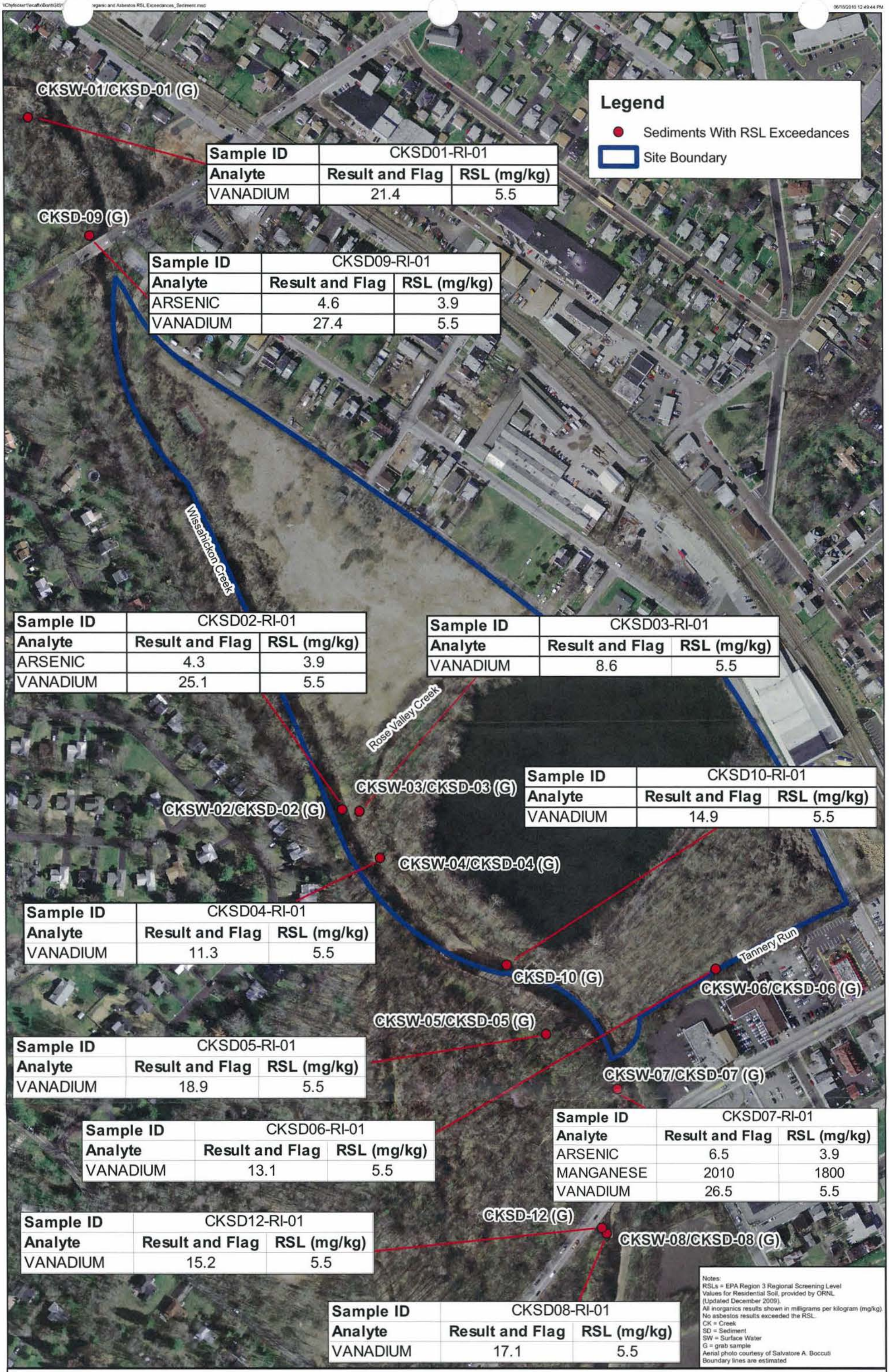
CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 165 330 660 Feet

Figure 59
Organics Exceeding Sediment Screening Levels in Creek



Sample ID	CKSD01-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	21.4	5.5

Sample ID	CKSD09-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	4.6	3.9
VANADIUM	27.4	5.5

Sample ID	CKSD02-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	4.3	3.9
VANADIUM	25.1	5.5

Sample ID	CKSD03-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	8.6	5.5

Sample ID	CKSD10-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	14.9	5.5

Sample ID	CKSD04-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	11.3	5.5

Sample ID	CKSD05-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	18.9	5.5

Sample ID	CKSD06-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	13.1	5.5

Sample ID	CKSD07-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
ARSENIC	6.5	3.9
MANGANESE	2010	1800
VANADIUM	26.5	5.5

Sample ID	CKSD12-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	15.2	5.5

Sample ID	CKSD08-RI-01	
Analyte	Result and Flag	RSL (mg/kg)
VANADIUM	17.1	5.5

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Residential Soil, provided by ORNL (Updated December 2009).
All inorganics results shown in milligrams per kilogram (mg/kg).
No asbestos results exceeded the RSL.
CK = Creek
SD = Sediment
SW = Surface Water
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 170 340 680 Feet

Figure 60
Inorganics and Asbestos Exceeding Sediment Screening Levels in Creek

Legend

- Surface Water Samples With RSL Exceedances
- Surface Water Samples With No RSL Exceedances
- Site Boundary

CKSW-01/CKSD-01 (G)

Wissahickon Creek

Rose Valley Creek

CKSW-02/CKSD-02 (G)

CKSW-03/CKSD-03 (G)

CKSW-04/CKSD-04 (G)

Sample ID	CKSW04-RI-01	
Analyte	**Result and Flag**	**RSL (ug/L)**
Dibenzo(a,h)anthracene	1.1 J	0.029
Indeno(1,2,3-cd)pyrene	1.2 J	0.29

Tannery Run

CKSW-05/CKSD-05 (G)

CKSW-06/CKSD-06 (G)

CKSW-07/CKSD-07 (G)

CKSW-08/CKSD-08 (G)

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
All results in micrograms per liter (ug/L).
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
CK = Creek
SD = Sediment
SW = Surface Water
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 150 300 600 Feet

Figure 61
Organics Exceeding Surface Water Screening Levels in Creek

Legend

- Surface Water Samples With RSL Exceedances
- Surface Water Samples With No RSL Exceedances
- Site Boundary

CKSW-01/CKSD-01 (G)

Wissahickon Creek

Rose Valley Creek

CKSW-02/CKSD-02 (G)

CKSW-03/CKSD-03 (G)

CKSW-04/CKSD-04 (G)

Tannery Run

CKSW-05/CKSD-05 (G)

CKSW-06/CKSD-06 (G)

CKSW-07/CKSD-07 (G)

CKSW-08/CKSD-08 (G)

Sample ID	CKSW05-RI-01	
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	29.99	1

Sample ID	CKSW07-RI-01	
Analyte	**Result and Flag**	**MCL (MFL)**
Asbestos, chrysotile	23.99	1

Notes:
RSLs = EPA Region 3 Regional Screening Level Values for Tapwater, provided by ORNL (Updated December 2009).
MCL = Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
All asbestos results shown millions of fibers per liter (MFL).
No inorganic results exceeded the RSL.
CK = Creek
SD = Sediment
SW = Surface Water
G = grab sample
Aerial photo courtesy of Salvatore A. Boccuti
Boundary lines are estimated

CDM

N W E S

Borit Asbestos Superfund Site, OU-1
Ambler, Pennsylvania

0 150 300 600 Feet

Figure 62
Inorganics and Asbestos Exceeding Surface Water Screening Levels in Creek

Tables

BORIT SITE INVESTIGATION PLANNING GUIDE

Table 1 Identification of Borit Site RI Data Requirements

Question Number	Investigative Question	Existing Information	Data Gaps	Proposed Action/Investigation Phase
Park Area				
1	What is the extent of ACM Waste in the cover and waste layers of the Park Area?	• Only surface soil samples have been collected • START collected ~25 samples on a grid from 0-3". Some form of asbestos was detected in 9 widely-distributed samples	• Aerial and vertical extent of ACM in the cover and waste layers • Depth of waste is unknown... assume 15-ft depth on average for investigation planning purposes	• **PHASE 1** • Locate utilities (pipes, former USTs near former residences, etc.) and possible metal debris beneath the Park prior to performing intrusive activities. • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) for the first two days of direct push sampling (24 hour turnaround time), if no fibers are observed passive air sampling will cease for this activity (approximately 8 samples at the Park). • Collect direct push soil samples on 100-ft grid for visual screening of ACM material (51 locations through cover and waste layers); log depth to native material. • Hold additional 5 locations (10%) in reserve for more refined delineation, if necessary. • Collect 5 randomly determined grab samples at 0-3" in cover for ingestion, dermal, and inhalation and 5 to 8 randomly determined samples (composite from 3 to 5 locations) from the cover/waste interface and from the waste layer. Collect 3 biased samples (composite from 3 to 5 locations) within the waste layer based on PID readings or visual contamination (see investigative question #2). Ten (10) analytical samples will be held in reserve for any sample interval. • Analyze approximately 26 samples will be analyzed by the PLM method in the cover and waste layers. • Collect GPS points at all direct push locations.

2	Are there chemical contaminants of concern other than asbestos within the cover and ACM waste layers on the Park Area?	• No data available	• Chemical analytical data for cover layer and waste samples	• **PHASE 1** • Use same direct push soil samples collected on 100-ft grid for visual screening of ACM material (51 locations) (from investigative question #1). • Collect 3 randomly determined grab samples at 0-3" in the cover for ingestion, dermal, and inhalation and 5 to 8 randomly determined grab samples from the cover/waste interface and from the waste layer. Collect 3 grab samples within the waste layer (biased based on PID readings or visual contamination). Hold 10 analytical samples in reserve (same as investigative question #1). • Collect PID headspace data every 2 ft through waste (and soil, see investigative question #3) in direct push sample. • Analyze approximately 24 samples for TCL VOCs, SVOCs, Pest/PCBs and TAL metals in the cover and waste layers.
3	Has native soil (if present) been impacted by the waste above it in the Park Area?	• No data available	• Asbestos and chemical analytical data for native soil samples	• **PHASE 1** • Direct push into the soil at the 51 locations; penetrate 4 feet into native soil or until the water table is encountered, whichever is more shallow. Visually log native material. • Collect selected soil samples biased toward the groundwater preferential pathway. Within native soil, collect samples at: 0-3" or in water table if water table is encountered shallower than 4 feet (48") within the native material. If the water table is encountered at all 5 locations, collect 2 to 3 samples at the water table and collect the remaining samples 0-3" in native soil. Collect 5 PLM samples as a composite from 3 to 5 locations and collect 5 grab samples for TCL VOCs, SVOCs, Pest/PCBs and TAL metals in native soil.

4	Has groundwater been impacted beneath the Park Area?	• No groundwater data have been collected	• Asbestos and chemical groundwater analytical data • Groundwater flow direction/gradient • Groundwater depth	• **PHASE 1** • Determine if soil or waste material is contaminated with compounds that can leach to the groundwater. • Collect groundwater or perched water grab samples during Phase 1 if water is observed during direct push activities. Reserve 5 Phase 1 groundwater samples for this activity. Bias groundwater samples towards the downgradient site groundwater pathway. • Install 3 temporary piezometers, collect water levels and survey to determine groundwater flow direction. • **PHASE 2** • Install monitoring wells in Phase 2, if warranted, based upon Phase 1 soil and perched water results.
5	Are additional data necessary to perform the HHRA for the Park Area?	• Some activity-based sampling (ABS) has been conducted such as maintenance scenarios: raking and grass cutting, walking, and soil sampling • Maintenance ABS scenario (raking). This ABS scenario showed an asbestos level of 0.076 fibers/mm^2 • Modeled risk from asbestos was sufficient to score the Site for the proposed NPL	• Additional activity-based samples to evaluate the air exposure pathway from asbestos • Additional chemical analytical data if non-ACM contamination is found in cover, waste, subsurface soil or groundwater	• **PHASE 1** • Refine CSM. • Collect 2 personal air samples per day (8 hour TWA and a 30 min. exposure limit) during all days of Phase 1 intrusive investigation activities for personal air monitoring for asbestos. Analyze approximately 12 samples at the Park for PCM and if this exceeds the PEL, then run for TEM. • **PHASE 2** • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) each day during ABS (approximately 8 samples at the Park). • Conduct ABS for construction activity and raking activity. • Analyze 2 activity-based air samples (high and low volume) by TEM. • Collect 2 grab surface soil samples (0-3") in cover for asbestos (Phase 1), if needed and percent moisture (Phase 2) at ABS locations prior to performing ABS activities. • Collect GPS points at all ABS locations. • **AFTER PHASE 2** • Prepare a Baseline Human Health Risk Assessment Report.

6	Are additional data necessary to perform the screening level ecological risk assessment for the Park Area?	• None	• Determine whether there are burrowing animals at the site • Determine ecological risks and exposure pathways	• **PHASE 1** • Order a threatened and endangered species map. • Perform an ecological site walk over (habitat survey) to observe what species inhabit or visit the Site. • **AFTER PHASE 2** • Perform a SLERA using HHRA data.
Asbestos Pile				
7	What is the extent of ACM Waste in the cover and waste layers of the Asbestos Pile?	• START collected 2 surface soil samples (0-3") in cover for asbestos only and 2 bulk waste samples for asbestos only • In general, test pits were limited to the northern (Reservoir) and eastern (Maple Street) edges of the Asbestos Pile • Test pits were limited by the approximately 14-ft reach of the backhoe (Gilmore Report) • An electromagnetic survey was	• Aerial and vertical extent • Depth of waste is unknown... assume 35-ft depth on average for investigation planning purposes • Data from the center, east, south, and west sides of the pile • EPA Remedial wants to minimize disturbance and minimize additional clearing or grubbing • If access is	• **PHASE 1** • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) for the first two days of direct push sampling (24 hour turnaround time). Cease passive air sampling if no fibers are observed for this activity (approximately 8 samples at the Asbestos Pile). • Sample cover and waste with direct push on a 100-ft grid on the Asbestos Pile (approximately 28 direct push locations if equipment access is available); log depth to native material. • Reserve additional 3 locations (10%) for more refined delineation, if necessary. • Collect 5 randomly determined grab samples at 0-3" in cover for ingestion, dermal, and inhalation and 5 to 8 randomly determined samples (composite from 3 to 5 locations) from the cover/waste interface and from the waste layer. Collect 3 biased samples (composite from 3 to 5 locations) within the waste layer (based on PID readings or visual contamination) (see investigative question #8). Hold 10 analytical samples in reserve for any sample interval. • Analyze approximately 26 samples for asbestos by the PLM method in the cover and waste layers. • Collect GPS points at all direct push locations.

		conducted (Gilmore Report); CDM will reevaluate the use of this report after Phase 1 has been completed to determine if the existing report is sufficient or if a new survey needs to be conducted • Site is heavily vegetated; which will make field activities difficult if not impossible in some areas	limited, need to take advantage of locations where EPA Removal has already performed clearing and grubbing	• **Will Evaluate Need After Phase 1** • Perform an electrical resistivity survey to determine the lateral extent and thickness of the Asbestos Pile.
8	What bulk waste material exists in the Asbestos Pile?	• There is a pipe crossing over Tannery Run which appears to run through the Asbestos Pile. • It is known that the Asbestos Pile was used as a transfer station and as a municipal trash disposal facility; therefore, there may be large	• Extent of metal objects existing within the Asbestos Pile • If there are large metal objects, will drilling be prohibited or does it pose a health and safety concern • Locate utilities crossing the	• **PHASE 1** • Perform an electromagnetic and magnetic survey prior to performing investigative question # 7 to locate buried metal.

		metal objects such as appliances or drums within the pile.	Asbestos Pile prior to drilling	
9	Are there contaminants of concern other than asbestos within the cover or ACM waste on the Asbestos Pile?	• EPA START collected 2 surface soil samples (0-3") in cover for organic and inorganic data in the former fire training area on the northern edge • Limited analysis on samples from the test pits for other contaminants. Have previously identified 2-butanone (150+ ug/kg), 1,2-DCA (180 ug/kg) and other VOCs (likely lab contaminants) • Four test pits in the area of the former trash transfer station encountered glass, plastic, tile,	• Chemical analytical data confirming the nature of the other contaminants • Extent of other contaminants already detected	• **PHASE 1** • Collect direct push soil samples on 100-ft grid used for visual screening of ACM material on the Asbestos Pile (approximately 28 locations); log depth to native material (see investigative question #7). • Collect 3 randomly determined grab samples at 0-3" in the cover for ingestion, dermal, and inhalation and 5 to 8 randomly determined grab samples from the cover/waste interface and from the waste layer. Collect 3 biased grab samples within the waste layer based on PID readings or visual contamination. Reserve 10 analytical samples for any sample interval (same as investigative question #7). • Collect PID headspace data every 2 ft through waste (and soil, see investigative question #10) in direct push sample. • Analyze approximately 24 samples for TCL VOCs, SVOCs, Pest/PCBs and TAL metals in the cover and waste layers.

		sludge, slag, metal, and "white material" • One test pit encountered material with "heavy odor) fuel oil/hydraulic fluid" • White sludge ("magnesia") reported		
10	Has native soil (if present) been impacted by the waste above it in the Asbestos Pile?	• Backhoe had a maximum reach of approximately 14 ft. Some indication of bedrock bottom to the pile • In transfer station area native soil was found at 4 ft and 10 ft at two test pits	• Native soil samples with chemical analytical data	• **PHASE 1** • Direct push into the soil at the 28 locations; penetrate 4 feet into native soil or until the water table is encountered, whichever is more shallow. Visually log native material. • Collect selected native soil samples biased toward the groundwater preferential pathway to determine vertical extent. Within native soil, collect samples at: 0-3" or in water table if encountered shallower than 4 feet (48") within the native material. If the water table is encountered at all 5 locations. Collect 2 to 3 samples at the water table and the remaining samples 0-3" in native soil. Collect 5 PLM samples as a composite from 3 to 5 locations and collect 5 grab samples for TCL VOCs, SVOCs, Pest/PCBs and TAL metals in native soil.

	Has groundwater been impacted beneath the Asbestos Pile?	• Groundwater seep at base of test pits was noted. May be perched water	• Groundwater asbestos and chemical analytical data • Groundwater flow direction/gradient • Groundwater depth	• **PHASE 1** • Determine if soil or waste material is contaminated with compounds that can leach to the groundwater. • Collect groundwater or perched water grab samples if observed during direct push activities. Reserve 5 groundwater samples for this activity. Bias groundwater samples towards the downgradient site groundwater pathway. • Analyze approximately 5 groundwater samples for asbestos by TEM, TCL VOCs, SVOCs, Pest/PCBs and TAL metals, if observed. • Install 3 temporary piezometers, collect water levels and survey to determine groundwater flow direction. • **PHASE 2** • Install monitoring wells in Phase 2 if warranted, depending on soil and perched water results.
12	Are additional data necessary to perform the HHRA for the Asbestos Pile?	• Some activity-based sampling (ABS) has been conducted such as a raking maintenance scenario	• Additional activity-based samples to evaluate the air exposure pathway • Additional analytical data if non-ACM contamination is found in cover, waste, subsurface soil and groundwater	• **PHASE 1** • Refine CSM. • Collect 2 personal air samples per day (8 hour TWA and a 30 min. exposure limit) during all days of Phase 1 intrusive investigation activities for personal air monitoring (approximately 14 samples at the Asbestos Pile will be analyzed for PCM and if this exceeds the PEL, then run for TEM). • **PHASE 2** • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) each day during activity-based sampling (ABS) (approximately 8 samples at the Asbestos Pile). • Perform ABS for construction activity and raking activity. • Analyze 2 activity-based air samples (high and low volume) by TEM for each ABS activity (approximately 4 samples). • Collect 2 grab surface soil samples (0-3") in cover for asbestos (Phase 1), if needed and percent moisture (Phase 2) at ABS locations prior to performing ABS activities. • Collect GPS points at all ABS locations. • **AFTER PHASE 2**

				• Prepare a Baseline Human Health Risk Assessment Report.
13	Are additional data necessary to perform the ecological risk assessment For the Asbestos Pile?	• None	• Determine if there are burrowing animals in the Asbestos Pile • Determine ecological risks and exposure pathways	• **PHASE 1** • Order a threatened and endangered species map. • Perform an ecological site walk over (habitat survey) to observe what species inhabit or visit the Site. • **AFTER PHASE 2** • Perform a SLERA using HHRA data.

servoir				
14	What is the nature and extent of the waste on the banks and within the Reservoir?	• ACM and other waste material have been observed on the banks of the Reservoir	• Analytical data from waste material that the berm is constructed of • Depth of waste is unknown... assume 20-ft average depth for investigation planning purposes	• **PHASE 1** • Locate utilities (stormwater piping, filling and drainage piping and controls, etc.) within the Reservoir berm prior to performing intrusive activities. • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) for the first two days of direct push or handauger sampling (24 hour turnaround time), if no fibers are observed cease passive air sampling for this activity (approximately 8 samples at the Reservoir). • Direct push or handauger 20 equally-spaced locations along the berm (about every 130 ft); log depth to native material. Try to place 1 direct push location near where the observation platform is proposed. (Need to get design from Wissahickon Waterfowl Preserve.) • For investigation planning purposes, assume 10 locations can be performed with direct push to approximately 20-ft (along the boundary with the Asbestos Pile) and 10 locations will be handaugered to approximately 4-ft (around the remainder of the Reservoir perimeter). • Collect 5 randomly determined grab samples at 0-3" within the cover and 5 randomly determined grab samples at depth within the waste. • Collect 1 grab sample 0-3" deep within the cover where the transformer is lying on the ground and analyze for PCBs. • Analyze approximately 10 soil samples for asbestos by PLM, TCL VOCs, SVOCs, Pest/PCBs and TAL metals along the berm and 1 sample near the transformer for PCBs only. • Collect PID headspace data every 2 ft through waste (and into native soil, if observed) in direct push and handauger samples. • Collect GPS points at all direct push and handauger locations.

15	Are there risks to ecological receptors at the Reservoir?	• Reservoir area used as a waterfowl preserve • EPA OSC noted that the Reservoir is being stocked with fish for the waterfowl • EPA BTAG stated that asbestos fibers have been shown to be toxic to some fish	• Confirm presence of ecological receptors in Reservoir • Confirm type of waterfowl observed at the Wissahickon Waterfowl Preserve • Confirm type of fish being stocked in the Reservoir	• **PHASE 1** • Refine CSM that addresses exposures to ecological receptors. • Order a threatened and endangered species map. • Perform an ecological site walk over (habitat survey) to observe what species inhabit or visit the Reservoir. • Talk with the Wissahickon Waterfowl Preserve to determine what waterfowl or other species have been observed at the Reservoir and what fish are used to stock the Reservoir. • **AFTER PHASE 2** • Perform a SLERA using HHRA data.
16	What is the depth to sediment and depth of sediment in the Reservoir?	• Some references to Reservoir depth are 3 ft to nearly 12 ft. O'Brien & Gere report noted field measurements on a drawing with no reference or field notes regarding how they were collected • Implies Reservoir is deeper closer to Wissahickon Creek	• Measure bathymetry • Depth of sediment	• **PHASE 1** • Perform simple bathymetric survey. Measure depth of water on a 100-foot grid. However, near the shore, collect measurements every 50 feet for the first 150 feet away from the banks. Collect measurements from a motorless boat with a six inch diameter plate attached to a measurement pole. • Probe sediment with metal probe to determine approximate depth of soft sediment.

17	What does the bottom sediment of the Reservoir consist of?	• None	• Grain size analyses for sediment • Total organic carbon in sediment	• **PHASE 1** • Analyze the sediment for total organic carbon and grain size.
18	Are Reservoir surface water and sediment contaminated?	• Three surface water and three sediment samples were collected by O'Brien & Gere for Priority Pollutants + 40. For surface water only toluene (27 ppb) and cyanide (21.7 ppb) were detected • PAH's were detected at a total concentration of ~128 ppm in SD-1 by O'Brien & Gere • Inorganic results collected in the three samples by O'Brien & Gere found lead at 40 ppm, copper at 29 ppm and zinc at 120 ppm	• Surface water and sediment chemical and asbestos analytical data	• **PHASE 1** • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) for the first two days of sediment/surface water sampling (24 hour turnaround time). If no fibers are observed cease passive air sampling for this activity (approximately 8 samples at the Reservoir). • Collect 15 sediment samples (0-6"), each of which is comprised of 3 to 5 grabs and homogenized to make a composite sample. Space sediment locations approximately equally. • Collect 5 surface water samples from different areas of the Reservoir from five approximately equal sections (collect surface water sample from bottom of the water column). • Collect general water quality (dissolved oxygen, turbidity, temperature, pH, salinity) parameters from the surface water locations by depth (at one third of water column and at two thirds of water column). • Analyze 15 sediment samples for asbestos by PLM, TCL VOCs, SVOC, Pest/PCBs and TAL metals. • Analyze 5 surface water samples for asbestos by TEM, TCL VOCs, SVOC, Pest/PCBs and TAL metals. • Collect GPS points at all sediment and surface water locations.

19	How does the Reservoir fill and drain? What is the current integrity of the berm structure?	• Anecdotal reports indicate that it may drain through a pipe located near the former dam into Wissahickon Creek	• Reservoir construction data • Reservoir current integrity analysis	• **PHASE 1** • Perform file search for background information concerning the construction of the Reservoir. Agencies to contact: Dams and Waterways, PADEP, County, and EPA (Ambler Asbestos Site File). • Take no action on integrity at this time. EPA may contact USACE for support.
20	Is the Reservoir hydraulically connected to the other surface water (streams) or groundwater?	• None	• Piezometric data from Reservoir, groundwater, and streams	• **PHASE 2** • Evaluate data obtained from the Phase 1 investigation and data from the Wissahickon Watershed and determine if additional information is required. • If additional data are still required, install staff gauges in the Reservoir, upstream and downstream in the Wissahickon Creek, and upstream in the Rose Valley Creek and Tannery Run • Install and survey piezometers in groundwater table. Collect water level data quarterly and immediately following major storm events.
21	If the Reservoir is hydraulically connected to the groundwater, has the groundwater quality been impacted?	• None	• Reservoir surface water quality data • Hydraulic connectivity data • Groundwater quality data	• **PHASE 2** • Evaluate Reservoir water and sediment quality data (see investigative question #18). • Install and survey staff gauges in streams and reservoir and piezometers in water table aquifer (see investigative question #20). • If Reservoir surface water is contaminated and recharging the groundwater, install 1 monitoring well upgradient and 3 monitoring wells downgradient of Reservoir.

22	Are additional data necessary to perform the HHRA for the Reservoir?		• Additional activity-based samples to evaluate the air exposure pathway	• **PHASE 1** • Refine CSM. • Collect 2 personal air samples per day (8 hour TWA and a 30 min. exposure limit) during all days of Phase 1 intrusive investigation activities for personal air monitoring (approximately 6 samples at the Reservoir will be analyzed for PCM and if this exceeds the PEL, then run for TEM). • **PHASE 2** • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) each day during ABS (approximately 8 samples at the Reservoir). • Perform ABS for construction and raking. • Analyze 2 activity-based air samples (high and low volume) by TEM for each ABS activity (approximately 4 samples). • Collect 2 grab surface soil samples (0-3") in cover for asbestos (Phase 1), if needed and percent moisture (Phase 2) at ABS locations prior to performing ABS activities. • Collect GPS points at all ABS locations. • Collect soil samples at depths useful for assessing risks for specific scenarios (see investigative question # 14). • **AFTER PHASE 2** • Prepare a Baseline Human Health Risk Assessment Report.
Creeks (Wissahickon, Rose Valley and Tannery Run)				
23	What is the extent of ACM waste material remaining on the banks of the creeks after EPA Removal activities are completed?	• EPA Removal Group has removed or contained ACM on banks along some sections of Wissahickon Creek and along Rose Valley Creek	• Extent of ACM along most of the creeks	• **PHASE 1** • Visually survey all stream banks near the Park, Reservoir, and Asbestos Pile, as well as areas downstream and upstream for ACM wastes. Photo document.

24	Are there ACM or non-ACM contaminants in the creek surface water and sediments?	• EPA START collected 20 sediment samples from the creeks and sampled for asbestos. Three contained asbestos • EPA START collected eight surface water samples from the creeks and analyzed for asbestos. None contained asbestos	• Asbestos and chemical analytical data from sediment in surface water and sediment from all creeks • Surface water analytical data • No non-ACM analytical data are known for surface water or sediment	• **PHASE 1** • Collect composite sediment samples (0-6") from heavy depositional areas including in Wissahickon Creek: one upstream north of Mt. Pleasant Ave and one downstream south of Butler Pike. • Collect surface water (collected from bottom of water column) and sediment samples (collected 0-6") within normal depositional areas (preferably at the same locations): in Wissahickon Creek: one upstream north of Mt. Pleasant Ave and one downstream south of Butler Pike; one each upstream and downstream of the confluence with Rose Valley Creek; one each upstream and downstream of the confluence of Tannery Run. In Rose Valley Creek: one midway between Wisshickon Ambler Alley and Wissahickon Creek. In Tannery Run: one midway between Maple St. and Wisshickon Creek. • Collect one 3 to 5 point composite sediment (collected 0-6") sample behind the former dam and one 3 to 5 (collected 0-6") point composite sediment sample behind the temporary turbidity curtain, both on Wissahickon Creek. • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) for the first two days of sediment/surface water sampling (24 hour turnaround time), if no fibers are observed cease passive air sampling for this activity (approximately 8 samples at the Creeks). • Analyze 12 sediment samples for asbestos by PLM, TCL VOCs, SVOCs, Pest/PCBs, TAL metals, grain size and TOC. • Analyze 8 surface water samples for asbestos by TEM, TCL VOCs, SVOCs, Pest/PCBs, and TAL metals. • Collect GPS points at all sediment and surface water locations.

	What is the risk to ecological receptors from the creeks?	• None	• Full CSI • Confirm presence of receptors in creeks	• **PHASE 1** • Develop CSM that addresses exposures to ecological receptors. • Check with the Wissahickon Valley Watershed and US Fish and Wildlife, PA Fish and Boat Commission, PA Game Commission, and PA Department of Conservation and Natural Resources to access any documents reporting ecological receptors in these waterways. • Order a threatened and endangered species map. • Perform an ecological site walk over (habitat survey) to observe what species inhabit or visit the Site. • **AFTER PHASE 2** • Perform a SLERA using HHRA data.
26	What are the depths to the sediment and the depth of the sediment in the creeks?	• Use EPA Removal Program's stream bank stabilization design drawings to determine stream depth	• Sediment depth data	• **PHASE 1** • Visually survey the length of the Creeks to identify depositional areas. • Probe sediment, where possible, to determine the depth of the soft sediment.
27	What is the nature of the bottom of the creek?	• Sediment exists in some areas	• Information on the substrate (bedrock? gravel? silts?)	• **PHASE 1** • Document substrate below sediment at base of Creeks by collecting a Creek bottom sample and visually classifying.
28	How does creek flow relate to the potential for streambank erosion?	• None	• Stream flow data • Flood data information	• **PHASE 1** • Research existing stream flow data and flood information. EPA OSC may have this information. • **PHASE 2** • If necessary, collect stream flow measurements on profiles upstream on each creek, and downstream of each tributary on Wissahickon Creek, on Rose Valley Creek just prior to confluence with Wissahickon, and on Tannery Run, just prior to confluence with Wissahickon Creek.

29	Are the soils in the flood plains of the creeks contaminated?	• EPA START collected 5 soil samples from 0-3" in the Wissahickon "flood prone areas" and analyzed for asbestos. None detected	• Analytical data for non-ACM contaminants	• **PHASE 1** • Collect 16 composite soil samples (collect 0-6" and 6-24" consisting of 5 grab samples each) from 8 flood plain areas. • The 8 floodplain areas are: northwest corner of the Park parcel; south corner of the Park parcel; southwest corner of the Reservoir parcel at the confluence of Rose Valley Creek; between Rose Valley Creek and the Reservoir parcel; between Wissahickon Creek and the Reservoir parcel; between Tannery Run and the Asbestos Pile parcel; south corner of the Asbestos Pile parcel at the confluence of Tannery Run; and downstream of the Borit Site, downstream of the WWTP. • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) for the first two days of floodplain sampling (24 hour turnaround time), if no fibers are observed cease passive air sampling for this activity (approximately 8 samples in the Creek floodplains). • Analyze 16 samples by PLM, TCL VOCs, SVOCs, Pest/PCBs, TAL metals, and TOC. • Collect GPS points at all floodplain sample locations.
30	What are the risks to human health from the creeks? Is there an exposure from wading or fishing?	• None	• CSM • Analytical data for assessing risk	• **PHASE 1** • Develop CSM to identify receptors and exposure pathways/media. • Collect analytical data from soil, sediment, and surface water (see investigative questions 24 and 29 above). • **PHASE 2** • Analyze 4 stationary passive air samples for asbestos by TEM and particulates (upwind, downwind, and both crosswind directions) each day during activity-based sampling (ABS) (approximately 4 samples at the downstream floodplain). • Perform ABS on the downstream floodplain area. Raking scenario. • Analyze 2 activity-based air samples (high and low volume) by TEM for each ABS activity (approximately 2 samples). • Collect 1 grab surface soil samples (0-3") in cover for asbestos (Phase 1) and percent moisture (Phase 2) at ABS locations prior to performing ABS activities.

				• Collect GPS points at all ABS locations. • **AFTER PHASE 2** • Prepare a Baseline Human Health Risk Assessment Report (Phase 2).
31	Are soils located on the other side of the Wissahickon from the Site contaminated?	• None	• Analytical data	• **PHASE 1** • Collect 3 samples (0-3") for PLM, TCL VOCs, SVOCs, Pest/PCBs, and TAL metals.
Other				
32	Determine predominant wind direction?	• Windroses	• Determine predominant wind direction	• **PHASE 1** • Evaluate windroses to determine predominant wind direction.
33	What is the history of these sites?	• Aerial photos	• Historical figures and maps • EPIC aerials	• **PHASE 1** • Order Sanborn® maps. • Review EPIC aerials when they are available.
34	Has the waste material at all or any of the three sites impacted groundwater?	• None	• Groundwater analytical data • Groundwater flow data	• **PHASE 2** • For purposes of investigation planning assume that 4 groundwater monitoring wells will be installed (assume 40-ft average).
35	Have there been any impacts to soil, sediment, surface water or groundwater at any of the three sites?	• ABS data has shown a threat to human health while raking on the asbestos pile • Surface soil data has shown high percentages of asbestos	• Reports	• **AFTER PHASE 2** • Prepare Draft and Final Remedial Investigation Reports.

36	What are the cleanup alternatives and costs based on the findings of the RI?	• None	• Reports	• **AFTER PHASE 2** • Prepare Draft and Final Feasibility Study reports.
37	Community Involvement	• NA	• NA	• **ONGOING** • Provide community involvement support for 5 meetings which may include: preparation of poster boards and other materials, CDM attendance at meetings in Ambler, PA, and meeting minutes.

Table 2
Overview Summary Table

Area	Medium Sampled	Organics RSL Exceedance	Inorganics RSL Exceedance	Asbestos RSL or MCL Exceedance
Park	Soil	√	√	√
Asbestos Pile	Soil	√	√	√
Reservoir	Soil	√	√	√
Floodplains	Soil	√	√	√
Reservoir	Sediment	√	√	
Creeks	Sediment	√	√	
Park	Groundwater	√	√	√
Asbestos Pile	Groundwater	√	√	√
Reservoir	Surface Water		√	√
Creeks	Surface Water	√		√

Notes:

Organics include: volatile organic compounds, semivolatile organic compounds, pesticides/polychlorinated biphenyls.

Inorganics include: metals.

√ = At least one compound from this group exceeded the associated RSL in at least one sample.

blank cell = No compound from this group exceeded the associated RSL in any sample.

Table 3
Summary of Boring and Sample Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Sampling Location	Description/ Sampling Frequency	Number of Samples	Analysis	Notes
DPT Drilling	Soil Borings at the Asbestos Pile	APSB-01 through APSB-34 (34 total boring locations)	APSB-01 through APSB-04, APSB-08 through APSB-13, APSB-15 through APSB-18, APSB-20 through APSB-21, APSB-23 through APSB-28, APSB-30 through APSB-34. (27 locations)	2 gw 8 surface soil samples 1 bulk soil sample 15 composite soil samples	24 soil 2 gw	Asbestos by PLM for soil samples and TEM for ground water samples	Total samples include one bulk soil sample at APSB20-21 feet bgs **Bulk soil sample contained a multi-colored, continuously changing layer of red, green, gray, and brown soil less than one inch thick. This was the first encounter of such soil sample.**
		APSB-01 through APSB-32 (32 total boring locations)	APSB-01 through APSB-04, APSB-08 through APSB-13, APSB-15 through APSB-18, APSB-20 through APSB-21, APSB-23 through APSB-28, APSB-30 through APSB-32. (25 locations)	2 gw 6 surface soil samples 15 grab soil samples 1 bulk soil sample 15 composite soil samples	37 soil 2 gw	TCL VOCs, SVOCs, Pest/PCBs and TAL Metals	Total samples include one bulk soil sample at APSB20-21 feet bgs **Bulk soil sample contained a multi-colored, continuously changing layer of red, green, gray, and brown soil less than one inch thick. This was the first encounter of such soil sample.**
	Soil Borings at the Park	PKSB-01 through PKSB-53 (53 total locations)	PKSB-03 through PKSB-04, PKSB-06, PKSB-08, PKSB-10, PKSB-12 through PKSB-13, PKSB-15, PKSB-19, PKSB-22, PKSB-26, PKSB-29 through PKSB-30, PKSB-33, PKSB-38, PKSB-40, PKSB-44, PKSB-48, PKSB-51, PKSB-53. (20 locations)	5 surface soil samples 15 composite soil samples	20 soil	Asbestos by PLM for soil samples	
		PKSB-01 through PKSB-53 (53 total locations)	PKSB-03 through PKSB-04, PKSB-06, PKSB-08, PKSB-10, PKSB-12 through PKSB-13, PKSB-15, PKSB-19, PKSB-22, PKSB-26, PKSB-29 through PKSB-30, PKSB-33, PKSB-38, PKSB-40, PKSB-44 through PKSB-45, PKSB-48, PKSB-51 through PKSB-53. (22 locations)	5 surface soil samples 20 grab soil samples 15 composite soil samples	40 soil	TCL VOCs, SVOCs, Pest/PCBs and TAL Metals	Total samples include one bulk soil sample at PKSB45-17.3 feet bgs **Bulk soil sample contained a black tar-like material with metal.**

Notes and Abbreviations:

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PCM = Asbestos analysis method
PE = Personal Air
PEL = Personal Exposure Limit
Pest/PCBs - Pesticides and Polychlorinated Biphenyls
PK = Park
PLM = Asbestos analysis method
PZ = Piezometer
RV = Reservoir
SB = Soil boring
SD = Sediment
STEL = Short Term Exposure Limit
SVOC = Semi-volatile organic compound
SW = Surface water
TAL = Target Analyte List
TAL = Target Compound List
TEM = Asbestos analysis method
TF = Transformer
TOC = Total organic carbon
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Sample locations for composite, grab and surface samples were predetermined prior to drilling. If visible staining was observed, then a sample was collected.

Table 3
Summary of Boring and Sample Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Sampling Location	Description/ Sampling Frequency	Number of Samples	Analysis	Notes
DPT / Hand Auger / Surface Soil Samples	Soil Borings at the Reservoir	RVSB-13 through RVSB-18 (6 total locations)	RVSB-15 through RVSB-18. (4 locations)	Collected soil samples from 4 locations: 3 grab soil samples 3 composite soil samples	6	Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs and TAL Metals.	
	Hand Auger Samples at the Reservoir	RVSB-01 through RVSB-12, RVSB-19 through RVSB-24 (18 total locations)	RVSB-01 through RVSB-12, RVSB-19 through RVSB-24. (18 locations)	Collected soil samples from 18 locations: 11 grab soil samples 13 composite soil samples	24		
	Surface Soil Sample at the Reservoir	RVSB-01 through RVSB-27 (27 total locations)	RVSB-04, RVSB-08, RVSB-12, RVSB-17, RVSB-19, RVSB-24, RVSB-25, RVSB-26, RVSB-27. (9 locations)	Collected surface soil samples from 0-3" at 9 locations.	9		
	Surface Soil Sample at the Asbestos Pile	APTF-01 through APTF-03 (3 total locations)	APTF-01 through APTF-03 (3 locations)	Collected surface soil samples from 0-3" at 3 locations.	3	Analyzed soil under or near the transformer for PCBs only.	The transformers are considerably closer to the asbestos pile and borders the road path. Also, electrical lines run from the asbestos pile to the pole; hence the reason why all transformer samples are associated with the asbestos pile.
Surface Soil Samples	Soil borings on other side of the Wissahickon from the BoRit Site	OWSB-01 through OWSB-03 (3 total locations)	OWSB-01 through OWSB-03 (3 locations)	Collected one grab sample from 0-3" bgs at each location.	3	Asbestos by PLM, TCL VOCs, SVOCS, TOC, Pest/PCBs and TAL Metals	
Floodplain Soil Borings	Soil borings in the floodplain near the Wissahickon and along creeks	CKFP-01 through CKFP-08 (8 total locations)	CKFP-01 through CKFP-08 (8 locations)	Collected floodplain samples from a total of 8 locations at 2 different depths: 7 composite soil samples at 0 - 0.25' 7 grab soil samples 0 - 0.25' 8 composite soil samples at 0.25 - 2' 8 grab soil samples at 0.25 - 2'	30	Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs, TOC and TAL Metals	collected only 7 samples at 0 - 0.25' due to location CKFP-06 having layers of woodchip material at that depth.
		CKSB-01 (1 total location)	CKSB-01 (1 location)	Collected soil sample from one location	1	Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs and TAL Metals	New sample collected from across south bank of Tannery Run in creek bank directly across from APSB-29.

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Table 3
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Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Sampling Location	Description/ Sampling Frequency	Number of Samples	Analysis	Notes
Piezometer Borings	Piezometer Wells at the Park	PKPZ-01 through PKPZ-03 (3 total locations)	PKPZ-01 through PKPZ-03 (3 locations)	Encountered water table during DPT drilling. Installed 3 piezometer wells. Collected ground water samples from 3 locations.	3	Asbestos by TEM, TCL VOCs, SVOCS, Pest/PCBs, and TAL Metals	
	Piezometer Wells in Asbestos Pile	APSB-29/APPZ-01 through APPZ-03 (3 total locations)	APSB-29/APPZ-01 through APPZ-03 (3 locations)	Encountered water table during DPT drilling. Installed 3 piezometer wells. Collected ground water samples from 3 locations.	3	Asbestos by TEM, TCL VOCs, SVOCS, Pest/PCBs, and TAL Metals	
Sediment Sampling	Sediment samples at the Reservoir	RVSD-01 through RVSD-15 (15 total locations)	RVSD-01 through RVSD-15 (15 locations)	Collected sediment samples from 15 locations.	15	Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs, TOC, grain size and TAL Metals	
	Sediment samples along creeks-Normal deposition	CKSD-01 through CKSD-08 (8 total locations)	CKSD-01 through CKSD-08 (8 locations)	Collected sediment samples from 8 locations.	8	Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs, TOC, grain size and TAL Metals	
	Sediment samples along creeks-heavy deposition	CKSD-09 through CKSD-10, CKSD-12 (3 total locations)	CKSD-09 through CKSD-10, CKSD-12. (3 locations)	Collected sediment samples from 3 locations.	3	Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs, TOC, grain size and TAL Metals	
Surface Water Sampling	Surface water samples along creeks	CKSW-01 through CKSW-08 (8 total locations)	CKSW-01 through CKSW-08 (8 locations)	Collected one surface water sample from each location.	8	Asbestos by TEM, TCL VOCs, SVOCS, Pest/PCBs, and TAL Metals	Water quality parameters included: dissolved oxygen, turbidity, temperature, pH, conductivity and oxidation reduction potential were collected at each sample location.
	Surface water samples from Reservoir	RVSW-01 through RVSW-05 (5 total locations)	RVSW-01 through RVSW-05 (5 locations)	Collected one surface water sample from each location from the bottom of the water column.	5	Asbestos by TEM, TCL VOCs, SVOCS, Pest/PCBs, and TAL Metals	Water quality parameters included: dissolved oxygen, turbidity, temperature, pH, conductivity and oxidation reduction potential were collected by depth at one third of water column and two thirds of water column.

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Table 3
Summary of Boring and Sample Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Sampling Location	Description/ Sampling Frequency	Number of Samples	Analysis	Notes
Air Sampling	Personal air sampling during intrusive activities	Boring activities at Park	PE-00001 through PE-00004, PE-00006 through PE-00020, PE-00042 through PE-00044. (22 samples)	Collected 22 total samples.	54 total samples	Asbestos by PCM, if sample PCM measurement exceeds PEL or STEL limits, the sample will be analyzed for TEM.	Collected two personal air samples per day (for an 8-hour time-weighted average and 30 minute exposure limits) during intrusive activities. No PCM samples exceeded PEL or STEL limits.
		Boring activities at Asbestos Pile	PE-00022, PE-00024 through PE-00039, PE-00041, PE-00053 through PE-00054. (20 samples)	Collected 20 total samples.			
		Boring activities at Reservoir	PE-00021, PE-00040, PE-00045 through PE-00048, PE-00051 through PE-00052. (8 samples)	Collected 8 total samples.			
		Boring activities at Creek Flood Plain	PE-00055 through PE-00058 (4 samples)	Collected 4 total samples.			
	Perimeter air sampling during direct push sampling	Boring activities at Park	PA-00001 through PA-00004, PA-00010 through PA-00013, PA-00015 through PA-00018, PA-00020 through PA-00023, PA-00025 through PA-00028, PA-00030 through PA-00033, PA-00065 through PA-00068. (28 samples)	Collected 28 total samples from stationary points.	58 samples analyzed 24 samples archived 82 total samples collected	Asbestos by TEM.	Field measured for particulates. Archived Samples: PA-00065 through PA-00068. (4 samples)
		Boring activities at Asbestos Pile	PA-00040, PA-00042 through PA-00043, PA-00045 through PA-00048, PA-00050 through PA-00053, PA-00055 through PA-00058, PA-00060, PA-00062 through PA-00063, PA-00095 through PA-00098. (22 samples)	Collected 22 total samples from stationary points.			Field measured for particulates.
		Boring activities at Reservoir	PA-00035 through PA-00038, PA-00070 through PA-00073, PA-00075 through PA-00078, PA-00080 through PA-00083, PA-00085 through PA-00088, PA-00090 through PA-00093. (24 samples)	Collected 24 total samples from stationary points.			Field measured for particulates. Archived Samples: PA-00070 through PA-00073, PA-00075 through PA-00078, PA-00080 through PA-00083, PA-00090 through PA-00093. (16 samples)
		Boring activities at Creek Flood Plain	PA-00100 through PA-00103, PA-00105 through PA-00108. (8 samples)	Collected 8 total samples from stationary points.			Field measured for particulates. Archived Samples: PA-00100 through PA-00103. (4 samples)

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TAL = Target Analyte List
TAL = Target Compound List
TEM = Asbestos analysis method
TF = Transformer
TOC = Total organic carbon
VOC = Volatile organic compound

Sample locations for composite, grab and surface samples were predetermined prior to drilling. If visible staining was observed, then a sample was collected.

Table 4
Summary of Soil and Ground Water Sample Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Soil Samples	Sample Date	Depth Range	Ground Water Samples (Sample Date)	Analysis
DPT Drilling	Soil Borings at the Asbestos Pile	APSB-01 through APSB-34	Grab Samples: APSB-03	12/9/2009	Grab Samples at: Cover/Waste Interface soil at 0 - 0.5' Waste soil at 1 - 7' Native soil at 3.5 - 37.5'	APSB-12 (12/11/2009) APSB-18 (12/9/2009)	TCL VOCs only.
			APSB-10	12/11/2009			
			APSB-13	12/15/2009			
			APSB-21	12/14/2009			
			APSB-24	12/15/2009			
			APSB-32	1/14/2010			
			Composite Samples: APSB-01, 02, 03, 04.	12/9/2009	Composite Samples at: Cover/Waste Interface soil at 0 - 2' Waste soil at 0 - 16' Native soil at 3 - 40.6'	APSB-12 (12/11/2009) APSB-18 (12/9/2009)	Asbestos by PLM for soil samples and TEM for ground water samples. SVOCs, Pest/PCBs and TAL Metals.
			APSB-09, 10, 11, 12.	12/11/2009			
			APSB-08, 13, 16, 17.	12/16/2009			
			APSB-15, 21, 23, 25.	12/14/2009			
			APSB-24, 26, 27, 28.	12/15/2009			
			APSB-30, 31, 32.	1/14/2010			
			Surface Soil Samples: APSB-33	1/21/2010	Grabbed at 0 - 3"		Asbestos by PLM only.
			APSB-34	1/21/2010			
			Surface Soil Samples: APSB-02	12/9/2009	Surface soil sample grabbed at 0 - 3" Bulk soil sample grabbed at 21'		Asbestos by PLM, TCL VOCs, SVOCs, Pest/PCBs and TAL Metals
			APSB-10	12/11/2009			
			APSB-13	12/15/2009			
			APSB-21	12/14/2009			
			APSB-24	12/15/2009			
			APSB-32	1/14/2010			
			Bulk Soil Sample: APSB20-21	12/11/2009			
	Soil Borings at the Park	PKSB-01 through PKSB-53	Grab Samples: PKSB-03	12/2/2009	Grab Samples at: Cover/Waste Interface soil at 0 - 1' Waste soil at 0.4 - 16' Native soil at 6 - 21'		TCL VOCs only.
			PKSB-15	12/8/2009			
			PKSB-22	12/2/2009			
			PKSB-33	12/7/2009			
			PKSB-40	12/3/2009			
			PKSB-51	12/4/2009			
			PKSB-52	12/18/2009			
			Composite Samples: PKSB-03, 04, 22, 26.	12/2/2009	Composite Samples at: Cover/Waste Interface soil at 0 - 1.7' Waste soil at 0.1 - 16' Native soil at 1.8 - 22.4'		Asbestos by PLM, SVOCS, Pest/PCBs and TAL Metals.
			PKSB-06, 19, 29, 40.	12/3/2009			
			PKSB-08, 10, 12, 15.	12/8/2009			
			PKSB-13, 30, 33, 35.	12/7/2009			
			PKSB-38, 44, 48, 51.	12/4/2009			
			Bulk Soil Sample: PKSB45-17.3	12/10/2009	Bulk soil sample grabbed at 17.3'		TCL VOCs, SVOCs, Pest/PCBs and TAL Metals.
			Surface Soil Samples: PKSB-15	12/8/2009	Grabbed at 0-3"		Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs and TAL Metals.
			PKSB-19	12/3/2009			
			PKSB-30	12/7/2009			
			PKSB-38	12/4/2009			
			Surface Soil Sample: PKSB-53	1/21/2010	Grabbed at 0-3"		Asbestos by PLM only.

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TOC = Total organic carbon
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PK = Park
PZ = Piezometer
RV = Reservoir
SB = Soil boring
TF = Transformer

Sample locations for composite, grab and surface samples were predetermined prior to drilling. If visible staining was observed, then a sample was collected.

Table 4
Summary of Soil and Ground Water Sample Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Soil Samples	Sample Date	Depth Range	Ground Water Samples (Sample Date)	Analysis
DPT / Hand Auger / Surface Soil Samples	DPT / Hand Auger / Surface Soil Samples at the Reservoir	RVSB-01 through RVSB-27	Grab Samples: RVSB-04	1/11/2010	Grab Samples at: Cover/Waste Interface soil at 0 - 1' Waste soil at 0.4 - 16' Native soil at 6 - 21'		TCL VOCs only.
			RVSB-08	1/12/2010			
			RVSB-12	1/8/2010			
			RVSB-17	12/10/2009			
			RVSB-19	1/7/2010			
			RVSB-24	1/13/2010			
			Composite Samples: RVSB-01, 19, 20.	1/7/2010	Composite Samples at: Cover/Waste Interface soil at 0 - 1' Waste soil at 0.4 - 16' Native soil at 6 - 21'		Asbestos by PLM, SVOCS, Pest/PCBs and TAL Metals.
			RVSB-02, 03, 04.	1/11/2010			
			RVSB-05, 06, 07, 08.	1/12/2010			
			RVSB-09, 10, 11, 12.	1/8/2010			
			RVSB-15, 16,1 7, 18.	12/10/2009			
			RVSB-21, 22, 23, 24.	1/13/2010			
			Surface Soil Samples: RVSB-04	1/11/2010	Grabbed at 0-3"		Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs and TAL Metals.
			RVSB-08	1/12/2010			
			RVSB-12	1/8/2010			
			RVSB-17	12/10/2009			
			RVSB-19	1/7/2010			
			RVSB-24	1/13/2010			
			Surface Soil Samples: RVSB-25	1/21/2010	Grabbed at 0-3"		Asbestos by PLM only.
			RVSB-26	1/21/2010			
			RVSB-27	1/21/2010			
	Surface Soil Sample at the Asbestos Pile	APTF-01 through APTF-03	Surface Soil Samples: APTF-01	1/14/2010	Grabbed at 0-3"		Analyzed soil under or near the transformer for PCBs only.
			APTF-02	1/14/2010			
			APTF-03	1/14/2010			
	Surface Soil Samples on other side of the Wissahickon from the BoRit Site	OWSB-01 through OWSB-03	Surface Soil Samples: OWSB-01	1/18/2010	Grabbed at 0-3"		Asbestos by PLM, TCL VOCs, SVOCS, TOC, Pest/PCBs and TAL Metals.
			OWSB-02	1/18/2010			
			OWSB-03	1/18/2010			

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Table 4
Summary of Soil and Ground Water Sample Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Field Activity	Task	Boring Location	Soil Samples	Sample Date	Depth Range	Ground Water Samples (Sample Date)	Analysis
Floodplain Soil Borings	Soil borings in the floodplain near the Wissahickon and along creeks	CKFP-01 through CKFP-08	Grab Samples: CKFP-01E	1/18/2010	Grab Samples at 0 - 0.25': CKFP-01 through CKFP-05 CKFP-07 through CKFP-08 Grab Samples at 0.25 - 2': CKFP-01 through CKFP-08		TCL VOCs only.
			CKFP-02E	1/18/2010			
			CKFP-03E	1/15/2010			
			CKFP-04C	1/15/2010			
			CKFP-05E	1/21/2010			
			CKFP-06E	1/21/2010			
			CKFP-07E	1/18/2010			
			CKFP-08E	1/18/2010			
			Composite Samples: CKFP-01A, 01B, 01C, 01D, 01E.	1/18/2010	Composite Samples at 0 - 0.25': CKFP-01 through CKFP-05 CKFP-07 through CKFP-08 Composite Samples at 0.25 - 2': CKFP-01 through CKFP-08		Asbestos by PLM, SVOCS, Pest/PCBs, TOC and TAL Metals.
			CKFP-02A, 02B, 02C, 02D, 02E.	1/18/2010			
			CKFP-03A, 03B, 03C, 03D, 03E.	1/15/2010			
			CKFP-04A, 04B, 04C, 04D, 04E.	1/15/2010			
			CKFP-05A, 05B, 05C, 05D, 05E.	1/21/2010			
			CKFP-06A, 06B, 06C, 06D, 06E.	1/21/2010			
			CKFP-07A, 07B, 07C, 07D, 07E.	1/18/2010			
			CKFP-08A, 08B, 08C, 08D, 08E.	1/18/2010			
	Soil boring in the floodplain near Tannery Run	CKSB-01	Grab sample: CKSB-01	1/14/2010	Grab samples at: Waste soil only at 1 - 2'		Asbestos by PLM, TCL VOCs, SVOCS, Pest/PCBs and TAL Metals.
Piezometer Borings	Piezometer Wells at the Park	PKPZ-01 through PKPZ-03				PKPZ-01 (1/6/2010)	Asbestos by TEM, TCL VOCs, SVOCS, Pest/PCBs, and TAL Metals.
						PKPZ-02 (1/6/2010)	
						PKPZ-03 (1/6/2010)	
	Piezometer Wells at the Asbestos Pile	APSB-29/APPZ-01 through APPZ-03				APPZ-01 (1/6/2010)	Asbestos by TEM, TCL VOCs, SVOCS, Pest/PCBs, and TAL Metals.
						APPZ-02 (1/6/2010)	
						APPZ-03 (1/6/2010)	

Notes and Abbreviations:

bgs = Below ground surface
DPT = Direct push technology
ft = feet
GW = Ground water
Pest/PCBs - Pesticides and Polychlorinated Biphenyls
PLM = Asbestos analysis method
SVOC = Semi-volatile organic compound
TAL = Target Analyte List
TCL = Target Compound List
TEM = Asbestos analysis method
TOC = Total organic carbon
VOC = Volatile organic compound
AP = Asbestos pile
CK = Creek
FP = Flood plain
OW = Other side of the Wissahickon
PK = Park
PZ = Piezometer
RV = Reservoir
SB = Soil boring
TF = Transformer

Sample locations for composite, grab and surface samples were predetermined prior to drilling. If visible staining was observed, then a sample was collected.

Table 5
Summary of DPT Boring Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Location	Location ID	Total Depth (feet bgs)	Visual Observation of ACM (Yes/No)
Asbestos Pile	APSB-01	20	No
	APSB-02	12	Yes
	APSB-03	12	Yes
	APSB-04	8	No
	APSB-05	13.3	Yes
	APSB-06	12	Yes
	APSB-07	30	Yes
	APSB-08	45	Yes
	APSB-09	15	Yes
	APSB-10	18.5	Yes
	APSB-11	15	Yes
	APSB-12	18.4	Yes
	APSB-13	40	Yes
	APSB-14	11	Yes
	APSB-15	25	Yes
	APSB-16	33	Yes
	APSB-17	41.6	Yes
	APSB-18	15	Yes
	APSB-19	16	No
	APSB-20	34.5	Yes
	APSB-21	28.8	Yes
	APSB-22	18.8	Yes
	APSB-23	24	Yes
	APSB-24	20	Yes
	APSB-25	25	Yes
	APSB-26	10	Yes
	APSB-27	20	Yes
	APSB-28	25	Yes
	APSB-29/APPZ-01	20	Yes
Park	PKSB-01	10	Yes
	PKSB-02	12	Yes
	PKSB-03	20	Yes
	PKSB-04	15	Yes
	PKSB-05	15	Yes
	PKSB-06	10	Yes
	PKSB-07	10	Yes
	PKSB-08	10	No
	PKSB-09	15	Yes
	PKSB-10	16	Yes
	PKSB-11	12	Yes
	PKSB-12	12	Yes
	PKSB-13	25	Yes
	PKSB-14	12	Yes
	PKSB-15	16	Yes
	PKSB-16	20	Yes
	PKSB-17	20	Yes
	PKSB-18	17.5	Yes
	PKSB-19	15	Yes
	PKSB-20	20	Yes
	PKSB-21	18	Yes
	PKSB-22	19	Yes
	PKSB-23	16	Yes
	PKSB-24	15	Yes

Notes and Abbreviations:
bgs: below ground surface
AP = Asbestos pile
PK = Park
PZ = Piezometer
RV = Reservoir
SB = Soil boring
ACM = Asbestos Containing Material
Sample locations for composite, grab and surface samples were predetermined prior to drilling.
If visible staining was observed, then a sample was collected.

Table 5
Summary of DPT Boring Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Location	Location ID	Total Depth (feet bgs)	Visual Observation of ACM (Yes/No)
Park	PKSB-25	20	Yes
	PKSB-26	18	Yes
	PKSB-27	17	Yes
	PKSB-28	20	Yes
	PKSB-29	20	Yes
	PKSB-30	20	Yes
	PKSB-31	17	Yes
	PKSB-32	20	Yes
	PKSB-33	20	Yes
	PKSB-34	20	Yes
	PKSB-35	20	Yes
	PKSB-36	25	Yes
	PKSB-37	25	Yes
	PKSB-38	24.5	Yes
	PKSB-39	24	Yes
	PKSB-40	25	Yes
	PKSB-41	10	Yes
	PKSB-42	20	Yes
	PKSB-43	23	Yes
	PKSB-44	25	Yes
	PKSB-45	30	Yes
	PKSB-46	20	Yes
	PKSB-47	24	Yes
	PKSB-48	30	Yes
	PKSB-49	25	Yes
	PKSB-50	25	Yes
	PKSB-51	25	Yes
	PKSB-52	10	Yes
Reservoir	RVSB-13	10	Yes
	RVSB-14	20	Yes
	RVSB-15	15	Yes
	RVSB-16	15	No
	RVSB-17	15	Yes
	RVSB-18	12	No

Notes and Abbreviations:
bgs: below ground surface
AP = Asbestos pile
PK = Park
PZ = Piezometer
RV = Reservoir
SB = Soil boring
ACM = Asbestos Containing Material
Sample locations for composite, grab and surface samples were predetermined prior to drilling.
If visible staining was observed, then a sample was collected.

Table 6
Summary of Hand Auger Locations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Location	Location ID	Total Depth (feet bgs)	Visual Observation of ACM (Yes/No)
Asbestos Pile	APSB-30	4	Yes
	APSB-31	4	Yes
	APSB-32	4	Yes
Creek Flood Plain	CKFP-01A	1	No
	CKFP-01B	1.5	No
	CKFP-01C	1.5	No
	CKFP-01D	2	No
	CKFP-01E	1	No
	CKFP-02A	2	Yes
	CKFP-02B	2	Yes
	CKFP-02C	2	Yes
	CKFP-02D	2	Yes
	CKFP-02E	2	Yes
	CKFP-03A	2	No
	CKFP-03B	2	No
	CKFP-03C	2	No
	CKFP-03D	2	No
	CKFP-03E	2	No
	CKFP-04A	2	Yes
	CKFP-04B	1.2	No
	CKFP-04C	2	Yes
	CKFP-04D	2	No
	CKFP-04E	2	No
	CKFP-05A	2	No
	CKFP-05B	2	No
	CKFP-05C	2	No
	CKFP-05D	2	No
	CKFP-05E	1	No
	CKFP-06A	2	No
	CKFP-06B	2	No
	CKFP-06C	2	No
	CKFP-06D	2	No
	CKFP-06E	2	No
	CKFP-07A	1.5	No
	CKFP-07B	2	No
	CKFP-07C	2	No
	CKFP-07D	2	No
	CKFP-07E	2	No
	CKFP-08A	1	No
	CKFP-08B	2	No
	CKFP-08C	2	No
	CKFP-08D	1	No
	CKFP-08E	1.2	No
	CKSB-01	4	Yes
Reservoir	RVSB-01	4	No
	RVSB-02	4	Yes
	RVSB-03	4	Yes
	RVSB-04	4	Yes
	RVSB-05	4	Yes
	RVSB-06	3.5	Yes
	RVSB-07	4	Yes
	RVSB-08	4	Yes
	RVSB-09	2	Yes
	RVSB-10	4	Yes
	RVSB-11	4	Yes
	RVSB-12	4	No
	RVSB-19	4	No
	RVSB-20	4	No
	RVSB-21	3.5	Yes
	RVSB-22	3	Yes
	RVSB-23	3	Yes
	RVSB-24	3	Yes

Notes and Abbreviations:
bgs: below ground surface
AP = Asbestos pile
CK = Creek
FP = Flood plain
RV = Reservoir
SB = Soil boring
ACM = Asbestos Containing Material
Sample locations for composite, grab and surface samples were predetermined prior to drilling. If visible staining was observed, then a sample was collected.

Table 7
Summary of Piezometer Installations
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Location	Location ID	Depth (feet bgs)	Total Depth (feet bgs)
Asbestos Pile	APSB-29/APPZ-01	Bentonite: 0 - 13 Sand Pack: 13 - 20 Screen Interval: 15 - 20	20
	APPZ-02	Bentonite: 0 - 13 Sand Pack: 13 - 20 Screen Interval: 15 - 20	20
	APPZ-03	Bentonite: 0 - 19 Sand Pack: 19 - 26 Screen Interval: 21 - 26	26
Park	PKPZ-01	Bentonite: 0 - 19 Sand Pack: 19 - 26 Screen Interval: 21 - 26	26
	PKPZ-02	Bentonite: 0 - 20 Sand Pack: 20 - 27 Screen Interval: 22 - 27	27
	PKPZ-03	Bentonite: 0 - 18 Sand Pack: 18 - 25 Screen Interval: 20 - 25	25

Notes and Abbreviations:
bgs: below ground surface
AP = Asbestos pile
PK = Park
PZ = Piezometer
SB = Soil boring

Table 8
Summary of Depth Range for Composite and Grab Samples
Borit Asbestos Superfund Site, OU-1
Phase I Remedial Investigation

Location	Samples		Depth Range			Notes
	Composite	Grab	Cover/Waste Layer (feet bgs)	Waste Layer (feet bgs)	Native Soil Layer (feet bgs)	
Asbestos Pile	APSB-01, 02, 03, 04.	APSB-03	0 - 8	0.8 - 5.6	4.5 - 8.3	No native soil layer encountered at APSB-04.
	APSB-09, 10, 11, 12.	APSB-10	0.1 - 2	1 - 10	10 - 16	
	APSB-08, 13, 16, 17.	APSB-13	None	5 - 13.6	31.5 - 40.6	No cover/waste interface soil layer encountered.
	APSB-15, 21, 23, 25.	APSB-21	None	0 - 16	18.5 - 26	No cover/waste interface soil layer encountered.
	APSB-24, 26, 27, 28.	APSB-24	None	0 - 10	5.4 - 21.5	No cover/waste interface soil layer encountered.
	APSB-30, 31, 32.	APSB-32	0 - 1	1	3 - 3.5	
Park	PKSB-03, 04, 22, 26.	PKSB-03, PKSB-22.	0 - 0.7	0.4 - 12	10 - 18.5	
	PKSB-08, 10, 12, 15.	PKSB-15	0.2 - 0.6	0.1 - 6	1.8 - 12.5	
	PKSB-13, 30, 33, 35.	PKSB-33	0.3 - 0.7	6 - 11.5	12.7 - 17	
	PKSB-06, 19, 29, 40.	PKSB-40	0.4 - 1	1 - 12	1.5 - 16.6	No waste soil encountered at PKSB-06.
	PKSB-38, 44, 48, 51.	PKSB-51	0.2 - 1.7	5 - 16	16.6 - 22.4	
		PKSB-52	0 - 0.6	2 - 2.6	6 - 6.6	
Reservoir	RVSB-01, 19, 20.	RVSB-19	0 - 0.5	None	2.5 - 3.5	No waste soil layer encountered.
	RVSB-02, 03, 04.	RVSB-04	0 - 0.5	1 - 2	1.5 - 4	
	RVSB-05, 06, 07, 08.	RVSB-08	0 - 0.5	1 - 3	3 - 4	No cover/waste interface soil layer encountered at RVSB-08.
	RVSB-09, 10, 11, 12.	RVSB-12	0 - 0.5	0.5 - 2	3 - 4	No waste soil layer encountered at RVSB-12. No native soil layer encountered at RVSB-09 and RVSB-10.
	RVSB-15, 16,1 7, 18.	RVSB-17	0 - 5.4	0.5 - 7	5 - 10.6	No waste soil layer encountered at RVSB-18.
	RVSB-21, 22, 23, 24.	RVSB-24	0 - 1	1.5 - 3.5	None	No native soil layer encountered.

Location	Samples		Depth Range		Notes
	Composite	Grab	Shallow Layer (feet bgs)	Deep Layer (feet bgs)	
Floodplain	CKFP-01A, 01B, 01C, 01D, 01E.	CKFP-01E	0 - 0.25	0.25 - 2	
	CKFP-02A, 02B, 02C, 02D, 02E.	CKFP-02E	0 - 0.25	0.25 - 2	
	CKFP-03A, 03B, 03C, 03D, 03E.	CKFP-03E	0 - 0.25	0.25 - 2	
	CKFP-04A, 04B, 04C, 04D, 04E.	CKFP-04C	0 - 0.25	0.25 - 2	
	CKFP-05A, 05B, 05C, 05D, 05E.	CKFP-05E	0 - 0.25	0.25 - 2	
	CKFP-06A, 06B, 06C, 06D, 06E.	CKFP-06E	None	0.25 - 2	No shallow layer encountered.
	CKFP-07A, 07B, 07C, 07D, 07E.	CKFP-07E	0 - 1	1 - 2	
	CKFP-08A, 08B, 08C, 08D, 08E.	CKFP-08E	0 - 0.25	0.25 - 2	

Notes and Abbreviations:
bgs: below ground surface
AP = Asbestos pile
CK = Creek
FP = Flood plain
PK = Park
RV = Reservoir
SB = Soil boring
Sample locations for composite, grab and surface samples were predetermined prior to drilling.
If visible staining was observed, then a sample was collected.

CDM

Table 9
Park, Reservoir, and Asbestos Pile Areas Statistics

Total Park Area Direct Push Borings	52				
Average Total Boring Depth	18.5	ft			
Range of Total Boring Depths	8.2	ft bgs	to	30	ft bgs
Average Cover Depth	0.8	ft bgs			
Range of Cover Depths	0.1	ft bgs	to	2.4	ft bgs
Average Waste Thickness	12.9	ft			
Average Fill Thickness	1.2	ft			
Average Depth to Native Soil	13.2	ft bgs			
Range of Depths to Native Soil	1.5	ft bgs	to	24.5	ft bgs
Total Reservoir Area Direct Push Borings	6				
Average Total Boring Depth	14.3	ft			
Range of Total Boring Depths	10	ft bgs	to	20	ft bgs
Average Cover Depth	0.4	ft bgs			
Range of Cover Depths	0.3	ft bgs	to	0.5	ft bgs
Average Waste Thickness	1.2	ft			
Average Fill Thickness	5.5	ft			
Average Depth to Native Soil	6.2	ft bgs			
Range of Depths to Native Soil	3.5	ft bgs	to	10	ft bgs
Total Asbestos Area Direct Push Borings	29				
Average Total Boring Depth	20.4	ft			
Range of Total Boring Depths	8	ft bgs	to	41.6	ft bgs
Average Cover Depth	0.7	ft bgs			
Range of Cover Depths	0.1	ft bgs	to	5.6	ft bgs
Average Waste Thickness	16.6	ft			
Average Fill Thickness	5.2	ft			
Average Depth to Native Soil	15.7	ft bgs			
Range of Depths to Native Soil	4	ft bgs	to	36.7	ft bgs

Notes:

ft = feet

bgs = below grade surface

"Fill" = general debris-like material

"Waste" = typical suspected asbestos waste-like material

Table 10
Park Surface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1260	ug/kg	13	13	J	PKSB19-SS	03-Dec-09	13	J	5	1		220	
Metals													
Aluminum	mg/kg	6490	8260	J	PKSB19-SS	03-Dec-09	3770	J	5	5	7700		
Arsenic	mg/kg	4.88	6.4	L	PKSB30-SS	07-Dec-09	2.8	L	5	5	0.39		
Barium	mg/kg	82.0	156		PKSB19-SS	03-Dec-09	37		5	5	1500		
Beryllium	mg/kg	1.37	2.4		PKSB15-SS	08-Dec-09	0.87		5	5	16		
Cadmium	mg/kg	0.618	0.94	L	PKSB19-SS	03-Dec-09	0.36	J	5	4	7		
Calcium	mg/kg	30720	51100	J	PKSB19-SS	03-Dec-09	2400	J	5	5			
Chromium	mg/kg	16.6	40.4		PKSB19-SS	03-Dec-09	8.3		5	5			
Cobalt	mg/kg	15.1	22.9		PKSB15-SS	08-Dec-09	11.4		5	5	2.3		
Copper	mg/kg	31.4	55.9	J	PKSB15-SS	08-Dec-09	17.9	J	5	5	310		
Iron	mg/kg	17040	18900	J	PKSB19-SS	03-Dec-09	15500	J	5	5	5500		
Lead	mg/kg	48.7	164		PKSB19-SS	03-Dec-09	16.3		5	5	40		
Magnesium	mg/kg	17788	31700	J	PKSB30-SS	07-Dec-09	3340	J	5	5			
Manganese	mg/kg	885	1370	J	PKSB15-SS	08-Dec-09	655	J	5	5	180		
Mercury	mg/kg	0.331	1.1		PKSB19-SS	03-Dec-09	0.035	J	5	4	0.56		
Nickel	mg/kg	35.6	99.8		PKSB19-SS	03-Dec-09	11.8		5	5	150		
Potassium	mg/kg	537	644	J	PKSB30D-SS	07-Dec-09	399	J	5	5			
Vanadium	mg/kg	20.2	23.9		PKSB19-SS	03-Dec-09	16.6		5	5	0.55		
Zinc	mg/kg	102	241		PKSB19-SS	03-Dec-09	51.7		5	5	2300		
Pesticides													
4,4'-DDD	ug/kg	0.9	0.9	J	PKSB19-SS	03-Dec-09	0.9	J	5	1		2000	
4,4'-DDE	ug/kg	0.16	0.22	J	PKSB19-SS	03-Dec-09	0.1	J	5	2		1400	
4,4'-DDT	ug/kg	0.465	0.71	J	PKSB19-SS	03-Dec-09	0.22	J	5	2		1700	
Aldrin	ug/kg	0.092	0.092	J	PKSB19-SS	03-Dec-09	0.092	J	5	1		29	
alpha-BHC	ug/kg	0.019	0.025	J	PKSB19-SS	03-Dec-09	0.013	J	5	2		77	
beta-BHC	ug/kg	0.282	0.67	J	PKSB30-SS	07-Dec-09	0.066	B	5	4		270	
Dieldrin	ug/kg	0.325	0.33	J	PKSB19-SS	03-Dec-09	0.32	J	5	2		30	
Endosulfan II	ug/kg	0.1	0.1	J	PKSB19-SS	03-Dec-09	0.1	J	5	1			
Endosulfan sulfate	ug/kg	0.38	0.38	J	PKSB19-SS	03-Dec-09	0.38	J	5	1			
Endrin	ug/kg	0.495	0.74	J	PKSB19-SS	03-Dec-09	0.25	J	5	2		1800	
Endrin aldehyde	ug/kg	0.319	0.54	J	PKSB19-SS	03-Dec-09	0.097	J	5	2			
Endrin ketone	ug/kg	0.448	1	J	PKSB19-SS	03-Dec-09	0.22	J	5	4			
gamma-BHC(Lindane)	ug/kg	0.15	0.15	B	PKSB19-SS	03-Dec-09	0.15	B	5	1		520	
gamma-Chlordane	ug/kg	0.176	0.27	J	PKSB30D-SS	07-Dec-09	0.019	J	5	3			
Heptachlor	ug/kg	0.15	0.15	B	PKSB19-SS	03-Dec-09	0.15	B	5	1		110	
Heptachlor epoxide	ug/kg	0.06	0.06	B	PKSB19-SS	03-Dec-09	0.06	B	5	1		53	
Methoxychlor	ug/kg	2.43	3.5	B	PKSB30D-SS	07-Dec-09	1.5	B	5	3		31000	
Semivolatiles													
Phenanthrene	ug/kg	69	69	J	PKSB15-SS	08-Dec-09	69	J	5	1			
Di-n-butylphthalate	ug/kg	56.5	94	J	PKSB19-SS	03-Dec-09	30	J	5	4		610000	
Fluoranthene	ug/kg	89.5	170	J	PKSB19-SS	03-Dec-09	33	J	5	4		230000	
Pyrene	ug/kg	91.5	200	J	PKSB19-SS	03-Dec-09	27	J	5	4		170000	
Benzo(a)anthracene	ug/kg	58	58	J	PKSB15-SS	08-Dec-09	58	J	5	1		150	
Chrysene	ug/kg	84	84	J	PKSB15-SS	08-Dec-09	84	J	5	1		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	144	400	J	PKSB19-SS	03-Dec-09	44	J	5	4		35000	
Benzo(b)fluoranthene	ug/kg	73.8	150	J	PKSB19-SS	03-Dec-09	25	J	5	4		150	
Benzo(k)fluoranthene	ug/kg	32	32	J	PKSB15-SS	08-Dec-09	32	J	5	1		1500	
Benzo(a)pyrene	ug/kg	118	150	J	PKSB19-SS	03-Dec-09	86	J	5	2		15	
Indeno(1,2,3-cd)pyrene	ug/kg	72.5	110	J	PKSB19-SS	03-Dec-09	35	J	5	2		150	
Benzo(g,h,i)perylene	ug/kg	55	55	J	PKSB15-SS	08-Dec-09	55	J	5	1			

Table 10
Park Surface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Volatiles													
1,1-Dichloroethene	ug/kg	0.965	1.3	B	PKSB19-SS	03-Dec-09	0.63	B	5	2		24000	
Acetone	ug/kg	9.3	12	B	PKSB30-SS	07-Dec-09	6.6	B	5	2		6100000	
Methylene chloride	ug/kg	1.8	1.8	B	PKSB19-SS	03-Dec-09	1.8	B	5	1		11000	
Cyclohexane	ug/kg	0.63	0.63	J	PKSB30-SS	07-Dec-09	0.63	J	5	1		700000	
Toluene	ug/kg	4.4	4.4	B	PKSB19-SS	03-Dec-09	4.4	B	5	1		500000	
2-Hexanone	ug/kg	6.58	12	B	PKSB15-SS	08-Dec-09	2	B	5	5		21000	
Asbestos													
Asbestos, chrysotile	%	0.467	0.9		PKSB53-SS	20-Jan-10	0.1		3	3			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 11
Park Cover Waste Interface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1260	ug/kg	7.38	16	J	PKSB08101215-CW	08-Dec-09	2.6	J	6	4		220	
Metals													
Aluminum	mg/kg	5630	7910	J	PKSB06192940-CW	03-Dec-09	1710	J	6	6	7700		
Arsenic	mg/kg	3.45	4.8	L	PKSB38444851-CW	04-Dec-09	1.4	L	6	6	0.39		
Barium	mg/kg	69.2	135		PKSB06192940-CW	03-Dec-09	20.2	J	6	6	1500		
Beryllium	mg/kg	2.01	3		PKSB13303335-CW	07-Dec-09	0.85		6	6	16		
Cadmium	mg/kg	0.472	0.82	L	PKSB13303335-CW	07-Dec-09	0.32	J	6	6	7		
Calcium	mg/kg	17557	61700	J	PKSB06192940-CW	03-Dec-09	3150	J	6	6			
Chromium	mg/kg	14.5	35.3		PKSB06192940-CW	03-Dec-09	2.8		6	6			
Cobalt	mg/kg	19.9	25.7		PKSB13303335-CW	07-Dec-09	14.3		6	6	2.3		
Copper	mg/kg	42.3	67.7	J	PKSB03042226-CW	02-Dec-09	17.7	J	6	6	310		
Iron	mg/kg	18163	24900	J	PKSB03042226-CW	02-Dec-09	6480	J	6	6	5500		
Lead	mg/kg	46.0	126		PKSB06192940-CW	03-Dec-09	19.3		6	6	40		
Magnesium	mg/kg	8252	23500	J	PKSB06192940-CW	03-Dec-09	1950	J	6	6			
Manganese	mg/kg	942	1580	J	PKSB13303335-CW	07-Dec-09	510	J	6	6	180		
Mercury	mg/kg	0.147	0.34		PKSB06192940-CW	03-Dec-09	0.041	J	6	6	0.56		
Nickel	mg/kg	37.1	81.1		PKSB06192940-CW	03-Dec-09	21.8		6	6	150		
Potassium	mg/kg	690	1050		PKSB52-CW	18-Dec-09	253	J	6	5			
Sodium	mg/kg	221	221	J	PKSB06192940-CW	03-Dec-09	221	J	6	1			
Vanadium	mg/kg	21.6	27.7		PKSB03042226-CW	02-Dec-09	6	J	6	6	0.55		
Zinc	mg/kg	112	201		PKSB06192940-CW	03-Dec-09	77.9		6	6	2300		
Pesticides													
4,4'-DDD	ug/kg	0.197	0.44	J	PKSB52-CW	18-Dec-09	0.053	J	6	4		2000	
4,4'-DDE	ug/kg	0.212	0.41	J	PKSB08101215-CW	08-Dec-09	0.057	J	6	3		1400	
4,4'-DDT	ug/kg	0.432	1.3	J	PKSB08101215-CW	08-Dec-09	0.13	J	6	5		1700	
Aldrin	ug/kg	0.018	0.018	J	PKSB06192940-CW	03-Dec-09	0.018	J	6	1		29	
alpha-BHC	ug/kg	0.021	0.023	J	PKSB38444851-CW	04-Dec-09	0.019	B	6	2		77	
alpha-Chlordane	ug/kg	0.21	0.21	J	PKSB06192940-CW	03-Dec-09	0.21	J	6	1			
beta-BHC	ug/kg	0.184	0.37	J	PKSB08101215-CW	08-Dec-09	0.057	B	6	4		270	
delta-BHC	ug/kg	0.031	0.047	J	PKSB06192940-CW	03-Dec-09	0.014	J	6	2			
Dieldrin	ug/kg	0.223	0.44	J	PKSB13303335-CW	07-Dec-09	0.07	J	6	4		30	
Endosulfan I	ug/kg	0.022	0.024	J	PKSB03042226-CW	02-Dec-09	0.019	J	6	2			
Endosulfan II	ug/kg	0.226	0.47	J	PKSB08101215-CW	08-Dec-09	0.042	J	6	4			
Endosulfan sulfate	ug/kg	0.067	0.1	J	PKSB38444851-CW	04-Dec-09	0.026	J	6	3			
Endrin	ug/kg	0.173	0.46	J	PKSB03042226-CW	02-Dec-09	0.048	B	6	5		1800	
Endrin aldehyde	ug/kg	0.124	0.23	J	PKSB08101215-CW	08-Dec-09	0.048	J	6	3			
Endrin ketone	ug/kg	0.811	2.5	J	PKSB08101215-CW	08-Dec-09	0.063	J	6	6			
gamma-BHC(Lindane)	ug/kg	0.251	0.67	J	PKSB13303335-CW	07-Dec-09	0.036	B	6	3		520	
gamma-Chlordane	ug/kg	0.081	0.15	J	PKSB06192940-CW	03-Dec-09	0.025	J	6	3			
Heptachlor	ug/kg	0.155	0.35	J	PKSB08101215-CW	08-Dec-09	0.041	J	6	4		110	
Heptachlor epoxide	ug/kg	0.025	0.028	B	PKSB06192940-CW	03-Dec-09	0.021	J	6	2		53	
Methoxychlor	ug/kg	0.985	2.6	B	PKSB13303335-CW	07-Dec-09	0.21	B	6	4		31000	

Table 11
Park Cover Waste Interface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
2-Methylphenol	ug/kg	130	130	J	PKSB13303335-CW	07-Dec-09	130	J	6	1		310000	
Fluorene	ug/kg	62	62	J	PKSB08101215-CW	08-Dec-09	62	J	6	1		230000	
Phenanthrene	ug/kg	414	1000		PKSB38444851-CW	04-Dec-09	28	J	6	5			
Anthracene	ug/kg	102	180	J	PKSB38444851-CW	04-Dec-09	19	J	6	4		1700000	
Carbazole	ug/kg	48.5	55	J	PKSB38444851-CW	04-Dec-09	42	J	6	2			
Di-n-butylphthalate	ug/kg	41	41	J	PKSB13303335-CW	07-Dec-09	41	J	6	1		610000	
Fluoranthene	ug/kg	563	1900		PKSB38444851-CW	04-Dec-09	30	J	6	6		230000	
Pyrene	ug/kg	428	1300		PKSB38444851-CW	04-Dec-09	31	J	6	6		170000	
Butylbenzylphthalate	ug/kg	120	120	J	PKSB52-CW	18-Dec-09	120	J	6	1		260000	
Benzo(a)anthracene	ug/kg	321	810		PKSB38444851-CW	04-Dec-09	24	J	6	5		150	
Chrysene	ug/kg	305	700		PKSB38444851-CW	04-Dec-09	25	J	6	5		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	84	84	J	PKSB52-CW	18-Dec-09	84	J	6	1		35000	
Benzo(b)fluoranthene	ug/kg	399	990		PKSB38444851-CW	04-Dec-09	26	J	6	5		150	
Benzo(k)fluoranthene	ug/kg	208	410	J	PKSB38444851-CW	04-Dec-09	50	J	6	4		1500	
Benzo(a)pyrene	ug/kg	394	790		PKSB38444851-CW	04-Dec-09	31	J	6	5		15	
Indeno(1,2,3-cd)pyrene	ug/kg	216	430	J	PKSB38444851-CW	04-Dec-09	63	J	6	4		150	
Dibenzo(a,h)anthracene	ug/kg	150	150	J	PKSB06192940-CW	03-Dec-09	150	J	6	2		15	
Dibenzo(a,h)anthracene	ug/kg	150	150	J	PKSB38444851-CW	04-Dec-09	150	J	6	2		15	
Benzo(g,h,i)perylene	ug/kg	262	700	J	PKSB06192940-CW	03-Dec-09	40	J	6	4			
Volatiles													
1,1-Dichloroethene	ug/kg	0.657	0.78	B	PKSB22-CW	02-Dec-09	0.55	B	6	3		24000	
Acetone	ug/kg	41.4	97		PKSB40-CW	03-Dec-09	8.2	B	6	3		6100000	
Carbon Disulfide	ug/kg	0.86	0.86	J	PKSB40-CW	03-Dec-09	0.86	J	6	1		82000	
Methylene chloride	ug/kg	0.74	0.74	B	PKSB40-CW	03-Dec-09	0.74	B	6	1		11000	
2-Butanone	ug/kg	24.5	32		PKSB40-CW	03-Dec-09	17	B	6	2		2800000	
Benzene	ug/kg	3	3	J	PKSB52-CW	18-Dec-09	3	J	6	1		1100	
Toluene	ug/kg	1.47	3.6	B	PKSB52-CW	18-Dec-09	0.52	B	6	5		500000	
2-Hexanone	ug/kg	5.35	18	B	PKSB52-CW	18-Dec-09	2	B	6	6		21000	
m,p-Xylene	ug/kg	1.1	1.1	B	PKSB52-CW	18-Dec-09	1.1	B	6	1			
Asbestos													
Asbestos, chrysotile	%	6.33	12		PKSB06192940-CW	03-Dec-09	0.1		4	4			1
Asbestos, chrysotile	%	6.33	12		PKSB08101215-CW	08-Dec-09	0.1		4	4			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 12
Park Native Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1260	ug/kg	16	16	J	PKSB03042226-NS	02-Dec-09	16	J	6	1		220	
Metals													
Aluminum	mg/kg	6770	8160	J	PKSB06192940-NS	03-Dec-09	6040	J	6	6	7700		
Arsenic	mg/kg	3.22	4.7	L	PKSB13303335-NS	07-Dec-09	2.7	L	6	6	0.39		
Barium	mg/kg	85.6	139		PKSB52-NS	18-Dec-09	50.1		6	6	1500		
Beryllium	mg/kg	0.557	0.76		PKSB52-NS	18-Dec-09	0.39	J	6	6	16		
Cadmium	mg/kg	0.387	0.55	J	PKSB13303335-NS	07-Dec-09	0.23	J	6	3	7		
Calcium	mg/kg	2782	6110	J	PKSB13303335-NS	07-Dec-09	1090		6	6			
Chromium	mg/kg	13.7	18.3		PKSB13303335-NS	07-Dec-09	9.2		6	6			
Cobalt	mg/kg	6.87	10.7		PKSB06192940-NS	03-Dec-09	4.5	J	6	6	2.3		
Copper	mg/kg	12.7	23.8	J	PKSB13303335-NS	07-Dec-09	9.1	J	6	6	310		
Iron	mg/kg	12087	16700	J	PKSB13303335-NS	07-Dec-09	7410	J	6	6	5500		
Lead	mg/kg	24.4	54.1		PKSB13303335-NS	07-Dec-09	8		6	6	40		
Magnesium	mg/kg	1852	2440	J	PKSB38444851-NS	04-Dec-09	1310		6	6			
Manganese	mg/kg	204	383	J	PKSB06192940-NS	03-Dec-09	97.4	J	6	6	180		
Mercury	mg/kg	0.083	0.095	J	PKSB13303335-NS	07-Dec-09	0.059	B	6	4	0.56		
Nickel	mg/kg	10.8	16.6		PKSB13303335-NS	07-Dec-09	8		6	6	150		
Potassium	mg/kg	803	954		PKSB52-NS	18-Dec-09	581	J	6	6			
Vanadium	mg/kg	19.7	22.7		PKSB52-NS	18-Dec-09	12.8		6	6	0.55		
Zinc	mg/kg	93.2	335		PKSB38444851-NS	04-Dec-09	24.8		6	6	2300		
Pesticides													
4,4'-DDD	ug/kg	3.15	6.9		PKSB13303335-NS	07-Dec-09	0.26	J	6	3		2000	
4,4'-DDE	ug/kg	0.75	1.5	J	PKSB13303335-NS	07-Dec-09	0.33	J	6	3		1400	
4,4'-DDT	ug/kg	0.285	0.29	J	PKSB03042226-NS	02-Dec-09	0.28	J	6	2		1700	
Aldrin	ug/kg	0.050	0.057	J	PKSB03042226-NS	02-Dec-09	0.042	J	6	2		29	
alpha-Chlordane	ug/kg	0.185	0.26	J	PKSB13303335-NS	07-Dec-09	0.11	J	6	2			
beta-BHC	ug/kg	0.062	0.086	B	PKSB03042226-NS	02-Dec-09	0.045	B	6	3		270	
delta-BHC	ug/kg	0.034	0.034	J	PKSB03042226-NS	02-Dec-09	0.034	J	6	1			
Dieldrin	ug/kg	0.18	0.18	J	PKSB03042226-NS	02-Dec-09	0.18	J	6	1		30	
Endosulfan I	ug/kg	0.05	0.05	J	PKSB03042226-NS	02-Dec-09	0.05	J	6	1			
Endosulfan II	ug/kg	0.121	0.22	J	PKSB03042226-NS	02-Dec-09	0.021	J	6	2			
Endosulfan sulfate	ug/kg	0.244	0.42	J	PKSB03042226-NS	02-Dec-09	0.067	J	6	2			
Endrin	ug/kg	0.073	0.073	J	PKSB03042226-NS	02-Dec-09	0.073	J	6	1		1800	
Endrin aldehyde	ug/kg	0.065	0.065	J	PKSB03042226-NS	02-Dec-09	0.065	J	6	1			
Endrin ketone	ug/kg	0.16	0.18	J	PKSB06192940-NS	03-Dec-09	0.14	J	6	2			
gamma-BHC(Lindane)	ug/kg	0.053	0.1	B	PKSB06192940-NS	03-Dec-09	0.021	B	6	3		520	
gamma-Chlordane	ug/kg	0.17	0.33	J	PKSB13303335-NS	07-Dec-09	0.02	J	6	3			
Heptachlor	ug/kg	0.036	0.041	B	PKSB38444851-NS	04-Dec-09	0.031	B	6	2		110	
Heptachlor epoxide	ug/kg	0.048	0.048	J	PKSB03042226-NS	02-Dec-09	0.048	J	6	1		53	
Methoxychlor	ug/kg	2.88	9.4	B	PKSB13303335-NS	07-Dec-09	0.11	B	6	4		31000	

Table 12
Park Native Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Benzaldehyde	ug/kg	36	36	J	PKSB13303335-NS	07-Dec-09	36	J	6	1		780000	
2-Methylphenol	ug/kg	119	200	J	PKSB13303335-NS	07-Dec-09	37	J	6	2		310000	
2,6-Dinitrotoluene	ug/kg	54	54	J	PKSB38444851-NS	04-Dec-09	54	J	6	1		6100	
3-Nitroaniline	ug/kg	330	330	J	PKSB38444851-NS	04-Dec-09	330	J	6	1			
Phenanthrene	ug/kg	49	49	J	PKSB13303335-NS	07-Dec-09	49	J	6	1			
Di-n-butylphthalate	ug/kg	37.5	45	J	PKSB13303335-NS	07-Dec-09	30	J	6	2		610000	
Fluoranthene	ug/kg	84.3	130	J	PKSB03042226-NS	02-Dec-09	29	J	6	4		230000	
Pyrene	ug/kg	72.5	110	J	PKSB03042226-NS	02-Dec-09	25	J	6	4		170000	
Butylbenzylphthalate	ug/kg	90	90	J	PKSB38444851-NS	04-Dec-09	90	J	6	1		260000	
Benzo(a)anthracene	ug/kg	45.3	54	J	PKSB03042226-NS	02-Dec-09	38	J	6	3		150	
Chrysene	ug/kg	59	77	J	PKSB03042226-NS	02-Dec-09	40	J	6	3		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	42.3	64	J	PKSB38444851-NS	04-Dec-09	31	J	6	3		35000	
Benzo(b)fluoranthene	ug/kg	70.5	130	J	PKSB03042226-NS	02-Dec-09	20	J	6	4		150	
Benzo(k)fluoranthene	ug/kg	97	120	J	PKSB03042226-NS	02-Dec-09	74	J	6	2		1500	
Benzo(a)pyrene	ug/kg	57	70	J	PKSB03042226-NS	02-Dec-09	43	J	6	3		15	
Indeno(1,2,3-cd)pyrene	ug/kg	31.3	45	J	PKSB03042226-NS	02-Dec-09	22	J	6	3		150	
Benzo(g,h,i)perylene	ug/kg	49	49	J	PKSB13303335-NS	07-Dec-09	49	J	6	1			
Volatiles													
1,1-Dichloroethene	ug/kg	1.38	2.2	B	PKSB40-NS	03-Dec-09	0.96	B	6	3		24000	
Acetone	ug/kg	52.7	91		PKSB52-NS	18-Dec-09	15		6	6		6100000	
Carbon Disulfide	ug/kg	5.65	9.4	J	PKSB40-NS	03-Dec-09	1.9	J	6	2		82000	
Methylene chloride	ug/kg	1.70	2.7	B	PKSB40-NS	03-Dec-09	0.69	B	6	2		11000	
2-Butanone	ug/kg	19.6	38	B	PKSB52-NS	18-Dec-09	5.5	J	6	4		2800000	
Chloroform	ug/kg	3.37	6.1	J	PKSB40-NS	03-Dec-09	0.64	J	6	2		290	
Cyclohexane	ug/kg	27	27		PKSB40-NS	03-Dec-09	27		6	1		700000	
Methylcyclohexane	ug/kg	51	51		PKSB40-NS	03-Dec-09	51		6	1			
4-Methyl-2-pentanone	ug/kg	6.07	9.6	J	PKSB40-NS	03-Dec-09	3.6	J	6	3		530000	
Toluene	ug/kg	2.68	4.5	B	PKSB40-NS	03-Dec-09	1.3	B	6	4		500000	
2-Hexanone	ug/kg	5.87	15	B	PKSB52-NS	18-Dec-09	2.1	B	6	6		21000	
o-Xylene	ug/kg	3.3	3.3	J	PKSB40-NS	03-Dec-09	3.3	J	6	1		380000	
m,p-Xylene	ug/kg	2.7	4.1	J	PKSB40-NS	03-Dec-09	1.3	B	6	2			
1,2,3-Trichlorobenzene	ug/kg	1.2	1.2	B	PKSB52-NS	18-Dec-09	1.2	B	6	1		4900	
Asbestos													
Asbestos, chrysotile	%	0.2	0.4		PKSB03042226-NS	02-Dec-09	0.1		6	6			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 13
Park Waste Layer Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1260	ug/kg	23.6	41	J	PKSB52-WA	18-Dec-09	1.9	J	6	3		220	
Metals													
Aluminum	mg/kg	10427	13200		PKSB52-WA	18-Dec-09	7980	J	6	6	7700		
Arsenic	mg/kg	2.62	5.7	L	PKSB08101215-WA	08-Dec-09	1.5	J & L	6	6	0.39		
Barium	mg/kg	321	1210		PKSB03042226-WA	02-Dec-09	76		6	6	1500		
Beryllium	mg/kg	0.432	0.72		PKSB08101215-WA	08-Dec-09	0.28	J	6	5	16		
Cadmium	mg/kg	0.722	1.2	L	PKSB08101215-WA	08-Dec-09	0.38	J	6	5	7		
Calcium	mg/kg	158167	201000	J	PKSB06192940-WA	03-Dec-09	124000	J	6	6			
Chromium	mg/kg	76.6	143		PKSB38444851-WA	04-Dec-09	42.5		6	6			
Cobalt	mg/kg	14.7	22.6		PKSB38444851-WA	04-Dec-09	10.9		6	6	2.3		
Copper	mg/kg	24.5	30.1	J	PKSB38444851-WA	04-Dec-09	16.3	J	6	6	310		
Iron	mg/kg	10867	12900	J	PKSB08101215-WA	08-Dec-09	7400	J	6	6	5500		
Lead	mg/kg	301	1290		PKSB03042226-WA	02-Dec-09	28.2		6	6	40		
Magnesium	mg/kg	35117	56600	J	PKSB38444851-WA	04-Dec-09	21400	J	6	6			
Managanese	mg/kg	250	375	J	PKSB08101215-WA	08-Dec-09	169	J	6	6	180		
Mercury	mg/kg	0.387	0.79		PKSB08101215-WA	08-Dec-09	0.058	J	6	4	0.56		
Nickel	mg/kg	189	357		PKSB38444851-WA	04-Dec-09	115		6	6	150		
Potassium	mg/kg	773	1560		PKSB38444851-WA	04-Dec-09	287	J	6	6			
Selenium	mg/kg	1.4	1.4	J	PKSB52-WA	18-Dec-09	1.4	J	6	1	39		
Sodium	mg/kg	374	582	J	PKSB06192940-WA	03-Dec-09	264	J	6	5			
Vanadium	mg/kg	16.6	21.1		PKSB08101215-WA	08-Dec-09	10.8		6	6	0.55		
Zinc	mg/kg	515	2350		PKSB03042226-WA	02-Dec-09	53.1		6	6	2300		
Pesticides													
4,4'-DDD	ug/kg	0.531	1	J	PKSB13303335-WA	07-Dec-09	0.043	J	6	5		2000	
4,4'-DDE	ug/kg	2.21	8.7		PKSB08101215-WA	08-Dec-09	0.065	J	6	6		1400	
4,4'-DDT	ug/kg	7.47	38		PKSB08101215-WA	08-Dec-09	0.071	J	6	6		1700	
Aldrin	ug/kg	0.043	0.046	J	PKSB06192940-WA	03-Dec-09	0.036	J	6	3		29	
Aldrin	ug/kg	0.043	0.046	J	PKSB38444851-WA	04-Dec-09	0.036	J	6	3		29	
alpha-BHC	ug/kg	0.026	0.032	J	PKSB38444851-WA	04-Dec-09	0.022	J	6	3		77	
alpha-Chlordane	ug/kg	0.376	1.1	J	PKSB08101215-WA	08-Dec-09	0.022	B	6	4			
beta-BHC	ug/kg	0.068	0.08	B	PKSB03042226-WA	02-Dec-09	0.052	B	6	3		270	
Dieldrin	ug/kg	2.93	14		PKSB08101215-WA	08-Dec-09	0.079	B	6	6		30	
Endosulfan I	ug/kg	0.099	0.12	J	PKSB06192940-WA	03-Dec-09	0.08	J	6	3			
Endosulfan II	ug/kg	1.10	1.8	J	PKSB08101215-WA	08-Dec-09	0.16	J	6	6			
Endosulfan sulfate	ug/kg	0.462	0.95	J	PKSB08101215-WA	08-Dec-09	0.16	J	6	5			
Endrin	ug/kg	0.842	2	J	PKSB08101215-WA	08-Dec-09	0.056	B	6	6		1800	
Endrin aldehyde	ug/kg	0.982	1.7	J	PKSB08101215-WA	08-Dec-09	0.27	J	6	6			
Endrin ketone	ug/kg	3.52	16		PKSB06192940-WA	03-Dec-09	0.29	J	6	6			
gamma-BHC(Lindane)	ug/kg	0.288	0.5	J	PKSB08101215-WA	08-Dec-09	0.076	B	6	2		520	
gamma-Chlordane	ug/kg	0.439	1.4	J	PKSB08101215-WA	08-Dec-09	0.036	J	6	4			
Heptachlor	ug/kg	0.62	0.96	J	PKSB08101215-WA	08-Dec-09	0.31	J	6	5		110	
Heptachlor epoxide	ug/kg	0.075	0.12	J	PKSB03042226-WA	02-Dec-09	0.024	B	6	3		53	
Methoxychlor	ug/kg	1.05	2.9	J	PKSB06192940-WA	03-Dec-09	0.23	B	6	6		31000	

Table 13
Park Waste Layer Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Phenanthrene	ug/kg	580	1300	J	PKSB08101215-WA	08-Dec-09	150	J	6	5			
Anthracene	ug/kg	108	210	J	PKSB08101215-WA	08-Dec-09	37	J	6	5		1700000	
Fluoranthene	ug/kg	796	1900		PKSB06192940-WA	03-Dec-09	160	J	6	5		230000	
Pyrene	ug/kg	1005	1600		PKSB08101215-WA	08-Dec-09	150	J	6	6		170000	
Benzo(a)anthracene	ug/kg	670	1100		PKSB06192940-WA	03-Dec-09	91	J	6	6		150	
Benzo(a)anthracene	ug/kg	670	1100	J	PKSB08101215-WA	08-Dec-09	91	J	6	6		150	
Chrysene	ug/kg	898	1600		PKSB08101215-WA	08-Dec-09	180	J	6	6		15000	
Benzo(b)fluoranthene	ug/kg	742	1800		PKSB06192940-WA	03-Dec-09	140	J	6	6		150	
Benzo(k)fluoranthene	ug/kg	286	670	J	PKSB06192940-WA	03-Dec-09	44	J	6	4		1500	
Benzo(a)pyrene	ug/kg	908	1800		PKSB08101215-WA	08-Dec-09	140	J	6	6		15	
Indeno(1,2,3-cd)pyrene	ug/kg	430	950	J	PKSB06192940-WA	03-Dec-09	79	J	6	5		150	
Dibenzo(a,h)anthracene	ug/kg	171	310	J	PKSB06192940-WA	03-Dec-09	32	J	6	2		15	
Benzo(g,h,i)perylene	ug/kg	608	1400	J	PKSB08101215-WA	08-Dec-09	120	J	6	5			
Volatiles													
1,1-Dichloroethene	ug/kg	1.60	1.6	B	PKSB40-WA	03-Dec-09	1.6	B	7	1		24000	
Acetone	ug/kg	79.9	320		PKSB03-WA	02-Dec-09	16	J	7	7		6100000	
CarbonDisulfide	ug/kg	4.20	4.2	J	PKSB03-WA	02-Dec-09	4.2	J	7	1		82000	
Methylene chloride	ug/kg	1.60	1.7	B	PKSB40-WA	03-Dec-09	1.5	B	7	2		11000	
2-Butanone	ug/kg	22.5	46		PKSB03-WA	02-Dec-09	4.6	J	7	3		2800000	
Chloroform	ug/kg	35.1	71	L	PKSB22-WA	02-Dec-09	1.7	J	7	7		290	
Cyclohexane	ug/kg	15	15	K	PKSB03-WA	02-Dec-09	15	K	7	1		700000	
Benzene	ug/kg	7.45	12	K	PKSB03-WA	02-Dec-09	2.9	J	7	2		1100	
Trichloroethene	ug/kg	5.22	9.1	J	PKSB22-WA	02-Dec-09	1.6	J	7	5		2800	
Methylcyclohexane	ug/kg	12	12	K	PKSB03-WA	02-Dec-09	12	K	7	1			
4-Methyl-2-pentanone	ug/kg	86.8	470		PKSB03-WA	02-Dec-09	2.8	J	7	6		530000	
Toluene	ug/kg	1231	8600		PKSB03-WA	02-Dec-09	1.5	B	7	7		500000	
2-Hexanone	ug/kg	10.3	23	B	PKSB52-WA	18-Dec-09	5.1	B	7	6		21000	
Ethylbenzene	ug/kg	20	20		PKSB03-WA	02-Dec-09	20		7	1		5400	
o-Xylene	ug/kg	31	31		PKSB03-WA	02-Dec-09	31		7	1		380000	
m,p-Xylene	ug/kg	21.1	41		PKSB03-WA	02-Dec-09	1.1	B	7	2			
Isopropylbenzene	ug/kg	1.30	1.3	J	PKSB03-WA	02-Dec-09	1.3	J	7	1		210000	
1,2-Dichlorobenzene	ug/kg	0.99	0.99	J	PKSB03-WA	02-Dec-09	0.99	J	7	1		190000	
1,2,3-Trichlorobenzene	ug/kg	1.30	1.3	B	PKSB52-WA	18-Dec-09	1.3	B	7	1		4900	
Asbestos													
Asbestos, chrysotile	%	14.8	17		PKSB13303335-WA	07-Dec-09	12		6	6			1
Crocidolite	%	0.1	0.1		PKSB08101215-WA	08-Dec-09	0.1		1	1			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 14
Reservoir Surface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1248	ug/kg	120	120		RVSB24-SS	13-Jan-10	120		6	1		220	
Aroclor-1254	ug/kg	140	140		RVSB24-SS	13-Jan-10	140		6	1		220	
Aroclor-1260	ug/kg	6.3	8.1	J	RVSB08-SS	12-Jan-10	5.1	J	6	3		220	
Metals													
Aluminum	mg/kg	6820	9840		RVSB04-SS	11-Jan-10	3220		6	6	7700		
Arsenic	mg/kg	5.25	7.1		RVSB19-SS	07-Jan-10	3.3		6	6	0.39		
Barium	mg/kg	85.4	100		RVSB17-SS	10-Dec-09	68.4		6	6	1500		
Beryllium	mg/kg	0.688	1.2		RVSB17-SS	10-Dec-09	0.36	J	6	5	16		
Cadmium	mg/kg	0.722	1.4	J	RVSB19-SS	07-Jan-10	0.25	J	6	6	7		
Calcium	mg/kg	13268	23300		RVSB08-SS	12-Jan-10	3840		6	6			
Chromium	mg/kg	17.1	25		RVSB19-SS	07-Jan-10	11.6		6	6			
Cobalt	mg/kg	7.96	11.1		RVSB04-SS	11-Jan-10	5.1	J	6	5	2.3		
Copper	mg/kg	29.8	63.2		RVSB19-SS	07-Jan-10	17.7		6	6	310		
Iron	mg/kg	14457	22500		RVSB04-SS	11-Jan-10	9030		6	6	5500		
Lead	mg/kg	82.1	153		RVSB19-SS	07-Jan-10	21.6		6	6	40		
Magnesium	mg/kg	4040	6030		RVSB17-SS	10-Dec-09	1530	J	6	6			
Manganese	mg/kg	498	890	J	RVSB17-SS	10-Dec-09	108		6	6	180		
Mercury	mg/kg	0.931	5		RVSB17-SS	10-Dec-09	0.06	B	6	6	0.56		
Nickel	mg/kg	18.3	31.7		RVSB04-SS	11-Jan-10	10.7		6	6	150		
Potassium	mg/kg	869	1110		RVSB04-SS	11-Jan-10	628	J	6	6			
Vanadium	mg/kg	22.5	29.7		RVSB04-SS	11-Jan-10	15.2		6	6	0.55		
Zinc	mg/kg	507	2440		RVSB04-SS	11-Jan-10	45.8		6	6	2300		
Pesticides													
4,4'-DDD	ug/kg	0.423	0.9	J	RVSB24-SS	13-Jan-10	0.08	B	6	6		2000	
4,4'-DDE	ug/kg	1.82	5.8	J	RVSB04-SS	11-Jan-10	0.063	J	6	6		1400	
4,4'-DDT	ug/kg	5.82	21	J	RVSB08-SS	12-Jan-10	0.86	J	6	6		1700	
Aldrin	ug/kg	0.448	1.2	J	RVSB24-SS	13-Jan-10	0.061	J	6	3		29	
alpha-BHC	ug/kg	0.056	0.093	J	RVSB19-SS	07-Jan-10	0.022	J	6	6		77	
alpha-Chlordane	ug/kg	0.512	1.5	J	RVSB24-SS	13-Jan-10	0.09	J	6	5			
beta-BHC	ug/kg	0.3	0.56	J	RVSB24-SS	13-Jan-10	0.1	J	6	6		270	
delta-BHC	ug/kg	0.064	0.16	J	RVSB17-SS	10-Dec-09	0.019	B	6	6			
Dieldrin	ug/kg	0.67	1.7	J	RVSB24-SS	13-Jan-10	0.13	J	6	6		30	
Endosulfan I	ug/kg	0.59	0.97	J	RVSB24-SS	13-Jan-10	0.16	J	6	3			
Endosulfan II	ug/kg	0.673	1.3	J	RVSB19-SS	07-Jan-10	0.33	J	6	6			
Endosulfan sulfate	ug/kg	0.166	0.44	J	RVSB19-SS	07-Jan-10	0.038	J	6	6			
Endrin	ug/kg	0.199	0.51	J	RVSB04-SS	11-Jan-10	0.05	J	6	6		1800	
Endrin aldehyde	ug/kg	0.347	1.1	J	RVSB17-SS	10-Dec-09	0.09	J	6	6			
Endrin ketone	ug/kg	0.77	2.2	J	RVSB04-SS	11-Jan-10	0.19	J	6	6			
gamma-BHC(Lindane)	ug/kg	0.14	0.27	J	RVSB04-SS	11-Jan-10	0.05	J	6	4		520	
gamma-Chlordane	ug/kg	0.309	0.94	J	RVSB24-SS	13-Jan-10	0.075	J	6	6			
Heptachlor	ug/kg	0.099	0.16	B	RVSB19-SS	07-Jan-10	0.064	B	6	6		110	
Heptachlor epoxide	ug/kg	0.090	0.29	J	RVSB19-SS	07-Jan-10	0.033	J	6	6		53	
Methoxychlor	ug/kg	0.348	1	J	RVSB17-SS	10-Dec-09	0.11	B	6	6		31000	

Table 14
Reservoir Surface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
2-Methylnaphthalene	ug/kg	36	36	J	RVSB24-SS	13-Jan-10	36	J	6	1		31000	
Acenaphthylene	ug/kg	41	41	J	RVSB17-SS	10-Dec-09	41	J	6	1			
Acenaphthene	ug/kg	45	45	J	RVSB17-SS	10-Dec-09	45	J	6	1		340000	
Fluorene	ug/kg	52	52	J	RVSB17-SS	10-Dec-09	52	J	6	1		230000	
Phenanthrene	ug/kg	263	720		RVSB17-SS	10-Dec-09	96	J	6	5			
Anthracene	ug/kg	160	160	J	RVSB17-SS	10-Dec-09	160	J	6	1		1700000	
Carbazole	ug/kg	84	84	J	RVSB17-SS	10-Dec-09	84	J	6	1			
Di-n-butylphthalate	ug/kg	44	91	J	RVSB19-SS	07-Jan-10	28	J	6	5		610000	
Fluoranthene	ug/kg	525	1600		RVSB17-SS	10-Dec-09	68	J	6	6		230000	
Pyrene	ug/kg	448	1300		RVSB17-SS	10-Dec-09	60	J	6	6		170000	
Butylbenzylphthalate	ug/kg	226	420	J	RVSB12-SS	08-Jan-10	38	J	6	3		260000	
Benzo(a)anthracene	ug/kg	260	740		RVSB17-SS	10-Dec-09	47	J	6	6		150	
Chrysene	ug/kg	309	880		RVSB17-SS	10-Dec-09	44	J	6	6		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	68.8	160	J	RVSB19-SS	07-Jan-10	23	J	6	6		35000	
Benzo(b)fluoranthene	ug/kg	406	1200		RVSB17-SS	10-Dec-09	63	J	6	6		150	
Benzo(k)fluoranthene	ug/kg	155	480		RVSB17-SS	10-Dec-09	26	J	6	6		1500	
Benzo(a)pyrene	ug/kg	338	850		RVSB17-SS	10-Dec-09	140	J	6	5		15	
Indeno(1,2,3-cd)pyrene	ug/kg	156	460	J	RVSB17-SS	10-Dec-09	31	J	6	6		150	
Dibenzo(a,h)anthracene	ug/kg	28	28	J	RVSB08-SS	12-Jan-10	28	J	6	1		15	
Benzo(g,h,i)perylene	ug/kg	360	360	J	RVSB17-SS	10-Dec-09	360	J	6	1			
Volatiles													
1,1-Dichloroethene	ug/kg	3.37	5.2	B	RVSB19-SS	07-Jan-10	1.5	B	6	3		24000	
Acetone	ug/kg	47.3	180		RVSB19-SS	07-Jan-10	9.3	B	6	5		6100000	
Methylacetate	ug/kg	2.6	2.6	J	RVSB04-SS	11-Jan-10	2.6	J	6	1		7800000	
Methylene chloride	ug/kg	2	2	J	RVSB12-SS	08-Jan-10	2	J	6	1		11000	
2-Butanone	ug/kg	26.7	32		RVSB12-SS	08-Jan-10	17		6	3		2800000	
Chloroform	ug/kg	1.47	2.8	B	RVSB19-SS	07-Jan-10	0.98	B	6	4		290	
Benzene	ug/kg	4.3	6.7	B	RVSB19-SS	07-Jan-10	1.9	B	6	2		1100	
Toluene	ug/kg	2.6	4.9	B	RVSB19-SS	07-Jan-10	1.4	J	6	4		500000	
2-Hexanone	ug/kg	21.2	30	B	RVSB12-SS	08-Jan-10	14	B	6	5		21000	
1,2,3-Trichlorobenzene	ug/kg	0.48	0.48	J	RVSB08-SS	12-Jan-10	0.48	J	6	1		4900	
Asbestos													
Asbestos	%	0.1	0.1		RVSB27-SS	21-Jan-10	0.1		3	1			1
Asbestos, chrysotile	%	0.683	1.2		RVSB08-SS	12-Jan-10	0.1		6	6			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 15
Reservoir Cover Waste Interface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1248	ug/kg	55	55		RVSB21222324-CW	13-Jan-10	55		6	1		220	
Aroclor-1254	ug/kg	25	25	J	RVSB21222324-CW	13-Jan-10	25	J	6	1		220	
Aroclor-1260	ug/kg	5.73	7.9	J	RVSB15161718-CW	10-Dec-09	3.6	J	6	3		220	
Metals													
Aluminum	mg/kg	7967	10900		RVSB050607-CW	12-Jan-10	6740		6	6	7700		
Arsenic	mg/kg	5.27	6.2		RVSB050607-CW	12-Jan-10	3.9		6	6	0.39		
Barium	mg/kg	102	138		RVSB09101112-CW	08-Jan-10	71.4		6	6	1500		
Beryllium	mg/kg	0.683	0.99		RVSB21222324-CW	13-Jan-10	0.37	J	6	6	16		
Cadmium	mg/kg	0.43	0.77	J	RVSB020304-CW	11-Jan-10	0.22	J	6	5	7		
Calcium	mg/kg	13968	34000		RVSB020304-CW	11-Jan-10	1880		6	6			
Chromium	mg/kg	17.4	21.4		RVSB050607-CW	12-Jan-10	12.6		6	6			
Cobalt	mg/kg	7.52	10.3		RVSB050607-CW	12-Jan-10	4.2	J	6	6	2.3		
Copper	mg/kg	25.2	43.1		RVSB020304-CW	11-Jan-10	13.1		6	6	310		
Iron	mg/kg	15800	19600		RVSB050607-CW	12-Jan-10	10000		6	6	5500		
Lead	mg/kg	65.3	148		RVSB020304-CW	11-Jan-10	19.6		6	6	40		
Magnesium	mg/kg	5518	16900		RVSB15161718-CW	10-Dec-09	1850		6	6			
Manganese	mg/kg	422	643		RVSB21222324-CW	13-Jan-10	117		6	6	180		
Mercury	mg/kg	0.431	1.8		RVSB15161718-CW	10-Dec-09	0.051	J	6	5	0.56		
Nickel	mg/kg	17.1	36.3		RVSB020304-CW	11-Jan-10	8.6		6	6	150		
Potassium	mg/kg	930	1630		RVSB050607-CW	12-Jan-10	568	J	6	6			
Vanadium	mg/kg	24.8	31.2		RVSB050607-CW	12-Jan-10	19.8		6	6	0.55		
Zinc	mg/kg	145	509		RVSB020304-CW	11-Jan-10	39.3		6	6	2300		
Pesticides													
4,4'-DDD	ug/kg	0.888	2.6	J	RVSB21222324-CW	13-Jan-10	0.13	J	6	6		2000	
4,4'-DDE	ug/kg	2.68	9.9		RVSB15161718-CW	10-Dec-09	0.15	J	6	6		1400	
4,4'-DDT	ug/kg	6.20	29		RVSB15161718-CW	10-Dec-09	0.38	J	6	6		1700	
Aldrin	ug/kg	0.065	0.17	J	RVSB21222324-CW	13-Jan-10	0.028	J	6	5		29	
alpha-BHC	ug/kg	0.022	0.027	J	RVSB09101112-CW	08-Jan-10	0.016	J	6	3		77	
alpha-Chlordane	ug/kg	0.280	0.53	J	RVSB21222324-CW	13-Jan-10	0.089	J	6	4			
beta-BHC	ug/kg	0.171	0.29	B	RVSB011920-CW	07-Jan-10	0.068	J	6	6		270	
delta-BHC	ug/kg	0.036	0.092	J	RVSB15161718-CW	10-Dec-09	0.0053	J	6	5			
Dieldrin	ug/kg	0.361	1.1	J	RVSB21222324-CW	13-Jan-10	0.056	J	6	6		30	
Endosulfan I	ug/kg	0.109	0.19	J	RVSB21222324-CW	13-Jan-10	0.048	J	6	3			
Endosulfan II	ug/kg	0.200	0.47	J	RVSB020304-CW	11-Jan-10	0.042	J	6	6			
Endosulfan sulfate	ug/kg	0.052	0.07	J	RVSB050607-CW	12-Jan-10	0.033	J	6	5			
Endrin	ug/kg	0.152	0.53	J	RVSB011920-CW	07-Jan-10	0.025	J	6	6		1800	
Endrin aldehyde	ug/kg	0.317	0.97	J	RVSB15161718-CW	10-Dec-09	0.058	J	6	5			
Endrin ketone	ug/kg	0.84	1.8	J	RVSB011920-CW	07-Jan-10	0.35	J	6	6			
gamma-BHC(Lindane)	ug/kg	0.185	0.42	J	RVSB15161718-CW	10-Dec-09	0.061	J	6	4		520	
gamma-Chlordane	ug/kg	0.229	0.49	J	RVSB21222324-CW	13-Jan-10	0.026	J	6	6			
Heptachlor	ug/kg	0.109	0.17	J	RVSB050607-CW	12-Jan-10	0.058	B	6	6		110	
Heptachlor epoxide	ug/kg	0.076	0.22	J	RVSB011920-CW	07-Jan-10	0.025	J	6	5		53	
Methoxychlor	ug/kg	0.228	0.54	J	RVSB050607-CW	12-Jan-10	0.12	B	6	6		31000	

Table 15
Reservoir Cover Waste Interface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
2-Methylnaphthalene	ug/kg	28	28	J	RVSB21222324-CW	13-Jan-10	28	J	6	1		31000	
Acenaphthylene	ug/kg	55	55	J	RVSB15161718-CW	10-Dec-09	55	J	6	1			
Acenaphthene	ug/kg	24	24	J	RVSB15161718-CW	10-Dec-09	24	J	6	1		340000	
Fluorene	ug/kg	39	39	J	RVSB15161718-CW	10-Dec-09	39	J	6	1		230000	
Phenanthrene	ug/kg	315	480		RVSB15161718-CW	10-Dec-09	120	J	6	4			
Anthracene	ug/kg	77	180	J	RVSB15161718-CW	10-Dec-09	23	J	6	4		1700000	
Carbazole	ug/kg	38	48	J	RVSB011920-CW	07-Jan-10	28	J	6	3			
Di-n-butylphthalate	ug/kg	46	46	J	RVSB011920-CW	07-Jan-10	46	J	6	1		610000	
Fluoranthene	ug/kg	574	1200		RVSB011920-CW	07-Jan-10	71	J	6	5		230000	
Pyrene	ug/kg	472	1000		RVSB011920-CW	07-Jan-10	69	J	6	5		170000	
Butylbenzylphthalate	ug/kg	70	70	J	RVSB011920-CW	07-Jan-10	70	J	6	1		260000	
Benzo(a)anthracene	ug/kg	288	610		RVSB011920-CW	07-Jan-10	40	J	6	5		150	
Chrysene	ug/kg	346	750		RVSB011920-CW	07-Jan-10	51	J	6	5		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	59.8	98	J	RVSB011920-CW	07-Jan-10	27	J	6	5		35000	
Benzo(b)fluoranthene	ug/kg	512	910		RVSB011920-CW	07-Jan-10	89	J	6	4		150	
Benzo(k)fluoranthene	ug/kg	180	330		RVSB011920-CW	07-Jan-10	29	J	6	4		1500	
Benzo(a)pyrene	ug/kg	335	670		RVSB011920-CW	07-Jan-10	68	J	6	4		15	
Indeno(1,2,3-cd)pyrene	ug/kg	144	260	J	RVSB011920-CW	07-Jan-10	28	J	6	5		150	
Dibenzo(a,h)anthracene	ug/kg	54	54	J	RVSB020304-CW	11-Jan-10	54	J	6	1		15	
Benzo(g,h,i)perylene	ug/kg	193	240	J	RVSB011920-CW	07-Jan-10	140	J	6	3			
Volatiles													
1,1-Dichloroethene	ug/kg	1.05	1.2	B	RVSB19-CW	07-Jan-10	0.89	B	5	2		24000	
Acetone	ug/kg	13.6	31	B	RVSB04-CW	11-Jan-10	3.5	B	5	4		6100000	
Methylacetate	ug/kg	3	3	J	RVSB04-CW	11-Jan-10	3	J	5	1		7800000	
Methylene chloride	ug/kg	1.1	1.1	B	RVSB12-CW	08-Jan-10	1.1	B	5	1		11000	
Chloroform	ug/kg	1.17	1.9	B	RVSB04-CW	11-Jan-10	0.79	B	5	3		290	
Benzene	ug/kg	2.1	2.6	B	RVSB04-CW	11-Jan-10	1.8	B	5	3		1100	
Toluene	ug/kg	1.7	2.4	B	RVSB04-CW	11-Jan-10	1.1	B	5	4		500000	
2-Hexanone	ug/kg	20.9	45	B	RVSB04-CW	11-Jan-10	7.6	B	5	4		21000	
1,2,4-Trichlorobenzene	ug/kg	0.85	0.85	B	RVSB19-CW	07-Jan-10	0.85	B	5	1		22000	
1,2,3-Trichlorobenzene	ug/kg	2.3	2.3	B	RVSB04-CW	11-Jan-10	2.3	B	5	1		4900	
Asbestos													
Asbestos, chrysotile	%	2.82	12		RVSB020304-CW	11-Jan-10	0.1		5	5			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 16
Reservoir Native Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Metals													
Aluminum	mg/kg	7828	10400		RVSB15161718-NS	10-Dec-09	6120		5	5	7700		
Arsenic	mg/kg	2.94	3.9		RVSB05060708-NS	12-Jan-10	1.8		5	5	0.39		
Barium	mg/kg	109	193		RVSB15161718-NS	10-Dec-09	64		5	5	1500		
Beryllium	mg/kg	0.65	0.72		RVSB1112-NS	08-Jan-10	0.56	J	5	5	16		
Calcium	mg/kg	1972	2710		RVSB020304-NS	11-Jan-10	891		5	5			
Chromium	mg/kg	13.4	18.7		RVSB15161718-NS	10-Dec-09	9.6		5	5			
Cobalt	mg/kg	6.28	7.7		RVSB020304-NS	11-Jan-10	5	J	5	5	2.3		
Copper	mg/kg	10.1	13.2		RVSB011920-NS	07-Jan-10	8.9		5	5	310		
Iron	mg/kg	11590	17700	J	RVSB15161718-NS	10-Dec-09	7230		5	5	5500		
Lead	mg/kg	13.0	20.1		RVSB1112-NS	08-Jan-10	7.5		5	5	40		
Magnesium	mg/kg	1888	2190		RVSB011920-NS	07-Jan-10	1540		5	5			
Manganese	mg/kg	335	538	J	RVSB15161718-NS	10-Dec-09	82.8		5	5	180		
Mercury	mg/kg	0.072	0.097	J	RVSB1112-NS	08-Jan-10	0.046	J	5	2	0.56		
Nickel	mg/kg	9.36	12.4		RVSB05060708-NS	12-Jan-10	7		5	5	150		
Potassium	mg/kg	559	652		RVSB15161718-NS	10-Dec-09	338	J	5	5			
Vanadium	mg/kg	21.7	31.4		RVSB15161718-NS	10-Dec-09	15.4		5	5	0.55		
Zinc	mg/kg	22.3	25.3		RVSB011920-NS	07-Jan-10	18.9		5	5	2300		
Pesticides													
4,4'-DDD	ug/kg	0.024	0.024	J	RVSB05060708-NS	12-Jan-10	0.024	J	5	1		2000	
4,4'-DDE	ug/kg	0.045	0.045	J	RVSB05060708-NS	12-Jan-10	0.045	J	5	1		1400	
alpha-BHC	ug/kg	0.016	0.016	J	RVSB05060708-NS	12-Jan-10	0.016	J	5	1		77	
beta-BHC	ug/kg	0.080	0.12	B	RVSB15161718-NS	10-Dec-09	0.046	J	5	5		270	
delta-BHC	ug/kg	0.038	0.078	J	RVSB020304-NS	11-Jan-10	0.015	B	5	3			
Dieldrin	ug/kg	0.042	0.065	J	RVSB05060708-NS	12-Jan-10	0.018	J	5	2		30	
Endosulfan I	ug/kg	0.036	0.036	J	RVSB15161718-NS	10-Dec-09	0.036	J	5	1			
Endosulfan II	ug/kg	0.041	0.044	J	RVSB05060708-NS	12-Jan-10	0.038	J	5	2			
Endosulfan sulfate	ug/kg	0.043	0.043	J	RVSB020304-NS	11-Jan-10	0.043	J	5	1			
Endrin aldehyde	ug/kg	0.067	0.11	J	RVSB020304-NS	11-Jan-10	0.024	J	5	2			
Endrin ketone	ug/kg	0.137	0.24	J	RVSB05060708-NS	12-Jan-10	0.034	J	5	2			
gamma-Chlordane	ug/kg	0.04	0.056	J	RVSB05060708-NS	12-Jan-10	0.024	B	5	2			
Heptachlor	ug/kg	0.055	0.085	J	RVSB020304-NS	11-Jan-10	0.031	J	5	5		110	
Heptachlor epoxide	ug/kg	0.038	0.042	J	RVSB05060708-NS	12-Jan-10	0.034	J	5	2		53	
Methoxychlor	ug/kg	0.163	0.23	B	RVSB1112-NS	08-Jan-10	0.13	B & J	5	3		31000	
Semivolatiles													
Di-n-butylphthalate	ug/kg	19.5	20	J	RVSB011920-NS	07-Jan-10	19	J	5	2		610000	
Bis(2-ethylhexyl)phthalate	ug/kg	21	21	J	RVSB15161718-NS	10-Dec-09	21	J	5	1		35000	

Table 16
Reservoir Native Soil Statistics

Volatiles													
Chloromethane	ug/kg	0.77	0.77	J	RVSB17-NS	10-Dec-09	0.77	J	5	1		12000	
1,1-Dichloroethene	ug/kg	0.84	0.84	B	RVSB17-NS	10-Dec-09	0.84	B	5	1		24000	
Acetone	ug/kg	20.0	59	B	RVSB19-NS	07-Jan-10	3.1	B	5	5		6100000	
Methylene chloride	ug/kg	0.55	0.55	B	RVSB12-NS	08-Jan-10	0.55	B	5	1		11000	
2-Butanone	ug/kg	40	40		RVSB08-NS	12-Jan-10	40		5	1		2800000	
Chloroform	ug/kg	1.34	3	B	RVSB08-NS	12-Jan-10	0.58	B	5	4		290	
Benzene	ug/kg	1.46	2	B	RVSB19-NS	07-Jan-10	0.91	B	5	2		1100	
4-Methyl-2-pentanone	ug/kg	1.35	1.5	J	RVSB17-NS	10-Dec-09	1.2	B	5	2		530000	
Toluene	ug/kg	1.56	3.1	B	RVSB19-NS	07-Jan-10	0.57	B	5	3		500000	
2-Hexanone	ug/kg	15.9	42	B	RVSB08-NS	12-Jan-10	5.7	B	5	4		21000	
1,2,4-Trichlorobenzene	ug/kg	0.84	0.84	B	RVSB19-NS	07-Jan-10	0.84	B	5	1		22000	
1,2,3-Trichlorobenzene	ug/kg	1.2	1.2	B	RVSB19-NS	07-Jan-10	1.2	B	5	1		4900	
Asbestos													
Asbestos	%	0.1	0.1		RVSB011920-NS	07-Jan-10	0.1		4	1			1
Asbestos, chrysotile	%	0.4	0.4		RVSB05060708-NS	12-Jan-10	0.4		1	1			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 17
Reservoir Waste Layer Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1260	ug/kg	4.4	4.4	J	RVSB15161718-WA	10-Dec-09	4.4	J	5	1		220	
Metals													
Aluminum	mg/kg	9778	12200		RVSB21222324-WA	13-Jan-10	3890		5	5	7700		
Antimony	mg/kg	3.6	3.6	J	RVSB21222324-WA	13-Jan-10	3.6	J	5	1	3.1		
Arsenic	mg/kg	10.8	35.2		RVSB21222324-WA	13-Jan-10	2.4		5	5	0.39		
Barium	mg/kg	105	134		RVSB05060708-WA	12-Jan-10	82.3		5	5	1500		
Beryllium	mg/kg	0.48	0.96		RVSB020304-WA	11-Jan-10	0.3	J	5	5	16		
Cadmium	mg/kg	1.16	2		RVSB21222324-WA	13-Jan-10	0.32	J	5	2	7		
Calcium	mg/kg	91480	146000		RVSB21222324-WA	13-Jan-10	41800		5	5			
Chromium	mg/kg	26.4	33.5		RVSB05060708-WA	12-Jan-10	18.2		5	5			
Cobalt	mg/kg	9.88	13		RVSB05060708-WA	12-Jan-10	5.1	J	5	5	2.3		
Copper	mg/kg	92.1	358		RVSB21222324-WA	13-Jan-10	20.2		5	5	310		
Iron	mg/kg	13514	28000		RVSB21222324-WA	13-Jan-10	5170	J	5	5	5500		
Lead	mg/kg	73.4	216		RVSB21222324-WA	13-Jan-10	16.9		5	5	40		
Magnesium	mg/kg	15360	36400		RVSB05060708-WA	12-Jan-10	4370		5	5			
Manganese	mg/kg	228	298		RVSB020304-WA	11-Jan-10	84	J	5	5	180		
Mercury	mg/kg	0.1095	0.15	B	RVSB21222324-WA	13-Jan-10	0.069	J	5	2	0.56		
Nickel	mg/kg	78.2	138		RVSB05060708-WA	12-Jan-10	26		5	5	150		
Potassium	mg/kg	805	1180		RVSB020304-WA	11-Jan-10	432	J	5	5			
Selenium	mg/kg	8	8		RVSB21222324-WA	13-Jan-10	8		5	1	39		
Vanadium	mg/kg	18.4	26		RVSB020304-WA	11-Jan-10	10.1		5	5	0.55		
Zinc	mg/kg	142	440		RVSB21222324-WA	13-Jan-10	24.2		5	5	2300		
Pesticides													
4,4'-DDD	ug/kg	0.164	0.35	J	RVSB21222324-WA	13-Jan-10	0.089	J	5	5		2000	
4,4'-DDE	ug/kg	7.40	36		RVSB21222324-WA	13-Jan-10	0.065	J	5	5		1400	
4,4'-DDT	ug/kg	2.97	14		RVSB21222324-WA	13-Jan-10	0.053	J	5	5		1700	
alpha-BHC	ug/kg	0.031	0.047	J	RVSB05060708-WA	12-Jan-10	0.014	J	5	2		77	
alpha-Chlordane	ug/kg	0.059	0.074	J	RVSB020304-WA	11-Jan-10	0.043	J	5	2			
beta-BHC	ug/kg	0.097	0.11	B	RVSB21222324-WA	13-Jan-10	0.083	J	5	4		270	
delta-BHC	ug/kg	0.065	0.15	J	RVSB05060708-WA	12-Jan-10	0.018	B	5	5			
Dieldrin	ug/kg	0.120	0.23	J	RVSB15161718-WA	10-Dec-09	0.04	J	5	4		30	
Endosulfanl	ug/kg	0.040	0.058	J	RVSB15161718-WA	10-Dec-09	0.021	J	5	2			
Endosulfan II	ug/kg	0.22	0.36	J	RVSB020304-WA	11-Jan-10	0.1	J	5	5			
Endosulfan II	ug/kg	0.22	0.36	J	RVSB05060708-WA	12-Jan-10	0.1	J	5	5			
Endosulfan sulfate	ug/kg	0.081	0.11	J	RVSB020304-WA	11-Jan-10	0.055	J	5	5			
Endosulfan sulfate	ug/kg	0.081	0.11	J	RVSB21222324-WA	13-Jan-10	0.055	J	5	5			
Endrin	ug/kg	0.198	0.77	J	RVSB21222324-WA	13-Jan-10	0.043	J	5	5		1800	
Endrin aldehyde	ug/kg	0.094	0.098	J	RVSB15161718-WA	10-Dec-09	0.089	J	5	2			
Endrin ketone	ug/kg	0.391	0.57	J	RVSB05060708-WA	12-Jan-10	0.043	J	5	5			
gamma-BHC(Lindane)	ug/kg	0.152	0.26	J	RVSB020304-WA	11-Jan-10	0.035	J	5	3		520	
gamma-Chlordane	ug/kg	0.053	0.084	J	RVSB21222324-WA	13-Jan-10	0.026	B	5	4			
Heptachlor	ug/kg	0.086	0.17	B	RVSB21222324-WA	13-Jan-10	0.027	J	5	5		110	
Heptachlor epoxide	ug/kg	0.042	0.057	J	RVSB05060708-WA	12-Jan-10	0.021	J	5	4		53	
Methoxychlor	ug/kg	0.428	1.2	B	RVSB21222324-WA	13-Jan-10	0.1	B & J	5	5		31000	

Table 17
Reservoir Waste Layer Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Naphthalene	ug/kg	23	23	J	RVSB15161718-WA	10-Dec-09	23	J	5	1		3600	
2-Methylnaphthalene	ug/kg	35	35	J	RVSB15161718-WA	10-Dec-09	35	J	5	1		31000	
Phenanthrene	ug/kg	58	60	J	RVSB21222324-WA	13-Jan-10	56	J	5	2			
Fluoranthene	ug/kg	107	190	J	RVSB21222324-WA	13-Jan-10	59	J	5	3		230000	
Pyrene	ug/kg	76.7	120	J	RVSB21222324-WA	13-Jan-10	51	J	5	3		170000	
Benzo(a)anthracene	ug/kg	42	64	J	RVSB21222324-WA	13-Jan-10	27	J	5	3		150	
Chrysene	ug/kg	62	76	J	RVSB21222324-WA	13-Jan-10	35	J	5	3		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	27	27	J	RVSB15161718-WA	10-Dec-09	27	J	5	1		35000	
Benzo(b)fluoranthene	ug/kg	71	85	J	RVSB21222324-WA	13-Jan-10	57	J	5	2		150	
Benzo(k)fluoranthene	ug/kg	24.5	29	J	RVSB21222324-WA	13-Jan-10	20	J	5	2		1500	
Benzo(a)pyrene	ug/kg	45	55	J	RVSB21222324-WA	13-Jan-10	35	J	5	2		15	
Indeno(1,2,3-cd)pyrene	ug/kg	24	28	J	RVSB21222324-WA	13-Jan-10	20	J	5	2		150	
Volatiles													
1,1-Dichloroethene	ug/kg	1.5	1.5	B	RVSB17-WA	10-Dec-09	1.5	B	4	1		24000	
Acetone	ug/kg	22.9	34	B	RVSB04-WA	11-Jan-10	6.6	B	4	3		6100000	
Methyl acetate	ug/kg	2	2	J	RVSB04-WA	11-Jan-10	2	J	4	1		7800000	
2-Butanone	ug/kg	22.5	24		RVSB08-WA	12-Jan-10	21		4	2		2800000	
Chloroform	ug/kg	15.2	27		RVSB08-WA	12-Jan-10	3.4	B	4	2		290	
4-Methyl-2-pentanone	ug/kg	1.7	1.8	J	RVSB04-WA	11-Jan-10	1.6	J	4	2		530000	
Toluene	ug/kg	1.5	1.8	B	RVSB17-WA	10-Dec-09	1.2	J	4	2		500000	
2-Hexanone	ug/kg	17.7	18	B	RVSB08-WA	12-Jan-10	17	B	4	3		21000	
2-Hexanone	ug/kg	17.7	18	B	RVSB24-WA	13-Jan-10	17	B	4	3		21000	
Asbestos													
Asbestos, chrysotile	%	13.2	15		RVSB020304-WA	11-Jan-10	12		5	5			1
Asbestos, chrysotile	%	13.2	15		RVSB21222324-WA	13-Jan-10	12		5	5			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 18
Asbestos Pile Surface Soils Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1260	ug/kg	67.4	370		APTF02-SS	14-Jan-10	5.6	J	10	7		220	
Metals													
Aluminum	mg/kg	10539	14800		APSB13-SS	15-Dec-09	5480		7	7	7700		
Arsenic	mg/kg	3.6	4.6		APSB32D-SS	14-Jan-10	2.3		7	7	0.39		
Barium	mg/kg	85.6	111		APSB02-SS	09-Dec-09	45.3		7	7	1500		
Beryllium	mg/kg	0.467	0.76		APSB02-SS	09-Dec-09	0.31	J	7	3	16		
Cadmium	mg/kg	1.30	2.3		APSB21-SS	14-Dec-09	0.38	J	7	6	7		
Calcium	mg/kg	58270	130000		APSB13-SS	15-Dec-09	4090		7	7			
Chromium	mg/kg	65.2	134		APSB32D-SS	14-Jan-10	13.3		7	7			
Cobalt	mg/kg	14.5	22.2		APSB32D-SS	14-Jan-10	5.4	J	7	7	2.3		
Copper	mg/kg	47.4	82.6		APSB32D-SS	14-Jan-10	9.6		7	7	310		
Iron	mg/kg	13857	22500	J	APSB02-SS	09-Dec-09	11300	J	7	7	5500		
Lead	mg/kg	82.3	206		APSB32D-SS	14-Jan-10	14.9		7	7	40		
Magnesium	mg/kg	33481	60100		APSB32D-SS	14-Jan-10	2870		7	7			
Manganese	mg/kg	334	488	J	APSB02-SS	09-Dec-09	167	J	7	7	180		
Mercury	mg/kg	0.174	0.34	B	APSB32-SS	14-Jan-10	0.037	J	7	7	0.56		
Nickel	mg/kg	177	371		APSB32D-SS	14-Jan-10	8.8		7	7	150		
Potassium	mg/kg	1148	2720		APSB02-SS	09-Dec-09	506	J	7	7			
Sodium	mg/kg	208	208	J	APSB02-SS	09-Dec-09	208	J	7	1			
Vanadium	mg/kg	26.7	37.5		APSB02-SS	09-Dec-09	19		7	7	0.55		
Zinc	mg/kg	146	285		APSB32D-SS	14-Jan-10	25.1		7	7	2300		
Pesticides													
4,4'-DDD	ug/kg	0.147	0.21	J	APSB32-SS	14-Jan-10	0.083	J	7	5		2000	
4,4'-DDE	ug/kg	0.450	0.73	J	APSB24-SS	15-Dec-09	0.028	J	7	5		1400	
4,4'-DDT	ug/kg	1.85	4.2	J	APSB32-SS	14-Jan-10	0.11	J	7	7		1700	
Aldrin	ug/kg	0.07	0.071	J	APSB02-SS	09-Dec-09	0.069	J	7	2		29	
alpha-BHC	ug/kg	0.02	0.02	J	APSB02-SS	09-Dec-09	0.02	J	7	1		77	
alpha-Chlordane	ug/kg	0.179	0.28	J	APSB10-SS	11-Dec-09	0.096	J	7	4			
beta-BHC	ug/kg	0.394	0.61	J	APSB13-SS	15-Dec-09	0.16	B	7	7		270	
delta-BHC	ug/kg	0.058	0.073	J	APSB10-SS	11-Dec-09	0.043	J	7	2			
Dieldrin	ug/kg	0.436	0.64	J	APSB32-SS	14-Jan-10	0.26	J	7	5		30	
Endosulfan I	ug/kg	0.065	0.12	J	APSB10-SS	11-Dec-09	0.024	J	7	3			
Endosulfan II	ug/kg	1.05	2.3	J	APSB10-SS	11-Dec-09	0.11	J	7	6			
Endosulfan sulfate	ug/kg	0.307	0.45	J	APSB10-SS	11-Dec-09	0.068	J	7	7			
Endosulfan sulfate	ug/kg	0.307	0.45	J	APSB24-SS	15-Dec-09	0.068	J	7	7			
Endrin	ug/kg	0.308	0.58	J	APSB10-SS	11-Dec-09	0.07	J	7	5		1800	
Endrin aldehyde	ug/kg	0.313	0.64	J	APSB10-SS	11-Dec-09	0.12	J	7	4			
Endrin ketone	ug/kg	1.78	3.3	J	APSB32D-SS	14-Jan-10	0.19	J	7	7			
gamma-BHC(Lindane)	ug/kg	0.453	1.7	J	APSB24-SS	15-Dec-09	0.035	J	7	5		520	
gamma-Chlordane	ug/kg	0.187	0.29	J	APSB24-SS	15-Dec-09	0.069	J	7	6			
Heptachlor	ug/kg	0.172	0.37	J	APSB24-SS	15-Dec-09	0.086	J	7	6		110	
Heptachlor epoxide	ug/kg	0.104	0.19	J	APSB32-SS	14-Jan-10	0.023	J	7	5		53	
Methoxychlor	ug/kg	0.318	0.39	B	APSB32-SS	14-Jan-10	0.17	B	7	5		31000	

Table 18
Asbestos Pile Surface Soils Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Naphthalene	ug/kg	27	27	J	APSB24-SS	15-Dec-09	27	J	7	1		3600	
2-Methylnaphthalene	ug/kg	38	38	J	APSB24-SS	15-Dec-09	38	J	7	1		31000	
Acenaphthene	ug/kg	190	260		APSB24-SS	15-Dec-09	120	J	7	2		340000	
Dibenzofuran	ug/kg	78.5	81	J	APSB10-SS	11-Dec-09	76	J	7	2		7800	
Fluorene	ug/kg	195	210	J	APSB10-SS	11-Dec-09	180	J	7	2		230000	
Phenanthrene	ug/kg	644	1700		APSB10-SS	11-Dec-09	42	J	7	6			
Anthracene	ug/kg	332	520		APSB10-SS	11-Dec-09	96	J	7	3		1700000	
Carbazole	ug/kg	135	140	J	APSB10-SS	11-Dec-09	130	J	7	2			
Fluoranthene	ug/kg	1059	2900		APSB10-SS	11-Dec-09	78	J	7	7		230000	
Pyrene	ug/kg	815	2200		APSB10-SS	11-Dec-09	58	J	7	7		170000	
Butylbenzylphthalate	ug/kg	67.5	120	J	APSB32D-SS	14-Jan-10	22	J	7	4		260000	
Benzo(a)anthracene	ug/kg	603	1500		APSB10-SS	11-Dec-09	37	J	7	6		150	
Chrysene	ug/kg	526	1400		APSB10-SS	11-Dec-09	42	J	7	7		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	44.5	48	J	APSB24-SS	15-Dec-09	41	J	7	2		35000	
Benzo(b)fluoranthene	ug/kg	692	1700		APSB10-SS	11-Dec-09	52	J	7	6		150	
Benzo(k)fluoranthene	ug/kg	398	630		APSB10-SS	11-Dec-09	180	J	7	4		1500	
Benzo(a)pyrene	ug/kg	550	1300		APSB10-SS	11-Dec-09	48	J	7	6		15	
Indeno(1,2,3-cd)pyrene	ug/kg	366	730		APSB10-SS	11-Dec-09	190	J	7	5		150	
Benzo(g,h,i)perylene	ug/kg	360	560		APSB10-SS	11-Dec-09	230	J	7	3			
Volatiles													
1,1-Dichloroethene	ug/kg	2.06	2.8	B	APSB21-SS	14-Dec-09	0.79	B	7	3		24000	
Acetone	ug/kg	12.8	21	B	APSB13-SS	15-Dec-09	3.3	B	7	3		6100000	
2-Butanone	ug/kg	58	58		APSB21-SS	14-Dec-09	58		7	1		2800000	
Chloroform	ug/kg	3.4	3.4	B	APSB32-SS	14-Jan-10	3.4	B	7	1		290	
Toluene	ug/kg	3.19	6.9	J	APSB32D-SS	14-Jan-10	0.84	B	7	4		500000	
2-Hexanone	ug/kg	87	92	B	APSB32-SS	14-Jan-10	82	B	7	2		21000	
Asbestos													
Asbestos, chrysotile	%	6.54	15		APSB32-SS	14-Jan-10	0.2		9	9			1
Asbestos, chrysotile	%	6.54	15		APSB34-SS	21-Jan-10	0.2		9	9			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 19
Asbestos Pile Cover Waste Interface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1016	ug/kg	33	33	J	APSB01020304-CW	09-Dec-09	33	J	3	1		390	
Aroclor-1254	ug/kg	62	62	J	APSB01020304-CW	09-Dec-09	62	J	3	1		220	
Aroclor-1260	ug/kg	18	18	J	APSB303132-CW	14-Jan-10	18	J	3	1		220	
Metals													
Aluminum	mg/kg	9023	9850		APSB09101112-CW	11-Dec-09	7490		3	3	7700		
Arenic	mg/kg	4.2	4.9		APSB01020304-CW	09-Dec-09	3.5		3	3	0.39		
Barium	mg/kg	88.4	106		APSB303132-CW	14-Jan-10	69.9		3	3	1500		
Beryllium	mg/kg	0.57	0.61	J	APSB09101112-CW	11-Dec-09	0.53	J	3	2	16		
Cadmium	mg/kg	1.01	2.5		APSB303132-CW	14-Jan-10	0.23	J	3	3	7		
Calcium	mg/kg	35067	73500		APSB303132-CW	14-Jan-10	15100		3	3			
Chromium	mg/kg	50.1	110		APSB303132-CW	14-Jan-10	19.5		3	3			
Cobalt	mg/kg	12.0	19.2		APSB303132-CW	14-Jan-10	8.3		3	3	2.3		
Copper	mg/kg	38.6	75.5		APSB303132-CW	14-Jan-10	15.7		3	3	310		
Iron	mg/kg	14100	14800	J	APSB09101112-CW	11-Dec-09	13300		3	3	5500		
Lead	mg/kg	108	171		APSB303132-CW	14-Jan-10	57		3	3	40		
Magnesium	mg/kg	21213	49800		APSB303132-CW	14-Jan-10	6320		3	3			
Manganese	mg/kg	409	489	J	APSB09101112-CW	11-Dec-09	339	J	3	3	180		
Mercury	mg/kg	0.237	0.39	B	APSB303132-CW	14-Jan-10	0.084	J	3	2	0.56		
Nickel	mg/kg	117	315		APSB303132-CW	14-Jan-10	17.7		3	3	150		
Potassium	mg/kg	913	1150	J	APSB303132-CW	14-Jan-10	588	J	3	3			
Vanadium	mg/kg	27.2	28.4		APSB303132-CW	14-Jan-10	25.1		3	3	0.55		
Zinc	mg/kg	126	255		APSB303132-CW	14-Jan-10	51.8		3	3	2300		
Pesticides													
4,4'-DDD	ug/kg	0.26	0.36	J	APSB01020304-CW	09-Dec-09	0.14	J	3	3		2000	
4,4'-DDE	ug/kg	0.276	0.47	J	APSB303132-CW	14-Jan-10	0.097	J	3	3		1400	
4,4'-DDT	ug/kg	2.80	5.5	J	APSB303132-CW	14-Jan-10	0.19	J	3	3		1700	
Aldrin	ug/kg	0.195	0.22	J	APSB09101112-CW	11-Dec-09	0.17	J	3	2		29	
alpha-BHC	ug/kg	0.041	0.041	J	APSB01020304-CW	09-Dec-09	0.041	J	3	1		77	
alpha-Chlordane	ug/kg	1.65	4.4		APSB09101112-CW	11-Dec-09	0.27	J	3	3			
beta-BHC	ug/kg	0.407	0.71	B	APSB303132-CW	14-Jan-10	0.25	B	3	3		270	
delta-BHC	ug/kg	0.075	0.076	J	APSB01020304-CW	09-Dec-09	0.073	J	3	2			
Dieldrin	ug/kg	0.607	0.76	J	APSB01020304-CW	09-Dec-09	0.36	J	3	3		30	
Endosulfan I	ug/kg	0.41	0.6	J	APSB01020304-CW	09-Dec-09	0.22	J	3	2			
Endosulfan II	ug/kg	2.25	5.1		APSB01020304-CW	09-Dec-09	0.34	J	3	3			
Endosulfan sulfate	ug/kg	0.331	0.57	J	APSB01020304-CW	09-Dec-09	0.083	J	3	3			
Endrin	ug/kg	0.583	1.1	J	APSB01020304-CW	09-Dec-09	0.27	J	3	3		1800	
Endrin aldehyde	ug/kg	0.43	0.91	J	APSB01020304-CW	09-Dec-09	0.19	J	3	3			
Endrin ketone	ug/kg	2.8	3.8	J	APSB303132-CW	14-Jan-10	1.1	J	3	3			
gamma-BHC(Lindane)	ug/kg	0.129	0.23	J	APSB303132-CW	14-Jan-10	0.069	J	3	3		520	
gamma-Chlordane	ug/kg	1.63	4.3	J	APSB09101112-CW	11-Dec-09	0.14	J	3	3			
Heptachlor	ug/kg	0.2	0.29	J	APSB01020304-CW	09-Dec-09	0.1	J	3	3		110	
Heptachlor epoxide	ug/kg	0.4	0.85	J	APSB09101112-CW	11-Dec-09	0.11	J	3	3		53	
Methoxychlor	ug/kg	0.57	0.79	J	APSB01020304-CW	09-Dec-09	0.26	B	3	3		31000	

Table 19
Asbestos Pile Cover Waste Interface Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Naphthalene	ug/kg	72	72	J	APSB01020304-CW	09-Dec-09	72	J	3	1		3600	
2-Methylnaphthalene	ug/kg	85	85	J	APSB01020304-CW	09-Dec-09	85	J	3	1		31000	
Acenaphthylene	ug/kg	140	140	J	APSB01020304-CW	09-Dec-09	140	J	3	1			
Acenaphthene	ug/kg	540	550		APSB01020304-CW	09-Dec-09	530	J	3	2		340000	
Dibenzofuran	ug/kg	370	450		APSB01020304-CW	09-Dec-09	290	J	3	2		7800	
Fluorene	ug/kg	845	970		APSB01020304-CW	09-Dec-09	720	J	3	2		230000	
Phenanthrene	ug/kg	5600	6100		APSB09101112-CW	11-Dec-09	5100		3	2			
Anthracene	ug/kg	2100	2300		APSB09101112-CW	11-Dec-09	1900		3	2		1700000	
Carbazole	ug/kg	285	360	J	APSB01020304-CW	09-Dec-09	210	J	3	2			
Fluoranthene	ug/kg	7417	13000	J	APSB09101112-CW	11-Dec-09	550	J	3	3		230000	
Pyrene	ug/kg	5323	9200		APSB09101112-CW	11-Dec-09	370	J	3	3		170000	
Butylbenzylphthalate	ug/kg	110	110	J	APSB01020304-CW	09-Dec-09	110	J	3	2		260000	
Butylbenzylphthalate	ug/kg	110	110	J	APSB303132-CW	14-Jan-10	110	J	3	2		260000	
Benzo(a)anthracene	ug/kg	3083	4900		APSB09101112-CW	11-Dec-09	250	J	3	3		150	
Chrysene	ug/kg	2880	4500		APSB09101112-CW	11-Dec-09	340	J	3	3		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	87.3	94	J	APSB303132-CW	14-Jan-10	77	J	3	3		35000	
Benzo(b)fluoranthene	ug/kg	3413	5000		APSB09101112-CW	11-Dec-09	440	J	3	3		150	
Benzo(k)fluoranthene	ug/kg	1633	2700		APSB01020304-CW	09-Dec-09	200	J	3	3		1500	
Benzo(a)pyrene	ug/kg	4350	4800		APSB01020304-CW	09-Dec-09	3900		3	2		15	
Indeno(1,2,3-cd)pyrene	ug/kg	1410	2200	J	APSB01020304-CW	09-Dec-09	230	J	3	3		150	
Benzo(g,h,i)perylene	ug/kg	1450	1700	J	APSB01020304-CW	09-Dec-09	1200		3	2			
Volatiles													
Acetone	ug/kg	4.3	4.3	B	APSB10-CW	11-Dec-09	4.3	B	3	1		6100000	
Carbon Disulfide	ug/kg	1.6	1.6	J	APSB10-CW	11-Dec-09	1.6	J	3	1		82000	
Benzene	ug/kg	1.1	1.1	J	APSB10-CW	11-Dec-09	1.1	J	3	1		1100	
Toluene	ug/kg	1.4	1.4	B	APSB10-CW	11-Dec-09	1.4	B	3	1		500000	
Tetrachloroethene	ug/kg	0.8	0.8	J	APSB10-CW	11-Dec-09	0.8	J	3	1		550	
2-Hexanone	ug/kg	47.7	92	B	APSB32-CW	14-Jan-10	3.4	B	3	2		21000	
1,2,3-Trichlorobenzene	ug/kg	1.7	1.7	B	APSB03-CW	09-Dec-09	1.7	B	3	1		4900	
Asbestos													
Asbestos, chrysotile	%	5.23	15		APSB303132-CW	14-Jan-10	0.3		3	3			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 20
Asbestos Pile Native Soils Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Metals													
Aluminum	mg/kg	10520	14200		APSB08131617-NS	16-Dec-09	6590		7	7	7700		
Arsenic	mg/kg	2.62	3.8		APSB09101112-NS	11-Dec-09	1.6		7	6	0.39		
Barium	mg/kg	119	155		APSB15212325-NS	14-Dec-09	51.9	J	7	7	1500		
Beryllium	mg/kg	0.637	0.86		APSB01020304-NS	09-Dec-09	0.46	J	7	6	16		
Calcium	mg/kg	45557	180000		APSB08131617-NS	16-Dec-09	14400		7	7			
Chromium	mg/kg	34.7	115		APSB08131617-NS	16-Dec-09	13.4		7	7			
Cobalt	mg/kg	12.3	20.7		APSB08131617-NS	16-Dec-09	7.7		7	7	2.3		
Copper	mg/kg	22.1	32.4		APSB08131617-NS	16-Dec-09	14.1		7	7	310		
Iron	mg/kg	14417	19300	J	APSB09101112-NS	11-Dec-09	9720		7	7	5500		
Lead	mg/kg	28.0	111		APSB01020304-NS	09-Dec-09	7.2		7	7	40		
Magnesium	mg/kg	12863	57300		APSB08131617-NS	16-Dec-09	2620		7	7			
Manganese	mg/kg	381	466	J	APSB24262728-NS	15-Dec-09	237	J	7	7	180		
Mercury	mg/kg	0.045	0.056	J	APSB09101112-NS	11-Dec-09	0.04	J	7	3	0.56		
Nickel	mg/kg	74.7	315		APSB08131617-NS	16-Dec-09	14.4		7	7	150		
Potassium	mg/kg	1094	1440		APSB01020304-NS	09-Dec-09	626	J	7	6			
Sodium	mg/kg	215	215	J	APSB09101112-NS	11-Dec-09	215	J	7	1			
Vanadium	mg/kg	21.4	29.4		APSB09101112-NS	11-Dec-09	10.1		7	7	0.55		
Zinc	mg/kg	36.5	64.2		APSB01020304-NS	09-Dec-09	21.9		7	7	2300		
Pesticides													
4,4'-DDD	ug/kg	0.070	0.095	J	APSB01020304-NS	09-Dec-09	0.031	J	7	3		2000	
4,4'-DDT	ug/kg	0.17	0.21	J	APSB3132-NS	14-Jan-10	0.13	J	7	2		1700	
Aldrin	ug/kg	0.036	0.036	J	APSB3132-NS	14-Jan-10	0.036	J	7	1		29	
beta-BHC	ug/kg	0.086	0.11	B	APSB01020304-NS	09-Dec-09	0.061	B	7	2		270	
delta-BHC	ug/kg	0.029	0.029	J	APSB3132-NS	14-Jan-10	0.029	J	7	1			
Dieldrin	ug/kg	0.043	0.053	J	APSB15212325-NS	14-Dec-09	0.026	J	7	3		30	
Endosulfan II	ug/kg	0.17	0.27	J	APSB01020304-NS	09-Dec-09	0.1	J	7	4			
Endosulfan sulfate	ug/kg	0.090	0.15	J	APSB01020304-NS	09-Dec-09	0.033	J	7	4			
Endrin	ug/kg	0.08	0.15	J	APSB01020304-NS	09-Dec-09	0.03	J	7	4		1800	
Endrin aldehyde	ug/kg	0.168	0.25	J	APSB08131617-NS	16-Dec-09	0.086	J	7	2			
Endrin ketone	ug/kg	0.109	0.16	J	APSB15212325D-NS	14-Dec-09	0.088	J	7	4			
gamma-Chlordane	ug/kg	0.042	0.052	J	APSB09101112-NS	11-Dec-09	0.032	J	7	3			
Heptachlor	ug/kg	0.04	0.042	J	APSB15212325D-NS	14-Dec-09	0.037	J	7	3		110	
Methoxychlor	ug/kg	0.281	0.48	B	APSB3132-NS	14-Jan-10	0.093	B	7	5		31000	

Table 20
Asbestos Pile Native Soils Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Naphthalene	ug/kg	22	22	J	APSB24262728-NS	15-Dec-09	22	J	7	1		3600	
Phenanthrene	ug/kg	83	110	J	APSB08131617-NS	16-Dec-09	56	J	7	2			
Anthracene	ug/kg	31	31	J	APSB08131617-NS	16-Dec-09	31	J	7	1		1700000	
Di-n-butylphthalate	ug/kg	22	22	J	APSB24262728-NS	15-Dec-09	22	J	7	1		610000	
Fluoranthene	ug/kg	75	110	J	APSB08131617-NS	16-Dec-09	22	J	7	3		230000	
Pyrene	ug/kg	89.5	93	J	APSB08131617-NS	16-Dec-09	86	J	7	2		170000	
Benzo(a)anthracene	ug/kg	48	54	J	APSB01020304-NS	09-Dec-09	42	J	7	2		150	
Chrysene	ug/kg	51	64	J	APSB01020304-NS	09-Dec-09	38	J	7	2		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	33	33	J	APSB01020304-NS	09-Dec-09	33	J	7	1		35000	
Benzo(b)fluoranthene	ug/kg	47	51	J	APSB01020304-NS	09-Dec-09	43	J	7	2		150	
Benzo(k)fluoranthene	ug/kg	23	23	J	APSB01020304-NS	09-Dec-09	23	J	7	1		1500	
Benzo(a)pyrene	ug/kg	41.5	45	J	APSB01020304-NS	09-Dec-09	38	J	7	2		15	
Indeno(1,2,3-cd)pyrene	ug/kg	26.5	31	J	APSB01020304-NS	09-Dec-09	22	J	7	2		150	
Benzo(g,h,i)perylene	ug/kg	39	39	J	APSB01020304-NS	09-Dec-09	39	J	7	1			
Volatiles													
1,1-Dichloroethene	ug/kg	1.13	1.6	B	APSB10-NS	11-Dec-09	0.84	B	7	4		24000	
Acetone	ug/kg	32.8	99	B	APSB13-NS	15-Dec-09	10	B	7	6		6100000	
Methylene chloride	ug/kg	1.6	1.7	B	APSB13-NS	15-Dec-09	1.5	B	7	2		11000	
2-Butanone	ug/kg	6.7	8.9	B	APSB13-NS	15-Dec-09	4.5	J	7	2		2800000	
Chloroform	ug/kg	34.2	72	L	APSB13-NS	15-Dec-09	0.92	B	7	6		290	
Trichloroethene	ug/kg	8.73	22		APSB13-NS	15-Dec-09	1.7	J	7	4		2800	
4-Methyl-2-pentanone	ug/kg	3.03	5.8	J	APSB03-NS	09-Dec-09	1.5	J	7	3		530000	
Toluene	ug/kg	1.78	2.7	B	APSB10-NS	11-Dec-09	0.86	B	7	2		500000	
2-Hexanone	ug/kg	13	14	B	APSB32-NS	14-Jan-10	12	B	7	2		21000	
Isopropyl benzene	ug/kg	1.8	1.8	J	APSB13-NS	15-Dec-09	1.8	J	7	1		210000	
1,2,3-Trichlorobenzene	ug/kg	0.68	0.68	B	APSB32-NS	14-Jan-10	0.68	B	7	1		4900	
Asbestos													
Asbestos, chrysotile	%	0.35	1.1		APSB24262728-NS	15-Dec-09	0.1		4	4			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 21
Asbestos Pile Waste Layer Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1254	ug/kg	16	16	J	APSB08131617-WA	16-Dec-09	16	J	6	1		220	
Aroclor-1260	ug/kg	6.5	6.5	J	APSB15212325-WA	14-Dec-09	6.5	J	6	1		220	
Metals													
Aluminum	mg/kg	10533	14900		APSB09101112-WA	11-Dec-09	7750		6	6	7700		
Arsenic	mg/kg	3.3	9		APSB01020304-WA	09-Dec-09	1.1	J	6	6	0.39		
Barium	mg/kg	131	177		APSB08131617-WA	16-Dec-09	95.7		6	6	1500		
Beryllium	mg/kg	0.42	0.58	J	APSB08131617-WA	16-Dec-09	0.33	J	6	4	16		
Cadmium	mg/kg	1.59	2.3		APSB01020304-WA	09-Dec-09	0.87	J	6	2	7		
Calcium	mg/kg	152317	255000		APSB303132-WA	14-Jan-10	20000		6	6			
Chromium	mg/kg	51.8	144		APSB15212325-WA	14-Dec-09	12.4		6	6			
Cobalt	mg/kg	11.7	26.2		APSB15212325-WA	14-Dec-09	6.1	J	6	6	2.3		
Copper	mg/kg	71.1	163		APSB303132-WA	14-Jan-10	29.1		6	6	310		
Iron	mg/kg	13310	21100	J	APSB01020304-WA	09-Dec-09	8150		6	6	5500		
Lead	mg/kg	46.4	112		APSB24262728-WA	15-Dec-09	16.7	K	6	6	40		
Magnesium	mg/kg	24503	71000		APSB15212325-WA	14-Dec-09	2570		6	6			
Manganese	mg/kg	262	334	J	APSB15212325-WA	14-Dec-09	184		6	6	180		
Mercury	mg/kg	0.078	0.094	B	APSB303132-WA	14-Jan-10	0.068	J	6	4	0.56		
Nickel	mg/kg	132	388		APSB15212325-WA	14-Dec-09	15.5		6	6	150		
Potassium	mg/kg	760	1010		APSB24262728-WA	15-Dec-09	537	J	6	4			
Sodium	mg/kg	320	320	J	APSB24262728-WA	15-Dec-09	320	J	6	1			
Vanadium	mg/kg	16.2	22.4		APSB09101112-WA	11-Dec-09	11.2		6	6	0.55		
Zinc	mg/kg	55.4	95.8		APSB303132-WA	14-Jan-10	23.4		6	6	2300		
Pesticides													
4,4'-DDD	ug/kg	0.282	0.51	J	APSB24262728-WA	15-Dec-09	0.052	J	6	5		2000	
4,4'-DDE	ug/kg	0.234	0.38	J	APSB01020304-WA	09-Dec-09	0.073	J	6	3		1400	
4,4'-DDT	ug/kg	0.475	0.99	J	APSB08131617-WA	16-Dec-09	0.17	J	6	6		1700	
Aldrin	ug/kg	0.366	1.2	J	APSB08131617-WA	16-Dec-09	0.045	J	6	4		29	
alpha-BHC	ug/kg	0.026	0.026	J	APSB01020304-WA	09-Dec-09	0.026	J	6	1		77	
alpha-Chlordane	ug/kg	0.253	0.45	J	APSB09101112-WA	11-Dec-09	0.15	J	6	3			
beta-BHC	ug/kg	0.17	0.27	B	APSB15212325-WA	14-Dec-09	0.11	B	6	4		270	
delta-BHC	ug/kg	0.126	0.17	J	APSB15212325-WA	14-Dec-09	0.082	J	6	2			
Dieldrin	ug/kg	1.057	3.4	J	APSB08131617-WA	16-Dec-09	0.24	J	6	6		30	
Endosulfan I	ug/kg	0.365	1.2	J	APSB08131617-WA	16-Dec-09	0.056	J	6	5			
Endosulfan II	ug/kg	1.97	4.2	J	APSB01020304-WA	09-Dec-09	0.28	J	6	4			
Endosulfan sulfate	ug/kg	0.751	2.7	J	APSB08131617-WA	16-Dec-09	0.084	J	6	5			
Endrin	ug/kg	0.118	0.15	J	APSB15212325-WA	14-Dec-09	0.071	J	6	4		1800	
Endrin aldehyde	ug/kg	1.43	6.1	J	APSB08131617-WA	16-Dec-09	0.12	J	6	6			
Endrin ketone	ug/kg	0.793	1.6	J	APSB15212325-WA	14-Dec-09	0.3	J	6	4			
gamma-Chlordane	ug/kg	0.275	0.56	J	APSB15212325-WA	14-Dec-09	0.041	J	6	4			
Heptachlor	ug/kg	1.22	5.6	J	APSB08131617-WA	16-Dec-09	0.06	B	6	5		110	
Heptachlor epoxide	ug/kg	0.069	0.098	J	APSB15212325-WA	14-Dec-09	0.028	J	6	3		53	
Methoxychlor	ug/kg	2.33	9.7	J	APSB08131617-WA	16-Dec-09	0.23	B	6	6		31000	

Table 21
Asbestos Pile Waste Layer Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
2-Methylnaphthalene	ug/kg	154	270	J	APSB08131617-WA	16-Dec-09	38	J	6	2		31000	
Acenaphthene	ug/kg	43	43	J	APSB01020304-WA	09-Dec-09	43	J	6	1		340000	
Fluorene	ug/kg	66	66	J	APSB01020304-WA	09-Dec-09	66	J	6	1		230000	
Phenanthrene	ug/kg	986	2500		APSB08131617-WA	16-Dec-09	65	J	6	4			
Anthracene	ug/kg	170	200	J	APSB15212325-WA	14-Dec-09	140	J	6	2		1700000	
Fluoranthene	ug/kg	411	1100		APSB01020304-WA	09-Dec-09	41	J	6	3		230000	
Pyrene	ug/kg	348	870		APSB01020304-WA	09-Dec-09	74	J	6	3		170000	
Benzo(a)anthracene	ug/kg	247	630		APSB01020304-WA	09-Dec-09	49	J	6	3		150	
Chrysene	ug/kg	280	680		APSB01020304-WA	09-Dec-09	79	J	6	3		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	56.7	73	J	APSB01020304-WA	09-Dec-09	44	J	6	3		35000	
Benzo(b)fluoranthene	ug/kg	442	830		APSB01020304-WA	09-Dec-09	53	J	6	2		150	
Benzo(k)fluoranthene	ug/kg	300	300		APSB01020304-WA	09-Dec-09	300		6	1		1500	
Benzo(a)pyrene	ug/kg	400	400		APSB01020304-WA	09-Dec-09	400		6	1		15	
Indeno(1,2,3-cd)pyrene	ug/kg	210	290	J	APSB01020304-WA	09-Dec-09	130	J	6	2		150	
Benzo(g,h,i)perylene	ug/kg	335	430	J	APSB15212325-WA	14-Dec-09	240	J	6	2			
Volatiles													
1,1-Dichloroethene	ug/kg	3.45	5	B	APSB21-WA	14-Dec-09	1.9	B	6	2		24000	
Acetone	ug/kg	304	1300	B	APSB13-WA	15-Dec-09	4.2	B	6	5		6100000	
Methylene chloride	ug/kg	6.2	11	B	APSB13-WA	15-Dec-09	1.4	B	6	2		11000	
2-Butanone	ug/kg	183	340	B	APSB13-WA	15-Dec-09	25		6	2		2800000	
Chloroform	ug/kg	220	630	L	APSB13-WA	15-Dec-09	1.4	B	6	4		290	
Cyclohexane	ug/kg	3.5	3.5	J	APSB21-WA	14-Dec-09	3.5	J	6	1		700000	
Carbon tetrachloride	ug/kg	26	26	J	APSB21-WA	14-Dec-09	26	J	6	1		250	
Trichloroethene	ug/kg	97.7	250		APSB13-WA	15-Dec-09	7.1	J	6	3		2800	
4-Methyl-2-pentanone	ug/kg	13	13	J	APSB10-WA	11-Dec-09	13	J	6	1		530000	
Toluene	ug/kg	10.2	29	B	APSB13-WA	15-Dec-09	1.5	J	6	4		500000	
2-Hexanone	ug/kg	77.5	130		APSB21-WA	14-Dec-09	25	B	6	2		21000	
Ethylbenzene	ug/kg	42	42	J	APSB13-WA	15-Dec-09	42	J	6	1		5400	
o-Xylene	ug/kg	130	130		APSB13-WA	15-Dec-09	130		6	1		380000	
m,p-Xylene	ug/kg	170	170		APSB13-WA	15-Dec-09	170		6	1			
Asbestos													
Asbestos, chrysotile	%	6.22	20		APSB303132-WA	14-Jan-10	0.8		6	6			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Tables 22
Floodplain Shallow and Deep Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Floodplain Shallow Soil Samples													
Aroclors													
Aroclor-1254	ug/kg	20.4	32	J	CKFP02-S	18-Jan-10	9.6	J	7	4		220	
Aroclor-1260	ug/kg	8.07	10	J	CKFP05-S	21-Jan-10	6.3	J	7	3		220	
Metals													
Aluminum	mg/kg	6363	7770		CKFP05-S	21-Jan-10	3580		7	7	7700		
Arsenic	mg/kg	3.07	4.1		CKFP05-S	21-Jan-10	2.1		7	7	0.39		
Barium	mg/kg	114	159		CKFP02-S	18-Jan-10	81.2		7	7	1500		
Beryllium	mg/kg	0.654	0.74		CKFP08-S	18-Jan-10	0.45	J	7	7	16		
Cadmium	mg/kg	0.439	0.82	J	CKFP02-S	18-Jan-10	0.27	J	7	7	7		
Calcium	mg/kg	6210	15300		CKFP04-S	15-Jan-10	1760	J	7	7			
Chromium	mg/kg	18.6	27		CKFP05-S	21-Jan-10	10		7	7			
Cobalt	mg/kg	7.09	8.8		CKFP05-S	21-Jan-10	5.2	J	7	7	2.3		
Copper	mg/kg	24.8	35.4		CKFP02-S	18-Jan-10	15.8		7	7	310		
Iron	mg/kg	14214	16900		CKFP05-S	21-Jan-10	11900		7	7	5500		
Lead	mg/kg	79	178		CKFP02-S	18-Jan-10	36.9		7	7	40		
Magnesium	mg/kg	3279	5730		CKFP04-S	15-Jan-10	1930		7	7			
Manganese	mg/kg	494	574		CKFP05-S	21-Jan-10	353		7	7	180		
Mercury	mg/kg	0.170	0.35	B	CKFP02-S	18-Jan-10	0.056	B	7	7	0.56		
Nickel	mg/kg	13	16.9		CKFP02-S	18-Jan-10	8.6		7	7	150		
Potassium	mg/kg	861	1640		CKFP04-S	15-Jan-10	587	J	7	7			
Vanadium	mg/kg	20.9	24.9		CKFP05-S	21-Jan-10	13.2		7	7	0.55		
Zinc	mg/kg	111	199		CKFP02-S	18-Jan-10	74.1		7	7	2300		
Pesticides													
4,4'-DDD	ug/kg	0.666	1.5	J	CKFP03-S	15-Jan-10	0.2	J	7	7		2000	
4,4'-DDE	ug/kg	1.11	2.4	J	CKFP01-S	18-Jan-10	0.25	J	7	7		1400	
4,4'-DDE	ug/kg	1.11	2.4	J	CKFP03-S	15-Jan-10	0.25	J	7	7		1400	
4,4'-DDT	ug/kg	13.1	60		CKFP03-S	15-Jan-10	0.91	J	7	7		1700	
Aldrin	ug/kg	0.105	0.36	J	CKFP02-S	18-Jan-10	0.018	J	7	7		29	
alpha-BHC	ug/kg	0.050	0.084	J	CKFP07-S	18-Jan-10	0.02	J	7	6		77	
alpha-Chlordane	ug/kg	0.909	2.1	J	CKFP03-S	15-Jan-10	0.18	J	7	7			
beta-BHC	ug/kg	0.287	0.63	J	CKFP02-S	18-Jan-10	0.12	B	7	7		270	
delta-BHC	ug/kg	0.119	0.3	J	CKFP07-S	18-Jan-10	0.052	J	7	7			
Dieldrin	ug/kg	0.71	1.8	J	CKFP01-S	18-Jan-10	0.18	J	7	7		30	
Endosulfan I	ug/kg	0.41	1.4	J	CKFP03-S	15-Jan-10	0.12	J	7	6			
Endosulfan II	ug/kg	1.11	3.1	J	CKFP03-S	15-Jan-10	0.084	J	7	7			
Endosulfan sulfate	ug/kg	0.212	0.32	J	CKFP07-S	18-Jan-10	0.093	J	7	7			
Endrin	ug/kg	0.165	0.53	J	CKFP03-S	15-Jan-10	0.048	J	7	7		1800	
Endrin aldehyde	ug/kg	0.693	1.5	J	CKFP07-S	18-Jan-10	0.089	J	7	7			
Endrin ketone	ug/kg	6.67	12	J	CKFP02-S	18-Jan-10	2.1	J	7	7			
Endrin ketone	ug/kg	6.67	12	J	CKFP07-S	18-Jan-10	2.1	J	7	7			
gamma-BHC(Lindane)	ug/kg	0.174	0.29	J	CKFP08-S	18-Jan-10	0.047	J	7	6		520	
gamma-Chlordane	ug/kg	0.604	1.6	J	CKFP01-S	18-Jan-10	0.12	J	7	7			
Heptachlor	ug/kg	0.171	0.28	B	CKFP02-S	18-Jan-10	0.12	J	7	7		110	
Heptachlor epoxide	ug/kg	0.152	0.29	J	CKFP01-S	18-Jan-10	0.037	J	7	7		53	
Methoxychlor	ug/kg	0.391	0.78	B	CKFP04-S	15-Jan-10	0.11	B	7	7		31000	

Tables 22
Floodplain Shallow and Deep Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Acenaphthylene	ug/kg	42	42	J	CKFP02-S	18-Jan-10	42	J	7	1			
Acenaphthene	ug/kg	108	220	J	CKFP07-S	18-Jan-10	40	J	7	4		340000	
Dibenzofuran	ug/kg	89	89	J	CKFP04-S	15-Jan-10	89	J	7	1		7800	
Fluorene	ug/kg	124	170	J	CKFP04-S	15-Jan-10	52	J	7	3		230000	
Phenanthrene	ug/kg	2257	3800		CKFP01-S	18-Jan-10	330		7	7			
Anthracene	ug/kg	302	440	J	CKFP07-S	18-Jan-10	52	J	7	7		1700000	
Carbazole	ug/kg	206	330	J	CKFP01-S	18-Jan-10	58	J	7	6			
Di-n-butylphthalate	ug/kg	150	150	J	CKFP03-S	15-Jan-10	150	J	7	1		610000	
Fluoranthene	ug/kg	3811	7000		CKFP01-S	18-Jan-10	480	L	7	7		230000	
Pyrene	ug/kg	2681	4600		CKFP07-S	18-Jan-10	390	L	7	7		170000	
Benzo(a)anthracene	ug/kg	1499	2600		CKFP07-S	18-Jan-10	300	L	7	7		150	
Chrysene	ug/kg	1484	2400		CKFP07-S	18-Jan-10	270	L	7	7		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	31	31	J	CKFP05-S	21-Jan-10	31	J	7	1		35000	
Benzo(b)fluoranthene	ug/kg	2064	3800		CKFP07-S	18-Jan-10	310		7	7		150	
Benzo(k)fluoranthene	ug/kg	686	1300		CKFP07-S	18-Jan-10	100	J	7	7		1500	
Benzo(a)pyrene	ug/kg	1411	2600		CKFP07-S	18-Jan-10	220		7	7		15	
Indeno(1,2,3-cd)pyrene	ug/kg	721	1200		CKFP07-S	18-Jan-10	140	J	7	7		150	
Dibenzo(a,h)anthracene	ug/kg	473	620		CKFP07-S	18-Jan-10	400	J	7	3		15	
Benzo(g,h,i)perylene	ug/kg	480	740		CKFP03-S	15-Jan-10	150	J	7	3			
Volatiles													
1,1-Dichloroethene	ug/kg	0.94	0.94	B	CKFP05-S	21-Jan-10	0.94	B	7	1		24000	
Acetone	ug/kg	19.5	26	B	CKFP07-S	18-Jan-10	13	B	7	2		6100000	
2-Butanone	ug/kg	21	21		CKFP05-S	21-Jan-10	21		7	1		2800000	
Chloroform	ug/kg	0.793	0.88	B	CKFP01-S	18-Jan-10	0.73	B	7	3		290	
Toluene	ug/kg	2	2	B	CKFP05-S	21-Jan-10	2	B	7	1		500000	
2-Hexanone	ug/kg	20.6	29	B	CKFP07-S	18-Jan-10	12	B	7	7		21000	
Asbestos													
Asbestos, chrysotile	%	0.238	0.5		CKFP02-S	18-Jan-10	0.1		8	8			1
Asbestos, chrysotile	%	0.238	0.5		CKFP04-S	15-Jan-10	0.1		8	8			1
Floodplain Deep Soil Samples													
Aroclors													
Aroclor-1248	ug/kg	20	20	J	CKFP01-D	18-Jan-10	20	J	9	1		220	
Aroclor-1254	ug/kg	32.6	72		CKFP03-D	15-Jan-10	9.3	J	9	4		220	
Aroclor-1260	ug/kg	15.8	29	J	CKFP06-D	21-Jan-10	8.9	J	9	5		220	
Metals													
Aluminum	mg/kg	7207	11100		CKFP02-D	18-Jan-10	4160		9	9	7700		
Arsenic	mg/kg	3.74	5.7		CKFP05-D	21-Jan-10	2.3		9	9	0.39		
Barium	mg/kg	136	211		CKFP02-D	18-Jan-10	99		9	9	1500		
Beryllium	mg/kg	0.69	0.94		CKFP07-D	18-Jan-10	0.43	J	9	9	16		
Cadmium	mg/kg	0.494	0.8	J	CKFP02-D	18-Jan-10	0.38	J	9	9	7		
Calcium	mg/kg	11949	76700		CKFP02-D	18-Jan-10	1500	J	9	9			
Chromium	mg/kg	21.2	31		CKFP05D-D	21-Jan-10	10.6		9	9			
Cobalt	mg/kg	7.58	10.8		CKFP05-D	21-Jan-10	5	J	9	9	2.3		
Copper	mg/kg	27.8	50.5		CKFP02-D	18-Jan-10	21.6	J	9	9	310		
Iron	mg/kg	15156	20600		CKFP05-D	21-Jan-10	12300		9	9	5500		
Lead	mg/kg	96.6	240		CKFP02-D	18-Jan-10	43.4	K	9	9	40		
Magnesium	mg/kg	4012	10700		CKFP02-D	18-Jan-10	2020	J	9	9			
Manganese	mg/kg	526	700		CKFP05-D	21-Jan-10	267		9	9	180		
Mercury	mg/kg	0.161	0.33	B	CKFP02-D	18-Jan-10	0.054	B	9	9	0.56		
Nickel	mg/kg	19.3	57.7		CKFP02-D	18-Jan-10	10.4		9	9	150		
Potassium	mg/kg	691	926		CKFP02-D	18-Jan-10	480	J	9	9			
Vanadium	mg/kg	22.3	30.9		CKFP05-D	21-Jan-10	14		9	9	0.55		
Zinc	mg/kg	121	213		CKFP02-D	18-Jan-10	90.5		9	9	2300		

Tables 22
Floodplain Shallow and Deep Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Pesticides													
4,4'-DDD	ug/kg	0.634	2.1	J	CKFP06-D	21-Jan-10	0.18	J	9	9		2000	
4,4'-DDE	ug/kg	1.65	4.7		CKFP01-D	18-Jan-10	0.12	J	9	9		1400	
4,4'-DDT	ug/kg	8.82	28		CKFP06-D	21-Jan-10	0.86	J	9	9		1700	
Aldrin	ug/kg	0.096	0.27	J	CKFP07-D	18-Jan-10	0.031	J	9	9		29	
alpha-BHC	ug/kg	0.046	0.076	J	CKFP03-D	15-Jan-10	0.025	J	9	6		77	
alpha-Chlordane	ug/kg	0.652	1.9	J	CKFP01-D	18-Jan-10	0.055	J	9	7			
beta-BHC	ug/kg	0.204	0.36	B	CKFP02-D	18-Jan-10	0.096	B	9	9		270	
delta-BHC	ug/kg	0.134	0.47	J	CKFP06-D	21-Jan-10	0.046	J	9	8			
Dieldrin	ug/kg	1.50	5.2	J	CKFP05-D	21-Jan-10	0.11	J	9	9		30	
Endosulfan I	ug/kg	0.247	0.98	J	CKFP03-D	15-Jan-10	0.045	J	9	9			
Endosulfan II	ug/kg	1.20	3.1	J	CKFP02-D	18-Jan-10	0.15	J	9	9			
Endosulfan sulfate	ug/kg	0.265	0.8	J	CKFP07-D	18-Jan-10	0.052	J	9	9			
Endrin	ug/kg	0.487	3.4	J	CKFP03-D	15-Jan-10	0.031	J	9	9		1800	
Endrin aldehyde	ug/kg	0.753	1.8	J	CKFP01-D	18-Jan-10	0.14	J	9	9			
Endrin ketone	ug/kg	8.18	22	J	CKFP06-D	21-Jan-10	0.26	J	9	9			
gamma-BHC(Lindane)	ug/kg	0.166	0.25	J	CKFP01-D	18-Jan-10	0.038	J	9	5		520	
gamma-BHC(Lindane)	ug/kg	0.166	0.25	J	CKFP06-D	21-Jan-10	0.038	J	9	5		520	
gamma-Chlordane	ug/kg	0.457	1.5	J	CKFP01-D	18-Jan-10	0.071	J	9	9			
Heptachlor	ug/kg	0.188	0.36	J	CKFP01-D	18-Jan-10	0.03	J	9	9		110	
Heptachlor epoxide	ug/kg	0.220	0.63	J	CKFP06-D	21-Jan-10	0.054	J	9	9		53	
Methoxychlor	ug/kg	0.657	2.7	J	CKFP07-D	18-Jan-10	0.13	B	9	9		31000	
Semivolatiles													
4-Methylphenol	ug/kg	460	460	J	CKFP06-D	21-Jan-10	460	J	9	1		31000	
Naphthalene	ug/kg	342	490	J	CKFP04-D	15-Jan-10	55	J	9	3		3600	
2-Methylnaphthalene	ug/kg	1079	2100		CKFP07-D	18-Jan-10	57	J	9	2		31000	
Acenaphthylene	ug/kg	150	150	J	CKFP06-D	21-Jan-10	150	J	9	1			
Acenaphthene	ug/kg	598	2700		CKFP07-D	18-Jan-10	27	J	9	6		340000	
Dibenzofuran	ug/kg	501	1200	J	CKFP07-D	18-Jan-10	24	J	9	4		7800	
Fluorene	ug/kg	564	1700	J	CKFP07-D	18-Jan-10	37	J	9	6		230000	
Phenanthrene	ug/kg	4223	15000		CKFP07-D	18-Jan-10	530		9	8			
Anthracene	ug/kg	850	3100		CKFP07-D	18-Jan-10	86	J	9	8		1700000	
Carbazole	ug/kg	451	1800	J	CKFP07-D	18-Jan-10	52	J	9	8			
Fluoranthene	ug/kg	5548	17000		CKFP07-D	18-Jan-10	880		9	8		230000	
Pyrene	ug/kg	4509	12000		CKFP07-D	18-Jan-10	870	J	9	8		170000	
Benzo(a)anthracene	ug/kg	2620	7700		CKFP07-D	18-Jan-10	420		9	8		150	
Chrysene	ug/kg	2580	7200		CKFP07-D	18-Jan-10	490		9	8		15000	
Bis(2-ethylhexyl)phthalate	ug/kg	110	220	J	CKFP06-D	21-Jan-10	35	B	9	3		35000	
Benzo(b)fluoranthene	ug/kg	2489	7500		CKFP07-D	18-Jan-10	470		9	8		150	
Benzo(k)fluoranthene	ug/kg	1114	2900	J	CKFP06-D	21-Jan-10	200	J	9	8		1500	
Benzo(a)pyrene	ug/kg	2163	5600		CKFP07-D	18-Jan-10	390		9	8		15	
Indeno(1,2,3-cd)pyrene	ug/kg	1086	2700		CKFP07-D	18-Jan-10	250		9	8		150	
Indeno(1,2,3-cd)pyrene	ug/kg	1086	2700	J	CKFP06-D	21-Jan-10	250		9	8		150	
Dibenzo(a,h)anthracene	ug/kg	250	250	J	CKFP02-D	18-Jan-10	250	J	9	1		15	
Benzo(g,h,i)perylene	ug/kg	909	2300		CKFP07-D	18-Jan-10	150	J	9	7			

Tables 22
Floodplain Shallow and Deep Soil Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Volatiles													
1,1-Dichloroethene	ug/kg	1.15	1.2	B	CKFP06-D	21-Jan-10	1.1	B	9	2		24000	
Acetone	ug/kg	618	2600		CKFP01-D	18-Jan-10	9	B	9	5		6100000	
2-Butanone	ug/kg	176	330		CKFP06-D	21-Jan-10	22	B	9	2		2800000	
Chloroform	ug/kg	5.94	42	L	CKFP02-D	18-Jan-10	0.65	B	9	8		290	
Benzene	ug/kg	1.44	2	J	CKFP06-D	21-Jan-10	0.88	J	9	2		1100	
Trichloroethene	ug/kg	2.6	2.6	J	CKFP02-D	18-Jan-10	2.6	J	9	1		2800	
Toluene	ug/kg	184	550		CKFP06-D	21-Jan-10	0.93	B	9	3		500000	
2-Hexanone	ug/kg	19.8	53	B	CKFP03-D	15-Jan-10	11	B	9	9		21000	
Ethylbenzene	ug/kg	8.1	8.1	J	CKFP06-D	21-Jan-10	8.1	J	9	1		5400	
m,p-Xylene	ug/kg	1	1	J	CKFP02-D	18-Jan-10	1	J	9	1			
1,2,4-Trichlorobenzene	ug/kg	1.01	1.4	B	CKFP06-D	21-Jan-10	0.64	B	9	3		22000	
1,2,3-Trichlorobenzene	ug/kg	1.17	1.5	B	CKFP06-D	21-Jan-10	0.82	B	9	3		4900	
Asbestos													
Asbestos, chrysotile	%	1.82	12		CKFP02-D	18-Jan-10	0.1		9	9			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 23
Reservoir Sediment Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Metals													
Aluminum	mg/kg	8440	12700		RVSD08-RI-01	24-Nov-09	1430		16	16	77000		
Arsenic	mg/kg	4.77	7.6	J	RVSD15-RI-01	24-Nov-09	0.55	J	16	16	3.9		
Barium	mg/kg	114	197	J	RVSD15-RI-01	24-Nov-09	10	J	16	16	15000		
Beryllium	mg/kg	0.32	0.4	J	RVSD06-RI-01	24-Nov-09	0.24	J	16	2	160		
Cadmium	mg/kg	1.34	2	J	RVSD08-RI-01	24-Nov-09	0.3	J	16	8	70		
Calcium	mg/kg	9448	21300		RVSD12-RI-01	24-Nov-09	465	J	16	16			
Chromium	mg/kg	36.8	65.5		RVSD08-RI-01	24-Nov-09	2.8		16	16			
Cobalt	mg/kg	6.69	11.1	J	RVSD02-RI-01	23-Nov-09	2.6	J	16	7	23		
Copper	mg/kg	53.2	90.9		RVSD08-RI-01	24-Nov-09	2.7	J	16	16	3100		
Iron	mg/kg	16595	25600		RVSD08-RI-01	24-Nov-09	1590		16	16	55000		
Lead	mg/kg	53.9	96		RVSD08-RI-01	24-Nov-09	2.8		16	16	400		
Magnesium	mg/kg	4025	11600		RVSD02-RI-01	23-Nov-09	356	J	16	16			
Manganese	mg/kg	282	542		RVSD06-RI-01	24-Nov-09	38.3		16	16	1800		
Mercury	mg/kg	0.219	0.36	J	RVSD11-RI-01	24-Nov-09	0.12	J	16	9	5.6		
Nickel	mg/kg	28.0	82.9		RVSD02-RI-01	23-Nov-09	1.8	J	16	16	1500		
Potassium	mg/kg	661	993	J	RVSD04-RI-01	23-Nov-09	320	J	16	7			
Vanadium	mg/kg	23.0	35	J	RVSD11-RI-01	24-Nov-09	2.2	J	16	16	5.5		
Zinc	mg/kg	182	354		RVSD08-RI-01	24-Nov-09	11.3		16	16	23000		
Pesticides													
4,4'-DDD	ug/kg	0.571	1.4	B	RVSD15-RI-01	24-Nov-09	0.13	B	16	12		20000	
4,4'-DDD	ug/kg	0.571	1.4	J	RVSD06-RI-01	24-Nov-09	0.13	B	16	12		20000	
4,4'-DDE	ug/kg	0.870	2.6	J	RVSD15-RI-01	24-Nov-09	0.03	J	16	16		14000	
4,4'-DDT	ug/kg	0.576	1.8	B	RVSD15-RI-01	24-Nov-09	0.098	B	16	12		17000	
Aldrin	ug/kg	0.203	0.39	B	RVSD14-RI-01	24-Nov-09	0.035	B	16	8		290	
alpha-BHC	ug/kg	0.267	0.63	J	RVSD15-RI-01	24-Nov-09	0.035	J	16	14		770	
alpha-Chlordane	ug/kg	0.240	0.83	J	RVSD06-RI-01	24-Nov-09	0.036	J	16	9			
beta-BHC	ug/kg	0.584	1.5	B	RVSD08-RI-01	24-Nov-09	0.12	B	16	16		2700	
delta-BHC	ug/kg	0.157	0.31	B	RVSD15-RI-01	24-Nov-09	0.036	B	16	15			
Dieldrin	ug/kg	0.356	1.1	J	RVSD12-RI-01	24-Nov-09	0.039	J	16	15		300	
Endosulfan I	ug/kg	0.161	0.33	J	RVSD11-RI-01	24-Nov-09	0.037	J	16	10			
Endosulfan I	ug/kg	0.161	0.33	J	RVSD14-RI-01	24-Nov-09	0.037	J	16	10			
Endosulfan II	ug/kg	0.443	1.4	J	RVSD15-RI-01	24-Nov-09	0.058	J	16	12			
Endosulfan sulfate	ug/kg	0.263	0.57	B	RVSD09-RI-01	24-Nov-09	0.091	B	16	8			
Endrin	ug/kg	0.419	1.3	J	RVSD06-RI-01	24-Nov-09	0.12	J	16	10		18000	
Endrin aldehyde	ug/kg	0.232	0.58	J	RVSD06-RI-01	24-Nov-09	0.026	J	16	7			
Endrin ketone	ug/kg	0.472	3.5	J	RVSD06-RI-01	24-Nov-09	0.057	J	16	14			
gamma-BHC(Lindane)	ug/kg	0.276	0.52	J	RVSD15-RI-01	24-Nov-09	0.13	J	16	13		5200	
gamma-Chlordane	ug/kg	0.441	1.3	B	RVSD15-RI-01	24-Nov-09	0.05	B	16	16			
Heptachlor	ug/kg	0.327	0.9	B	RVSD08-RI-01	24-Nov-09	0.042	B	16	16		1100	
Heptachlor epoxide	ug/kg	0.263	0.49	J	RVSD09-RI-01	24-Nov-09	0.14	J	16	11		530	
Methoxychlor	ug/kg	1.92	12	J	RVSD08-RI-01	24-Nov-09	0.098	B	16	16		310000	

Table 23
Reservoir Sediment Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Phenanthrene	ug/kg	480	480		RVSD06-RI-01	24-Nov-09	480		16	1			
Anthracene	ug/kg	120	120	J	RVSD06-RI-01	24-Nov-09	120	J	16	1		17000000	
Carbazole	ug/kg	47	47	J	RVSD06-RI-01	24-Nov-09	47	J	16	1			
Di-n-butylphthalate	ug/kg	141	340	J	RVSD15-RI-01	24-Nov-09	29	J	16	7		6100000	
Fluoranthene	ug/kg	299	910		RVSD06-RI-01	24-Nov-09	50	J	16	10		2300000	
Pyrene	ug/kg	252	720		RVSD06-RI-01	24-Nov-09	43	J	16	9		1700000	
Butylbenzylphthalate	ug/kg	200	200	J	RVSD11-RI-01	24-Nov-09	200	J	16	1		2600000	
Benzo(a)anthracene	ug/kg	163	410	J	RVSD06-RI-01	24-Nov-09	35	J	16	4		1500	
Chrysene	ug/kg	188	410	J	RVSD06-RI-01	24-Nov-09	32	J	16	5		150000	
Bis(2-ethylhexyl)phthalate	ug/kg	119	230	J	RVSD15-RI-01	24-Nov-09	51	J	16	5		350000	
Benzo(b)fluoranthene	ug/kg	231	470		RVSD06-RI-01	24-Nov-09	44	J	16	8		1500	
Benzo(k)fluoranthene	ug/kg	128	170	J	RVSD06-RI-01	24-Nov-09	85	J	16	2		15000	
Benzo(a)pyrene	ug/kg	192	370	J	RVSD06-RI-01	24-Nov-09	31	J	16	7		150	
Indeno(1,2,3-cd)pyrene	ug/kg	121	190	J	RVSD06-RI-01	24-Nov-09	82	J	16	3		1500	
Dibenzo(a,h)anthracene	ug/kg	65	65	J	RVSD06-RI-01	24-Nov-09	65	J	16	1		150	
Volatiles													
1,1-Dichloroethene	ug/kg	9.6	37	B	RVSD09-RI-01	24-Nov-09	1.1	B	16	9		240000	
Acetone	ug/kg	267	990		RVSD07-RI-01	23-Nov-09	25	B	16	14		61000000	
Carbon Disulfide	ug/kg	22.1	46	J	RVSD09-RI-01	24-Nov-09	4.1	J	16	12		820000	
Methylene chloride	ug/kg	7.2	11	B	RVSD10-RI-01	24-Nov-09	1.6	B	16	7		110000	
2-Butanone	ug/kg	121	210		RVSD07-RI-01	23-Nov-09	32		16	15		28000000	
4-Methyl-2-pentanone	ug/kg	44	44	B	RVSD07-RI-01	23-Nov-09	44	B	16	1		5300000	
Toluene	ug/kg	13.8	33	B	RVSD09-RI-01	24-Nov-09	0.83	B	16	14		5000000	
2-Hexanone	ug/kg	64.0	310	B	RVSD09-RI-01	24-Nov-09	4.9	B	16	16		210000	
Total Organic Carbon													
Total Organic Carbon	mg/kg	55559	108000		RVSD07-RI-01	23-Nov-09	5350		16	16			
Asbestos													
Asbestos, chrysotile	%	0.256	0.9		RVSD02-RI-01	23-Nov-09	0.1		16	16			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 24
Creek Sediment Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Aroclors													
Aroclor-1254	ug/kg	47.4	71		CKSD10-RI-01	19-Jan-10	5.2	J	12	3		2200	
Aroclor-1260	ug/kg	6.15	9.5	J	CKSD07-RI-01	19-Jan-10	2.8	J	12	2		2200	
Metals													
Aluminum	mg/kg	4593	6260		CKSD07-RI-01	19-Jan-10	3020		12	12	77000		
Arsenic	mg/kg	3.2	6.5		CKSD07-RI-01	19-Jan-10	1.7		12	12	3.9		
Barium	mg/kg	87.3	216		CKSD07-RI-01	19-Jan-10	47.7		12	12	15000		
Beryllium	mg/kg	0.598	1.1		CKSD09-RI-01	20-Jan-10	0.25	J	12	12	160		
Cadmium	mg/kg	0.252	0.32	J	CKSD07-RI-01	19-Jan-10	0.2	J	12	6	70		
Calcium	mg/kg	5377	26000	J	CKSD08-RI-01	19-Jan-10	1130	J	12	12			
Chromium	mg/kg	14.0	25.2		CKSD07-RI-01	19-Jan-10	6.3		12	12			
Cobalt	mg/kg	7.22	11.7		CKSD09-RI-01	20-Jan-10	2.8	J	12	12	23		
Copper	mg/kg	15.7	25.4	J	CKSD07-RI-01	19-Jan-10	9.1	J	12	12	3100		
Iron	mg/kg	15299	22100		CKSD02-RI-01	20-Jan-10	6250		12	12	55000		
Lead	mg/kg	25.0	53.2	K	CKSD10-RI-01	19-Jan-10	11.4	K	12	12	400		
Magnesium	mg/kg	4424	18300	J	CKSD08-RI-01	19-Jan-10	1620	J	12	12			
Manganese	mg/kg	510	2010		CKSD07-RI-01	19-Jan-10	195		12	12	1800		
Mercury	mg/kg	0.0543	0.091	J	CKSD10-RI-01	19-Jan-10	0.036	J	12	6	5.6		
Nickel	mg/kg	11.0	16.2		CKSD07-RI-01	19-Jan-10	5.2	J	12	12	1500		
Potassium	mg/kg	838	1510		CKSD02-RI-01	20-Jan-10	332	J	12	12			
Vanadium	mg/kg	17.6	27.4		CKSD09-RI-01	20-Jan-10	8.6		12	12	5.5		
Zinc	mg/kg	82.5	153		CKSD06-RI-01	19-Jan-10	46.4		12	12	23000		
Pesticides													
4,4'-DDD	ug/kg	0.840	3.3	J	CKSD03-RI-01	20-Jan-10	0.082	J	12	12		20000	
4,4'-DDE	ug/kg	0.433	1.9	J	CKSD03-RI-01	20-Jan-10	0.035	J	12	12		14000	
4,4'-DDT	ug/kg	1.61	7.5		CKSD10-RI-01	19-Jan-10	0.082	J	12	12		17000	
Aldrin	ug/kg	0.235	1.7	J	CKSD07-RI-01	19-Jan-10	0.012	J	12	12		290	
alpha-BHC	ug/kg	0.031	0.039	J	CKSD12-RI-01	19-Jan-10	0.026	J	12	6		770	
alpha-Chlordane	ug/kg	0.822	2.1	J	CKSD06-RI-01	19-Jan-10	0.072	J	12	12			
beta-BHC	ug/kg	0.106	0.22	J	CKSD03-RI-01	20-Jan-10	0.014	J	12	11		2700	
delta-BHC	ug/kg	0.070	0.13	J	CKSD09-RI-01	20-Jan-10	0.021	B	12	9			
Dieldrin	ug/kg	1.67	8.3		CKSD07-RI-01	19-Jan-10	0.24	J	12	12		300	
Endosulfan I	ug/kg	0.138	0.37	J	CKSD10-RI-01	19-Jan-10	0.022	J	12	11			
Endosulfan II	ug/kg	0.362	1.1	J	CKSD10-RI-01	19-Jan-10	0.06	J	12	11			
Endosulfan sulfate	ug/kg	0.096	0.17	J	CKSD04-RI-01	19-Jan-10	0.028	J	12	11			
Endrin	ug/kg	0.074	0.18	J	CKSD04-RI-01	19-Jan-10	0.024	J	12	12		18000	
Endrin aldehyde	ug/kg	0.287	0.53	J	CKSD03-RI-01	20-Jan-10	0.055	J	12	12			
Endrin aldehyde	ug/kg	0.287	0.53	J	CKSD04-RI-01	19-Jan-10	0.055	J	12	12			
Endrin ketone	ug/kg	1.64	4.7	J	CKSD09-RI-01	20-Jan-10	0.047	J	12	12			
Endrin ketone	ug/kg	1.64	4.7	J	CKSD12-RI-01	19-Jan-10	0.047	J	12	12			
gamma-BHC(Lindane)	ug/kg	0.080	0.13	J	CKSD03-RI-01	20-Jan-10	0.028	J	12	4		5200	
gamma-Chlordane	ug/kg	0.623	1.5	J	CKSD06-RI-01	19-Jan-10	0.19	J	12	12			
Heptachlor	ug/kg	0.084	0.15	J	CKSD04-RI-01	19-Jan-10	0.025	J	12	11		1100	
Heptachlor epoxide	ug/kg	0.162	0.36	J	CKSD06-RI-01	19-Jan-10	0.028	J	12	12		530	
Methoxychlor	ug/kg	0.226	0.37	J	CKSD07-RI-01	19-Jan-10	0.077	B	12	10		310000	

Table 24
Creek Sediment Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (mg/kg)	RSL (ug/kg)	RSL (%)
Semivolatiles													
Acetophenone	ug/kg	64.3	79	B	CKSD12-RI-01	19-Jan-10	45	B	12	4		7800000	
Acenaphthylene	ug/kg	25.5	26	J	CKSD10-RI-01	19-Jan-10	25	J	12	2			
Acenaphthene	ug/kg	76.3	140	J	CKSD07-RI-01	19-Jan-10	25	J	12	9		3400000	
Dibenzofuran	ug/kg	46.9	64	J	CKSD10-RI-01	19-Jan-10	25	J	12	7		78000	
Fluorene	ug/kg	98.2	180	J	CKSD07-RI-01	19-Jan-10	38	J	12	9		2300000	
Phenanthrene	ug/kg	1003	1900		CKSD06-RI-01	19-Jan-10	61	J	12	12			
Phenanthrene	ug/kg	1003	1900		CKSD07-RI-01	19-Jan-10	61	J	12	12			
Phenanthrene	ug/kg	1003	1900		CKSD10-RI-01	19-Jan-10	61	J	12	12			
Anthracene	ug/kg	197	330		CKSD06-RI-01	19-Jan-10	44	J	12	11		17000000	
Carbazole	ug/kg	124	230		CKSD06-RI-01	19-Jan-10	30	J	12	9			
Fluoranthene	ug/kg	1472	2700		CKSD10-RI-01	19-Jan-10	110	J	12	12		2300000	
Pyrene	ug/kg	1328	2200	J	CKSD06-RI-01	19-Jan-10	130	J	12	12		1700000	
Butylbenzylphthalate	ug/kg	31.7	42	J	CKSD12D-RI-01	19-Jan-10	26	J	12	3		2600000	
Benzo(a)anthracene	ug/kg	705	1200		CKSD06-RI-01	19-Jan-10	79	J	12	12		1500	
Chrysene	ug/kg	793	1300		CKSD06-RI-01	19-Jan-10	82	J	12	12		150000	
Chrysene	ug/kg	793	1300		CKSD10-RI-01	19-Jan-10	82	J	12	12		150000	
Bis(2-ethylhexyl)phthalate	ug/kg	74.7	180	B	CKSD10-RI-01	19-Jan-10	26	B	12	7		350000	
Benzo(b)fluoranthene	ug/kg	749	1300		CKSD06-RI-01	19-Jan-10	96	J	12	12		1500	
Benzo(b)fluoranthene	ug/kg	749	1300		CKSD10-RI-01	19-Jan-10	96	J	12	12		1500	
Benzo(k)fluoranthene	ug/kg	303	540		CKSD10-RI-01	19-Jan-10	54	J	12	12		15000	
Benzo(a)pyrene	ug/kg	613	1000		CKSD10-RI-01	19-Jan-10	84	J	12	12		150	
Indeno(1,2,3-cd)pyrene	ug/kg	326	570		CKSD10-RI-01	19-Jan-10	53	J	12	12		1500	
Benzo(g,h,i)perylene	ug/kg	227	420		CKSD06-RI-01	19-Jan-10	37	J	12	12			
Volatiles													
1,1-Dichloroethene	ug/kg	0.97	0.98	J	CKSD12D-RI-01	19-Jan-10	0.96	J	12	2		240000	
Acetone	ug/kg	23	23	B	CKSD07-RI-01	19-Jan-10	23	B	12	1		61000000	
Methylene chloride	ug/kg	1.42	2	B	CKSD10-RI-01	19-Jan-10	1.1	B	12	6		110000	
2-Butanone	ug/kg	16	16		CKSD04-RI-01	19-Jan-10	16		12	1		28000000	
Chloroform	ug/kg	0.964	1.2	B	CKSD08-RI-01	19-Jan-10	0.78	B	12	8		2900	
2-Hexanone	ug/kg	14.4	20	B	CKSD10-RI-01	19-Jan-10	12	B	12	12		210000	
Asbestos													
Asbestos, chrysotile	%	0.229	0.8		CKSD03-RI-01	20-Jan-10	0.1		7	7			1
Crocidolite	%	0.1	0.1		CKSD07-RI-01	19-Jan-10	0.1		1	1			1

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 25
Reservoir Surface Water Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (ug/L)	MCL (MFL)
Metals												
Aluminum	ug/L	927	3520		RVSW03-RI-01	20-Nov-09	107	B	6	6	37000	
Arsenic	ug/L	4.43	5.1	J	RVSW03-RI-01	20-Nov-09	3.7	J	6	3	0.45	
Barium	ug/L	136	297		RVSW03-RI-01	20-Nov-09	69.1	J	6	6	7300	
Calcium	ug/L	37817	43200		RVSW03-RI-01	20-Nov-09	34400		6	6		
Chromium	ug/L	8.1	10.4		RVSW03-RI-01	20-Nov-09	5.8	J	6	2		
Copper	ug/L	19.4	23.2	J	RVSW03-RI-01	20-Nov-09	15.5	J	6	2	1500	
Iron	ug/L	1017	3930		RVSW03-RI-01	20-Nov-09	78.2	B	6	6	26000	
Lead	ug/L	18.8	54.4		RVSW03-RI-01	20-Nov-09	3.6	J	6	5		
Magnesium	ug/L	6342	7680		RVSW03-RI-01	20-Nov-09	5670		6	6		
Manganese	ug/L	115	311		RVSW03-RI-01	20-Nov-09	40.2		6	6	880	
Potassium	ug/L	10627	11100		RVSW03D-RI-01	20-Nov-09	9960		6	6		
Sodium	ug/L	7325	7560		RVSW03D-RI-01	20-Nov-09	7080		6	6		
Vanadium	ug/L	22.3	22.3	J	RVSW03-RI-01	20-Nov-09	22.3	J	6	1	2.6	
Zinc	ug/L	131	176		RVSW03-RI-01	20-Nov-09	86		6	2	11000	
Pesticides												
beta-BHC	ug/L	0.007	0.0075	J	RVSW03D-RI-01	20-Nov-09	0.0058	J	6	3	0.37	
Semivolatiles												
Bis(2-ethylhexyl)phthalate	ug/L	0.52	0.52	J	RVSW02-RI-01	19-Nov-09	0.52	J	6	1	48	
Volatiles												
1,1-Dichloroethene	ug/L	0.96	1	B	RVSW03-RI-01	20-Nov-09	0.89	B	6	4	340	
Asbestos												
Asbestos,chrysotile	MFL	104	635.4		RVSW04-RI-01	20-Nov-09	1.78		9	9		7

Notes:
ug/L - microgram per liter
MCL - Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
MFL - millions of fibers per liter
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 26
Creek Surface Water Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (ug/L)	MCL (MFL)
Metals												
Aluminum	ug/L	161	212		CKSW05-RI-01	19-Jan-10	118	J	9	4	37000	
Barium	ug/L	122	179	J	CKSW06-RI-01	19-Jan-10	107	J	9	9	7300	
Calcium	ug/L	49744	54000		CKSW05-RI-01	19-Jan-10	32300		9	9		
Chromium	ug/L	3.85	4.4	J	CKSW02-RI-01	20-Jan-10	3.3	J	9	2		
Cyanide	ug/L	4.6	4.6	J	CKSW01-RI-01	20-Jan-10	4.6	J	9	1	730	
Iron	ug/L	274	1050		CKSW05-RI-01	19-Jan-10	77.4	B	9	9	26000	
Lead	ug/L	4.03	6.3	J	CKSW05-RI-01	19-Jan-10	2.8	J	9	3		
Magnesium	ug/L	16433	17800		CKSW01-RI-01	20-Jan-10	12200		9	9		
Manganese	ug/L	69.1	334		CKSW05-RI-01	19-Jan-10	13.6	J	9	9	880	
Potassium	ug/L	3716	4280	J	CKSW02-RI-01	20-Jan-10	2170	J	9	9		
Sodium	ug/L	103978	126000		CKSW02-RI-01	20-Jan-10	40700		9	9		
Pesticides												
Dieldrin	ug/L	0.009	0.0094	J	CKSW06-RI-01	19-Jan-10	0.0093	J	9	2	0.042	
Endrin aldehyde	ug/L	0.006	0.006	J	CKSW01-RI-01	20-Jan-10	0.0056	J	9	2		
Methoxychlor	ug/L	0.041	0.053	B	CKSW08D-RI-01	19-Jan-10	0.025	B	9	6	180	
Semivolatiles												
Acetophenone	ug/L	0.8	0.8	B	CKSW06-RI-01	19-Jan-10	0.8	B	9	1	3700	
Indeno(1,2,3-cd)pyrene	ug/L	1.2	1.2	J	CKSW04-RI-01	20-Jan-10	1.2	J	9	1	0.29	
Dibenzo(a,h)anthracene	ug/L	1.1	1.1	J	CKSW04-RI-01	20-Jan-10	1.1	J	9	1	0.029	
Benzo(g,h,i)perylene	ug/L	1.3	1.3	J	CKSW04-RI-01	20-Jan-10	1.3	J	9	1		
Volatiles												
Chloromethane	ug/L	0.21	0.25	B	CKSW07-RI-01	19-Jan-10	0.15	B	9	5	190	
Trichlorofluoromethane	ug/L	0.08	0.08	J	CKSW02-RI-01	20-Jan-10	0.08	J	9	1	1300	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	0.13	0.13	J	CKSW02-RI-01	20-Jan-10	0.13	J	9	1	59000	
Acetone	ug/L	2.17	3	B	CKSW01-RI-01	20-Jan-10	0.29	B	9	8	22000	
Carbon Disulfide	ug/L	0.062	0.062	B	CKSW08-RI-01	19-Jan-10	0.062	B	9	1	1000	
Methylene chloride	ug/L	0.088	0.12	B	CKSW08D-RI-01	19-Jan-10	0.064	B	9	8	48	
Chloroform	ug/L	0.177	0.28	B	CKSW01-RI-01	20-Jan-10	0.087	B	9	9	1.9	
Benzene	ug/L	0.068	0.068	J	CKSW06-RI-01	19-Jan-10	0.068	J	9	1	4.1	
Trichloroethene	ug/L	0.076	0.076	J	CKSW01-RI-01	20-Jan-10	0.076	J	9	1	20	
Bromodichloromethane	ug/L	0.08	0.084	J	CKSW07-RI-01	19-Jan-10	0.074	J	9	3	1.2	
Toluene	ug/L	0.071	0.09	B	CKSW06-RI-01	19-Jan-10	0.059	B	9	5	2300	
Tetrachloroethene	ug/L	0.077	0.16	J	CKSW03-RI-01	20-Jan-10	0.052	J	9	6	1.1	
Dibromochloromethane	ug/L	0.056	0.058	J	CKSW07-RI-01	19-Jan-10	0.054	J	9	2	1.5	
Asbestos												
Asbestos,chrysotile	MFL	10.9	29.99		CKSW05-RI-01	19-Jan-10	0.18		8	8		7

Notes:
ug/L - microgram per liter
MCL - Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
MFL - millions of fibers per liter
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 27
Park Groundwater Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (ug/L)	MCL (MFL)
Metals												
Aluminum	ug/L	7318	10500		PKPZ02D-RI-01	06-Jan-10	3760		4	4	3700	
Arsenic	ug/L	12.2	17.2		PKPZ02-RI-01	06-Jan-10	4.1	J	4	4	0.045	
Barium	ug/L	1751	2820		PKPZ02-RI-01	06-Jan-10	154	J	4	4	730	
Beryllium	ug/L	14.6	18.2		PKPZ02-RI-01	06-Jan-10	8.8		4	3	7.3	
Cadmium	ug/L	2.9	2.9	J	PKPZ01-RI-01	06-Jan-10	2.9	J	4	1	1.8	
Calcium	ug/L	68275	97200		PKPZ01-RI-01	06-Jan-10	34700		4	4		
Chromium	ug/L	21.2	28		PKPZ02D-RI-01	06-Jan-10	14		4	4		
Cobalt	ug/L	75.7	92		PKPZ01-RI-01	06-Jan-10	62.6		4	3	1.1	
Copper	ug/L	158	158		PKPZ01-RI-01	06-Jan-10	158		4	1	150	
Cyanide	ug/L	7.9	7.9	J	PKPZ01-RI-01	06-Jan-10	7.9	J	4	1	73	
Iron	ug/L	52658	111000		PKPZ02-RI-01	06-Jan-10	5320		4	4	2600	
Lead	ug/L	146	512		PKPZ01-RI-01	06-Jan-10	17.1		4	4		
Magnesium	ug/L	11270	25400		PKPZ01-RI-01	06-Jan-10	2550	J	4	4		
Manganese	ug/L	3680	5670		PKPZ02-RI-01	06-Jan-10	148		4	4	88	
Mercury	ug/L	0.069	0.069	B	PKPZ02D-RI-01	06-Jan-10	0.067	B	4	4	0.057	
Mercury	ug/L	0.069	0.069	B	PKPZ02-RI-01	06-Jan-10	0.067	B	4	4	0.057	
Mercury	ug/L	0.069	0.069	B	PKPZ03-RI-01	06-Jan-10	0.067	B	4	4	0.057	
Nickel	ug/L	37.7	51.3		PKPZ01-RI-01	06-Jan-10	18.5	J	4	4	73	
Potassium	ug/L	54100	65900		PKPZ02-RI-01	06-Jan-10	41300		4	4		
Sodium	ug/L	38475	59900		PKPZ02-RI-01	06-Jan-10	18400		4	4		
Vanadium	ug/L	118	203		PKPZ02D-RI-01	06-Jan-10	25.4	J	4	4	0.26	
Zinc	ug/L	307	900		PKPZ01-RI-01	06-Jan-10	91.8		4	4	1100	
Pesticides												
beta-BHC	ug/L	0.009	0.0087	J	PKPZ03-RI-01	06-Jan-10	0.0087	J	4	1	0.037	
Endosulfan sulfate	ug/L	0.008	0.008	J	PKPZ02D-RI-01	06-Jan-10	0.008	J	4	1		
Methoxychlor	ug/L	0.007	0.0071	J	PKPZ02D-RI-01	06-Jan-10	0.0064	J	4	2	18	
Semivolatiles												
Naphthalene	ug/L	2.1	2.1	J	PKPZ03-RI-01	06-Jan-10	2.1	J	4	1	0.14	
2-Methylnaphthalene	ug/L	1.7	1.7	J	PKPZ03-RI-01	06-Jan-10	1.7	J	4	1	15	
Carbazole	ug/L	0.58	0.58	J	PKPZ03-RI-01	06-Jan-10	0.58	J	4	1		
Volatiles												
Chloromethane	ug/L	0.110	0.14	B	PKPZ01-RI-01	06-Jan-10	0.079	B	4	2	19	
Trichlorofluoromethane	ug/L	0.067	0.067	J	PKPZ01-RI-01	06-Jan-10	0.067	J	4	1	130	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	0.12	0.12	J	PKPZ02-RI-01	06-Jan-10	0.12	J	4	1	5900	
Acetone	ug/L	5.75	7.1	B	PKPZ03-RI-01	06-Jan-10	3.7	B	4	4	2200	
Carbon Disulfide	ug/L	0.465	0.71		PKPZ02D-RI-01	06-Jan-10	0.089	B	4	4	100	
Methylene chloride	ug/L	0.075	0.075	B	PKPZ01-RI-01	06-Jan-10	0.075	B	4	1	4.8	
2-Butanone	ug/L	117	350	L	PKPZ01-RI-01	06-Jan-10	21	L	4	4	710	
Benzene	ug/L	4.57	6		PKPZ02-RI-01	06-Jan-10	2.6		4	3	0.41	
Methylcyclohexane	ug/L	1.2	1.2		PKPZ03-RI-01	06-Jan-10	1.2		4	1		
Toluene	ug/L	0.857	1.4		PKPZ02-RI-01	06-Jan-10	0.056	J	4	4	230	
Tetrachloroethene	ug/L	0.078	0.084	J	PKPZ02D-RI-01	06-Jan-10	0.074	J	4	3	0.11	
Ethylbenzene	ug/L	0.167	0.28	J	PKPZ03-RI-01	06-Jan-10	0.11	J	4	3	1.5	
o-Xylene	ug/L	0.357	0.63		PKPZ03-RI-01	06-Jan-10	0.21	J	4	3	120	
m,p-Xylene	ug/L	1.14	2.6		PKPZ03-RI-01	06-Jan-10	0.4	J	4	3		

Table 27
Park Groundwater Statistics

Asbestos												
Asbestos, chrysotile	MFL	3645	7838.52		PKPZ02-RI-01	06-Jan-10	1247.04		8	8		7

Notes:
ug/L - microgram per liter
MCL - Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
MFL - millions of fibers per liter
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 28
Asbestos Pile Groundwater Statistics

Analyte	Result Unit	Average Result of Detected Values	Maximum Result	Maximum Validation Flag	Maximum Detection Location	Maximum Detection Sample Date	Minimum Result	Minimum Validation Flag	Number of Samples Analyzed	Number of Samples Detected	RSL (ug/L)	MCL (MFL)
Metals												
Aluminum	ug/L	2278	7380		APPZ03-RI-01	06-Jan-10	134	B	5	4	3700	
Arsenic	ug/L	19.3	28.9		APPZ03-RI-01	06-Jan-10	6.3	J	5	3	0.045	
Barium	ug/L	695	1810		APPZ03-RI-01	06-Jan-10	164	J	5	5	730	
Beryllium	ug/L	10.3	10.3		APPZ03-RI-01	06-Jan-10	10.3		5	1	7.3	
Calcium	ug/L	555200	756000		APSB18-RI-01	09-Dec-09	146000		5	5		
Chromium	ug/L	21.1	29.8		APSB12-RI-01	11-Dec-09	8.2	J	5	3		
Cobalt	ug/L	42.2	42.2	J	APPZ03-RI-01	06-Jan-10	42.2	J	5	1	1.1	
Copper	ug/L	23.8	33.3		APPZ03-RI-01	06-Jan-10	11.7	J	5	3	150	
Cyanide	ug/L	4.9	4.9	J	APPZ01-RI-01	06-Jan-10	4.9	J	5	1	73	
Iron	ug/L	33748	87300		APPZ03-RI-01	06-Jan-10	92.4	J	5	4	2600	
Lead	ug/L	18.9	69.6		APPZ03-RI-01	06-Jan-10	5.5	J	5	5		
Magnesium	ug/L	53866	179000		APPZ01-RI-01	06-Jan-10	2130	J	5	5		
Manganese	ug/L	4148	11500		APPZ03-RI-01	06-Jan-10	7.7	J	5	5	88	
Mercury	ug/L	0.067	0.087	B	APPZ01-RI-01	06-Jan-10	0.046	J	5	4	0.057	
Nickel	ug/L	31.4	51.6		APPZ03-RI-01	06-Jan-10	11.5	J	5	4	73	
Potassium	ug/L	24528	60900		APPZ01-RI-01	06-Jan-10	8040		5	5		
Sodium	ug/L	14806	31100		APPZ03-RI-01	06-Jan-10	8830		5	5		
Vanadium	ug/L	134	134		APPZ03-RI-01	06-Jan-10	134		5	1	0.26	
Zinc	ug/L	497	1280		APPZ01-RI-01	06-Jan-10	84		5	3	1100	
Pesticides												
4,4'-DDD	ug/L	0.006	0.0057	J	APPZ01-RI-01	06-Jan-10	0.0057	J	5	1	0.28	
beta-BHC	ug/L	0.006	0.0058	J	APPZ01-RI-01	06-Jan-10	0.0058	J	5	1	0.037	
Dieldrin	ug/L	0.014	0.014	J	APSB12-RI-01	11-Dec-09	0.014	J	5	1	0.0042	
Endosulfan II	ug/L	0.010	0.01	J	APSB18-RI-01	09-Dec-09	0.0096	J	5	2		
Endosulfan sulfate	ug/L	0.009	0.0098	J	APSB12-RI-01	11-Dec-09	0.0076	J	5	2		
Endrin ketone	ug/L	0.01	0.01	J	APPZ01-RI-01	06-Jan-10	0.01	J	5	1		
gamma-Chlordane	ug/L	0.009	0.0087	J	APSB12-RI-01	11-Dec-09	0.0087	J	5	1		
Methoxychlor	ug/L	0.042	0.051	J	APPZ02-RI-01	06-Jan-10	0.032	J	5	2	18	
Semivolatiles												
Caprolactam	ug/L	6.75	9.9	J	APSB18-RI-01	09-Dec-09	3.6	J	5	2	1800	
3-Nitroaniline	ug/L	9.2	9.2	J	APPZ02-RI-01	06-Jan-10	9.2	J	5	1		
Dibenzofuran	ug/L	2.6	2.6	J	APPZ01-RI-01	06-Jan-10	2.6	J	5	1	3.7	
Pentachlorophenol	ug/L	5.9	5.9	B	APSB18-RI-01	09-Dec-09	5.9	B	5	1	0.56	
Phenanthrene	ug/L	11	11	J	APPZ01-RI-01	06-Jan-10	11	J	5	1		
Fluoranthene	ug/L	2.94	5.1	J	APPZ01-RI-01	06-Jan-10	0.77	J	5	2	150	
Pyrene	ug/L	2.61	4.5	J	APPZ01-RI-01	06-Jan-10	0.71	J	5	2	110	
Volatiles												
Chloromethane	ug/L	0.124	0.15	B	APPZ01-RI-01	06-Jan-10	0.098	B	5	2	19	
1,1-Dichloroethene	ug/L	0.74	0.74	B	APSB12-RI-01	11-Dec-09	0.74	B	5	1	34	
Acetone	ug/L	5.03	5.7	B	APPZ02-RI-01	06-Jan-10	3.3	B	5	4	2200	
Carbon Disulfide	ug/L	0.753	1.1		APPZ03-RI-01	06-Jan-10	0.43	B	5	3	100	
Methylene chloride	ug/L	0.086	0.086	B	APPZ01-RI-01	06-Jan-10	0.086	B	5	1	4.8	
2-Butanone	ug/L	497	1400	L	APPZ03-RI-01	06-Jan-10	14	L	5	3	710	
Benzene	ug/L	0.54	0.54	J	APSB18-RI-01	09-Dec-09	0.54	J	5	1	0.41	
Toluene	ug/L	0.055	0.056	J	APPZ01-RI-01	06-Jan-10	0.054	J	5	2	230	
2-Hexanone	ug/L	10	10		APSB18-RI-01	09-Dec-09	10		5	1	4.7	

Table 28
Asbestos Pile Groundwater Statistics

Asbestos												
Asbestos, chrysotile	MFL	131671	1068888.89		APSB18-R1-01	09-Dec-09	1211.41		10	9		7

Notes:
ug/L - microgram per liter
MCL - Maximum Contaminant Levels provided by EPA under the Safe Drinking Water Act (Updated March 2010).
MFL - millions of fibers per liter
RSL - Regional Screening Level
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 29
Asbestos Detected in Park Soil Borings

Analyte	Result Unit	Sample Location	PKSB03042226-NS-2315	PKSB03042226-WA-2316	PKSB06192940-CW	PKSB06192940-NS
Subarea			**1**	**1**	**2**	**2**
Asbestos, chrysotile	%	Park	0.4	15	12	0.1
Crocidolite	%	Park	-	-	-	-
Total Asbestos	%	Park	0.4	***15***	***12***	0.1

Analyte	Result Unit	Sample Location	PKSB06192940-WA	PKSB08101215-CW-2503	PKSB08101215-NS-2504	PKSB08101215-WA-2505
Subarea			**2**	**3**	**3**	**3**
Asbestos, chrysotile	%	Park	15	12	0.1	15
Crocidolite	%	Park	-	-	-	0.1
Total Asbestos	%	Park	***15***	***12***	0.1	***15.1***

Analyte	Result Unit	Sample Location	PKSB13303335-NS-2394	PKSB13303335-WA-2395	PKSB15-SS-2506	PKSB19-SS
Subarea			**4**	**4**	**3**	**2**
Asbestos, chrysotile	%	Park	0.2	17	0.1	0.4
Crocidolite	%	Park	-	-	-	-
Total Asbestos	%	Park	0.2	***17***	0.1	0.4

Analyte	Result Unit	Sample Location	PKSB38444851-CW-2392	PKSB38444851-NS-2391	PKSB38444851-WA-2390	PKSB52-CW-2748
Subarea			**5**	**5**	**5**	**None**
Asbestos, chrysotile	%	Park	0.1	0.2	15	1.2
Crocidolite	%	Park	-	-	-	-
Total Asbestos	%	Park	0.1	0.2	***15***	***1.2***

Analyte	Result Unit	Sample Location	PKSB52-NS-2749	PKSB52-WA-2750	PKSB53-SS-3547
Subarea			**None**	**None**	**3**
Asbestos, chrysotile	%	Park	0.1	12	0.5
Crocidolite	%	Park	-	-	-
Total Asbestos	%	Park	0.1	***12***	0.5

Notes:

PK - Park

SB - Soil Borings

"-" - Not detected

Bold and italicized values exceed RSL of 1% total asbestos.

Table 30
Volatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB03-WA	PKSB15-CW	PKSB15-NS	PKSB15-SS	PKSB15-WA	PKSB19-SS	PKSB22-CW
Subarea			1	3	3	3	3	2	1
1,1-Dichloroethene	ug/kg	24000						1.3 B	0.78 B
1,2,3-Trichlorobenzene	ug/kg	4900							
1,2-Dichlorobenzene	ug/kg	190000	0.99 J						
2-Butanone	ug/kg	2800000	46		5.5 J		4.6 J		
2-Hexanone	ug/kg	21000	9.6 B	3.1 B	2.1 B	12 B		6 B	2.8 B
4-Methyl-2-pentanone	ug/kg	530000	470				4.8 J		
Acetone	ug/kg	6100000	320	8.2 B	22 B	6.6 B	24 B		
Benzene	ug/kg	1100	12 K						
Carbon Disulfide	ug/kg	82000	4.2 J						
Chloroform	ug/kg	290	2.1 J		0.64 J		42 J		
Cyclohexane	ug/kg	700000	15 K						
Ethylbenzene	ug/kg	5400	20						
Isopropylbenzene	ug/kg	210000	1.3 J						
m,p-Xylene	ug/kg		41						
Methylcyclohexane	ug/kg		12 K						
Methylene chloride	ug/kg	11000						1.8 B	
o-Xylene	ug/kg	380000	31						
Toluene	ug/kg	500000	8600	0.74 J			1.8 J	4.4 B	1.2 B
Trichloroethene	ug/kg	2800					3.4 J		

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 30
Volatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB22-NS	PKSB22-WA	PKSB30D-SS	PKSB30-SS	PKSB33-CW	PKSB33-NS	PKSB33-WA
Subarea			1	1	4	4	4	4	4
1,1-Dichloroethene	ug/kg	24000	0.97 B				0.64 B	0.96 B	
1,2,3-Trichlorobenzene	ug/kg	4900							
1,2-Dichlorobenzene	ug/kg	190000							
2-Butanone	ug/kg	2800000						12 J	
2-Hexanone	ug/kg	21000	2.4 B	5.7 B	9.2 B	3.7 B	3.8 B	2.7 B	5.2 B
4-Methyl-2-pentanone	ug/kg	530000		6.9 J				3.6 J	6.4 J
Acetone	ug/kg	6100000	15	38 B		12 B		40	72 B
Benzene	ug/kg	1100							
Carbon Disulfide	ug/kg	82000						1.9 J	
Chloroform	ug/kg	290		71 L					63 L
Cyclohexane	ug/kg	700000				0.63 J			
Ethylbenzene	ug/kg	5400							
Isopropylbenzene	ug/kg	210000							
m,p-Xylene	ug/kg								
Methylcyclohexane	ug/kg								
Methylene chloride	ug/kg	11000	0.69 B	1.5 B					
o-Xylene	ug/kg	380000							
Toluene	ug/kg	500000	1.3 B	3.1 B					1.7 J
Trichloroethene	ug/kg	2800		9.1 J					7.2 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 30
Volatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB38-SS	PKSB40-CW	PKSB40-NS	PKSB40-WA	PKSB45-17_3	PKSB51-CW	PKSB51-NS
Subarea			**5**	**2**	**2**	**2**	**5**	**5**	**5**
1,1-Dichloroethene	ug/kg	24000	0.63 B	0.55 B	2.2 B	1.6 B			
1,2,3-Trichlorobenzene	ug/kg	4900							
1,2-Dichlorobenzene	ug/kg	190000							
2-Butanone	ug/kg	2800000		32					23
2-Hexanone	ug/kg	21000	2 B	2 B	10 B	13 B		2.4 B	3 B
4-Methyl-2-pentanone	ug/kg	530000			9.6 J	30			
Acetone	ug/kg	6100000		97	80	16 J		19 B	68 B
Benzene	ug/kg	1100					**310000**		
Carbon Disulfide	ug/kg	82000		0.86 J	9.4 J				
Chloroform	ug/kg	290			6.1 J	1.7 J			
Cyclohexane	ug/kg	700000			27				
Ethylbenzene	ug/kg	5400					1300 J		
Isopropylbenzene	ug/kg	210000							
m,p-Xylene	ug/kg				4.1 J		2400 J		
Methylcyclohexane	ug/kg				51		3900 J		
Methylene chloride	ug/kg	11000		0.74 B	2.7 B	1.7 B			
o-Xylene	ug/kg	380000			3.3 J				
Toluene	ug/kg	500000		0.52 B	4.5 B	1.5 B	90000	1.3 B	1.6 B
Trichloroethene	ug/kg	2800							

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
PK – Park
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 30
Volatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB51-WA	PKSB52-CW	PKSB52-NS	PKSB52-WA
Subarea			**5**	**None**	**None**	**None**
1,1-Dichloroethene	ug/kg	24000				
1,2,3-Trichlorobenzene	ug/kg	4900			1.2 B	1.3 B
1,2-Dichlorobenzene	ug/kg	190000				
2-Butanone	ug/kg	2800000		17 B	38 B	17 B
2-Hexanone	ug/kg	21000	5.1 B	18 B	15 B	23 B
4-Methyl-2-pentanone	ug/kg	530000			5 J	2.8 J
Acetone	ug/kg	6100000	62 B		91	27 B
Benzene	ug/kg	1100		3 J		2.9 J
Carbon Disulfide	ug/kg	82000				
Chloroform	ug/kg	290	46 L			20 L
Cyclohexane	ug/kg	700000				
Ethylbenzene	ug/kg	5400				
Isopropylbenzene	ug/kg	210000				
m,p-Xylene	ug/kg			1.1 B	1.3 B	1.1 B
Methylcyclohexane	ug/kg					
Methylene chloride	ug/kg	11000				
o-Xylene	ug/kg	380000				
Toluene	ug/kg	500000	1.9 B	3.6 B	3.3 B	3.7 B
Trichloroethene	ug/kg	2800	4.8 L			1.6 J

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
PK – Park
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 31
Semivolatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB03042226-CW	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW	PKSB06192940-WA	PKSB08101215-CW
Subarea			1	1	1	2	2	3
1,1'-Biphenyl	ug/kg	390000						
2,6-Dinitrotoluene	ug/kg	6100						
2-Methylnaphthalene	ug/kg	31000						
2-Methylphenol	ug/kg	310000						
3-Nitroaniline	ug/kg							
Acenaphthene	ug/kg	340000						
Anthracene	ug/kg	1700000			37 J	100 J	120 J	110 J
Benzaldehyde	ug/kg	780000						
Benzo(a)anthracene	ug/kg	150		54 J	91 J	**350 J**	**1100**	**310 J**
Benzo(a)pyrene	ug/kg	15		**70 J**	**140 J**	**690 J**	**1500**	**350 J**
Benzo(b)fluoranthene	ug/kg	150		130 J	140 J	**480 J**	**1800**	**350 J**
Benzo(g,h,i)perylene	ug/kg				150 J	700 J	840 J	240 J
Benzo(k)fluoranthene	ug/kg	1500		120 J	44 J	220 J	670 J	150 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000		32 J				
Butylbenzylphthalate	ug/kg	260000						
Carbazole	ug/kg							42 J
Chrysene	ug/kg	15000		77 J	180 J	320 J	1100	350 J
Dibenzo(a,h)anthracene	ug/kg	15			**32 J**	**150 J**	**310 J**	
Di-n-butylphthalate	ug/kg	610000						
Fluoranthene	ug/kg	230000	35 J	130 J	160 J	600 J	1900	600
Fluorene	ug/kg	230000						62 J
Indeno(1,2,3-cd)pyrene	ug/kg	150		45 J	79 J	**240 J**	**950 J**	130 J
Naphthalene	ug/kg	3600						
Phenanthrene	ug/kg				150 J	490 J	470 J	450
Pyrene	ug/kg	170000	31 J	110 J	150 J	500 J	1400	500

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 31
Semivolatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB08101215-NS	PKSB08101215-WA	PKSB13303335-CW	PKSB13303335-NS	PKSB13303335-WA	PKSB15-SS	PKSB19-SS
Subarea			3	3	4	4	4	3	2
1,1'-Biphenyl	ug/kg	390000							
2,6-Dinitrotoluene	ug/kg	6100							
2-Methylnaphthalene	ug/kg	31000							
2-Methylphenol	ug/kg	310000			130 J	200 J			
3-Nitroaniline	ug/kg								
Acenaphthene	ug/kg	340000							
Anthracene	ug/kg	1700000		210 J			120 J		
Benzaldehyde	ug/kg	780000				36 J			
Benzo(a)anthracene	ug/kg	150		**1100 J**	24 J	44 J	**520 J**	58 J	
Benzo(a)pyrene	ug/kg	15		**1800**	**31 J**	**58 J**	**390 J**	**86 J**	**150 J**
Benzo(b)fluoranthene	ug/kg	150	20 J	**1100 J**	26 J	60 J	**320 J**	95 J	**150 J**
Benzo(g,h,i)perylene	ug/kg			1400 J	40 J	49 J	120 J	55 J	
Benzo(k)fluoranthene	ug/kg	1500		330 J				32 J	
Bis(2-ethylhexyl)phthalate	ug/kg	35000				31 J		44 J	400 J
Butylbenzylphthalate	ug/kg	260000							
Carbazole	ug/kg								
Chrysene	ug/kg	15000		1600	25 J	60 J	580 J	84 J	
Dibenzo(a,h)anthracene	ug/kg	15							
Di-n-butylphthalate	ug/kg	610000			41 J	45 J		66 J	94 J
Fluoranthene	ug/kg	230000	29 J	1200 J	30 J	85 J	390 J	120 J	170 J
Fluorene	ug/kg	230000							
Indeno(1,2,3-cd)pyrene	ug/kg	150		**460 J**		27 J		35 J	110 J
Naphthalene	ug/kg	3600							
Phenanthrene	ug/kg			1300 J	28 J	49 J	750 J	69 J	
Pyrene	ug/kg	170000	25 J	1600	45 J	82 J	940 J	110 J	200 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 31
Semivolatiles Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB30D-SS	PKSB30-SS	PKSB38444851-CW	PKSB38444851-NS	PKSB38444851-WA	PKSB45-17_3	PKSB52-CW	PKSB52-WA
Subarea			**4**	**4**	**5**	**5**	**5**	**5**	**None**	**None**
1,1'-Biphenyl	ug/kg	390000						340000		
2,6-Dinitrotoluene	ug/kg	6100				54 J				
2-Methylnaphthalene	ug/kg	31000						**3100000**		
2-Methylphenol	ug/kg	310000				37 J				
3-Nitroaniline	ug/kg					330 J				
Acenaphthene	ug/kg	340000						**930000**		
Anthracene	ug/kg	1700000			180 J			1000000	19 J	53 J
Benzaldehyde	ug/kg	780000								
Benzo(a)anthracene	ug/kg	150			**810**	38 J	**920 J**	**1400000**	110 J	**290 J**
Benzo(a)pyrene	ug/kg	15			**790**	**43 J**	**1200 J**	**1300000**	**110 J**	**420 J**
Benzo(b)fluoranthene	ug/kg	150	25 J	25 J	**990**	72 J	**750 J**	**1200000**	**150 J**	**340 J**
Benzo(g,h,i)perylene	ug/kg							440000 J	66 J	530 K
Benzo(k)fluoranthene	ug/kg	1500			410 J	74 J		**450000**	50 J	100 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000	66 J	65 J		64 J			84 J	
Butylbenzylphthalate	ug/kg	260000				90 J			120 J	
Carbazole	ug/kg				55 J			240000 J		
Chrysene	ug/kg	15000			700	40 J	1300 J	**1600000**	130 J	630 K
Dibenzo(a,h)anthracene	ug/kg	15			**150 J**					
Di-n-butylphthalate	ug/kg	610000	30 J	36 J		30 J				
Fluoranthene	ug/kg	230000	33 J	35 J	1900	93 J		**1600000**	210 J	330 J
Fluorene	ug/kg	230000						**930000**		
Indeno(1,2,3-cd)pyrene	ug/kg	150			**430 J**	22 J	**490 J**	**430000 J**	63 J	**170 J**
Naphthalene	ug/kg	3600						**3200000**		
Phenanthrene	ug/kg				1000			3100000	100 J	230 J
Pyrene	ug/kg	170000	27 J	29 J	1300	73 J	1400 J	**2600000**	190 J	540 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 32
Inorganics Detected in Park Soil

Analyte	Result Unit	RSL (mg/kg)	PKSB03042226-CW	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW	PKSB06192940-NS	PKSB06192940-WA
Subarea			1	1	1	2	2	2
Aluminum	mg/kg	7700	5770 J	6590 J	**7980 J**	**7910 J**	**8160 J**	**11800 J**
Arsenic	mg/kg	0.39	**4.2 L**	**2.7 L**	**3 L**	**4.2 L**	**3.2 L**	**1.5 L**
Barium	mg/kg	1500	46.9	50.1	1210	135	56.9	163
Beryllium	mg/kg	16	2.2	0.39 J	0.28 J	0.85	0.54 J	0.36 J
Cadmium	mg/kg	7	0.6 J		0.7 L	0.4 J		0.43 J
Calcium	mg/kg		18600 J	1260 J	134000 J	61700 J	1100 J	201000 J
Chromium	mg/kg		11.5	13	60.4	35.3	11.8	42.5
Cobalt	mg/kg	2.3	**22.8**	**4.7 J**	**15.7**	**14.3**	**10.7**	**10.9**
Copper	mg/kg	310	67.7 J	11 J	19.4 J	34.4 J	10.3 J	28 J
Iron	mg/kg	5500	**24900 J**	**13400 J**	**7400 J**	**17300 J**	**13700 J**	**11600 J**
Lead	mg/kg	40	29.4	17.5	**1290**	**126**	8	**60.2**
Magnesium	mg/kg		11600 J	1580 J	33400 J	23500 J	1810 J	24400 J
Manganese	mg/kg	180	**1180 J**	97.4 J	169 J	**510 J**	**383 J**	**208 J**
Mercury	mg/kg	0.56	0.1 J	0.087 J		0.34		0.058 J
Nickel	mg/kg	150	24.8	9.2	**188**	81.1	8.9	124
Potassium	mg/kg		555 J	890	702	1020	769	746
Selenium	mg/kg	39						
Sodium	mg/kg				375 J	221 J		582 J
Vanadium	mg/kg	0.55	**27.7**	**20.1**	**10.8**	**25.3**	**22.5**	**16.2**
Zinc	mg/kg	2300	86.8	41	**2350**	201	26.3	161

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
PK – Park
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 32
Inorganics Detected in Park Soil

Analyte	Result Unit	RSL (mg/kg)	PKSB08101215-CW	PKSB08101215-NS	PKSB08101215-WA	PKSB13303335-CW	PKSB13303335-NS	PKSB13303335-WA	PKSB15-SS
Subarea			**3**	**3**	**3**	**4**	**4**	**4**	**3**
Aluminum	mg/kg	7700	1710 J	6040 J	**9480 J**	4820 J	6120 J	**11200 J**	3770 J
Arsenic	mg/kg	0.39	**1.4 L**	**3.1 L**	**5.7 L**	**3.2 L**	**4.7 L**	**2.1 L**	**2.8 L**
Barium	mg/kg	1500	20.2 J	96	213	45.2	71.8	125	44.3
Beryllium	mg/kg	16	2	0.56 J	0.72	3	0.39 J	0.43 J	2.4
Cadmium	mg/kg	7	0.32 J	0.23 J	1.2 L	0.82 L	0.55 J	0.9 L	0.8 L
Calcium	mg/kg		3150 J	4140 J	124000 J	3510 J	6110 J	175000 J	23600 J
Chromium	mg/kg		2.8	9.2	51.4	9.2	18.3	78.8	8.3
Cobalt	mg/kg	2.3	**23.1**	**4.5 J**	**12.5**	**25.7**	**5.9 J**	**13.3**	**22.9**
Copper	mg/kg	310	17.7 J	9.1 J	28.8 J	58.4 J	23.8 J	16.3 J	55.9 J
Iron	mg/kg	5500	**6480 J**	**7410 J**	**12900 J**	**24400 J**	**16700 J**	**10700 J**	**16900 J**
Lead	mg/kg	40	27.8	39.1	**204**	19.3	**54.1**	28.2	29.2
Magnesium	mg/kg		1950 J	1610 J	21400 J	2040 J	2360 J	30900 J	15600 J
Manganese	mg/kg	180	**569 J**	120 J	**375 J**	**1580 J**	121 J	**201 J**	**1370 J**
Mercury	mg/kg	0.56	0.093 J	0.092 J	**0.79**	0.15	0.095 J	0.2	0.15
Nickel	mg/kg	150	37.8	8	115	30.7	16.6	**172**	32.5
Potassium	mg/kg			581 J	504 J	253 J	759	838	399 J
Selenium	mg/kg	39							
Sodium	mg/kg				264 J				
Vanadium	mg/kg	0.55	**6 J**	**12.8**	**21.1**	**22.7**	**18.7**	**20.1**	**16.6**
Zinc	mg/kg	2300	77.9	33.8	201	101	98.2	53.1	81.5

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Resider
Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
PK – Park
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise
B - Analyte not detected substantially above the level reported in
laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual valu
is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value
is expected to be higher.
PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet
below ground surface

Table 32
Inorganics Detected in Park Soil

Analyte	Result Unit	RSL (mg/kg)	PKSB19-SS	PKSB30D-SS	PKSB30-SS	PKSB38444851-CW	PKSB38444851-NS	PKSB38444851-WA	PKSB38-SS	PKSB45-17_3
Subarea			**2**	**4**	**4**	**5**	**5**	**5**	**5**	**5**
Aluminum	mg/kg	7700	**8260 J**	6300 J	6110 J	**7780 J**	6810 J	**8900 J**	**8010 J**	80.6
Arsenic	mg/kg	0.39	**5.8 L**	**6 L**	**6.4 L**	**4.8 L**	**2.9 L**	**1.5 J**	**3.4 L**	**2**
Barium	mg/kg	1500	156	41.6	37	112	100	76	131	140
Beryllium	mg/kg	16	1.3	1.2	1.1	1.6	0.7		0.87	
Cadmium	mg/kg	7	0.94 L	0.37 J	0.36 J	0.36 J	0.38 J			0.17 J
Calcium	mg/kg		51100 J	30500 J	46000 J	8080 J	2990 J	142000 J	2400 J	1080
Chromium	mg/kg		40.4	10.3	9.8	14.8	17	143	14	2
Cobalt	mg/kg	2.3	**16.1**	**13.2**	**11.4**	**15.5**	**8.3**	**22.6**	**12**	
Copper	mg/kg	310	42.7 J	19.7 J	17.9 J	33.5 J	11.5 J	30.1 J	20.6 J	112
Iron	mg/kg	5500	**18900 J**	**17300 J**	**16600 J**	**20000 J**	**13600 J**	**12300 J**	**15500 J**	2630
Lead	mg/kg	40	**164**	17.3	16.3	**41.2**	18.2	33.3	16.5	**644 K**
Magnesium	mg/kg		17400 J	20900 J	31700 J	5080 J	2440 J	56600 J	3340 J	171 J
Manganese	mg/kg	180	**655 J**	**919 J**	**724 J**	**922 J**	**335 J**	**289 J**	**755 J**	20.5
Mercury	mg/kg	0.56	**1.1**	0.035 J	0.04 J	0.041 J				
Nickel	mg/kg	150	99.8	17.6	11.8	21.8	13.9	**357**	16.5	17.1
Potassium	mg/kg		420 J	644 J	642 J	571 J	866	1560	580	
Selenium	mg/kg	39								
Sodium	mg/kg							338 J		
Vanadium	mg/kg	0.55	**23.9**	**19.6**	**19.6**	**24.1**	**21.4**	**12.5**	**21.2**	
Zinc	mg/kg	2300	241	77	57.9	109	335	78	51.7	29.4

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Resider
Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
PK – Park
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise
B - Analyte not detected substantially above the level reported in
laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual valu
is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value
is expected to be higher.
PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet
below ground surface

Table 32
Inorganics Detected in Park Soil

Analyte	Result Unit	RSL (mg/kg)	PKSB52-CW	PKSB52-NS	PKSB52-WA
Subarea			**None**	**None**	**None**
Aluminum	mg/kg	7700	5790	6900	**13200**
Arsenic	mg/kg	0.39	**2.9**	**2.7**	**1.9**
Barium	mg/kg	1500	55.7	139	139
Beryllium	mg/kg	16	2.4	0.76	0.37 J
Cadmium	mg/kg	7	0.33 J		0.38 J
Calcium	mg/kg		10300	1090	173000
Chromium	mg/kg		13.4	12.8	83.5
Cobalt	mg/kg	2.3	**17.8**	**7.1**	**13.4**
Copper	mg/kg	310	42.1	10.2	24.6
Iron	mg/kg	5500	**15900**	**7710**	**10300**
Lead	mg/kg	40	32 K	9.5 K	**190 K**
Magnesium	mg/kg		5340	1310	44000
Manganese	mg/kg	180	**893**	165	**257**
Mercury	mg/kg	0.56	0.16	**0.059 B**	0.5
Nickel	mg/kg	150	26.3	8.4	**177**
Potassium	mg/kg		1050	954	287 J
Selenium	mg/kg	39			1.4 J
Sodium	mg/kg				312 J
Vanadium	mg/kg	0.55	**23.5**	**22.7**	**18.7**
Zinc	mg/kg	2300	95.8	24.8	249

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Reside
Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
PK – Park
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise
B - Analyte not detected substantially above the level reported in
laboratory or field blanks.
K - Analyte present. Reported value may be biased high. Actual valu
is expected to be lower.
L - Analyte present. Reported value may be biased low. Actual value
is expected to be higher.
PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet
below ground surface

Table 33
Pesticides/PCBs Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB03042226-CW	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW	PKSB06192940-NS
Subarea			1	1	1	2	2
Aroclor-1260	ug/kg	220	4.4 J	16 J	28 J	6.5 J	
4,4'-DDD	ug/kg	2000	0.056 J	2.3 J	0.52 J	0.053 J	
4,4'-DDE	ug/kg	1400	0.057 J	0.33 J	0.6 J	0.17 J	
4,4'-DDT	ug/kg	1700	0.13 J	0.29 J	1.2 J	0.23 J	
Aldrin	ug/kg	29		0.057 J	0.036 J	0.018 J	0.042 J
alpha-BHC	ug/kg	77	0.019 B		0.023 B		
alpha-Chlordane	ug/kg			0.11 J	0.022 B	0.21 J	
beta-BHC	ug/kg	270	0.18 B	0.086 B	0.08 B	0.057 B	0.045 B
delta-BHC	ug/kg		0.014 J	0.034 J		0.047 J	
Dieldrin	ug/kg	30	0.07 J	0.18 J	1.7 J	0.14 J	
Endosulfan I	ug/kg		0.024 J	0.05 J	0.08 J	0.019 J	
Endosulfan II	ug/kg		0.042 J	0.22 J	1.5 J	0.23 J	
Endosulfan sulfate	ug/kg		0.075 J	0.42 J	0.42 J	0.026 J	0.067 J
Endrin	ug/kg	1800	0.46 J	0.073 J	0.083 J	0.048 B	
Endrin aldehyde	ug/kg		0.048 J	0.065 J	0.95 J	0.094 J	
Endrin ketone	ug/kg		1.2 J	0.14 J	0.92 J	0.063 J	0.18 J
gamma-BHC(Lindane)	ug/kg	520	0.047 B	0.021 B	0.076 B		0.1 B
gamma-Chlordane	ug/kg		0.068 J	0.16 J	0.22 J	0.15 J	
Heptachlor	ug/kg	110	0.041 J		0.44 J	0.15 B	0.031 B
Heptachlorepoxide	ug/kg	53	0.021 J	0.048 J	0.12 J	0.028 B	
Methoxychlor	ug/kg	31000	0.21 B	0.3 B	0.3 B	0.5 J	

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 33
Pesticides/PCBs Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB06192940-WA	PKSB08101215-CW	PKSB08101215-NS	PKSB08101215-WA	PKSB13303335-CW
Subarea			**2**	**3**	**3**	**3**	**4**
Aroclor-1260	ug/kg	220	1.9 J	16 J			
4,4'-DDD	ug/kg	2000		0.24 J		0.59 J	
4,4'-DDE	ug/kg	1400	1.3 J	0.41 J		8.7	
4,4'-DDT	ug/kg	1700	0.91 J	1.3 J		38	0.27 J
Aldrin	ug/kg	29	0.046 J				
alpha-BHC	ug/kg	77	0.022 J				
alpha-Chlordane	ug/kg					1.1 J	
beta-BHC	ug/kg	270	0.071 B	0.37 J			
delta-BHC	ug/kg						
Dieldrin	ug/kg	30	0.68 J	0.24 J		14	0.44 J
Endosulfan I	ug/kg		0.12 J				
Endosulfan II	ug/kg		0.68 J	0.47 J		1.8 J	
Endosulfan sulfate	ug/kg		0.16 J			0.95 J	
Endrin	ug/kg	1800	0.91 J	0.2 J		2 J	
Endrin aldehyde	ug/kg		0.37 J	0.23 J		1.7 J	
Endrin ketone	ug/kg		16	2.5 J		2 J	0.29 J
gamma-BHC(Lindane)	ug/kg	520				0.5 J	0.67 J
gamma-Chlordane	ug/kg		0.036 J			1.4 J	
Heptachlor	ug/kg	110	0.44 J	0.35 J		0.96 J	
Heptachlorepoxide	ug/kg	53	0.081 B				
Methoxychlor	ug/kg	31000	2.9 J	0.63 B	1.7 B	0.73 B	2.6 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 33
Pesticides/PCBs Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB13303335-NS	PKSB13303335-WA	PKSB15-SS	PKSB19-SS	PKSB30D-SS	PKSB30-SS	PKSB38444851-CW
Subarea			4	4	3	2	4	4	5
Aroclor-1260	ug/kg	220				13 J			
4,4'-DDD	ug/kg	2000	6.9	1 J		0.9 J			
4,4'-DDE	ug/kg	1400	1.5 J	1.6 J		0.22 J			
4,4'-DDT	ug/kg	1700	0.28 J	0.23 J		0.71 J		0.22 J	
Aldrin	ug/kg	29				0.092 J			
alpha-BHC	ug/kg	77				0.025 J			0.023 J
alpha-Chlordane	ug/kg		0.26 J	0.3 J					
beta-BHC	ug/kg	270			0.27 J	0.12 B		0.67 J	0.13 B
delta-BHC	ug/kg								
Dieldrin	ug/kg	30		0.81 J	0.32 J	0.33 J			
Endosulfan I	ug/kg								
Endosulfan II	ug/kg			1.5 J		0.1 J			0.16 J
Endosulfan sulfate	ug/kg					0.38 J			0.1 J
Endrin	ug/kg	1800		1.7 J	0.25 J	0.74 J			0.086 B
Endrin aldehyde	ug/kg			1.2 J		0.54 J			
Endrin ketone	ug/kg			1.2 J	0.31 J	1 J	0.26 J	0.22 J	0.41 J
gamma-BHC(Lindane)	ug/kg	520				0.15 B			0.036 B
gamma-Chlordane	ug/kg		0.33 J			0.24 J	0.27 J		0.025 J
Heptachlor	ug/kg	110		0.95 J		0.15 B			0.08 B
Heptachlorepoxide	ug/kg	53				0.06 B			
Methoxychlor	ug/kg	31000	9.4 B	1.7 B	2.3 B		3.5 B	1.5 B	

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 33
Pesticides/PCBs Detected in Park Soil

Analyte	Result Unit	RSL (ug/kg)	PKSB38444851-NS	PKSB38444851-WA	PKSB38-SS	PKSB45-17_3	PKSB52-CW	PKSB52-WA
Subarea			**5**	**5**	**5**	**5**	**None**	**None**
Aroclor-1260	ug/kg	220					2.6 J	41 J
4,4'-DDD	ug/kg	2000	0.26 J	0.043 J		1.2 J	0.44 J	0.5 J
4,4'-DDE	ug/kg	1400	0.42 J	0.065 J	0.1 J	28 J		1 J
4,4'-DDT	ug/kg	1700		0.071 J		3.3 J	0.23 J	4.4 J
Aldrin	ug/kg	29		0.046 J		3.8 J		
alpha-BHC	ug/kg	77		0.032 J	0.013 J	4.2 J		
alpha-Chlordane	ug/kg			0.081 B				
beta-BHC	ug/kg	270	0.056 B	0.052 B	0.066 B	49 J		
delta-BHC	ug/kg					11 J		
Dieldrin	ug/kg	30		0.079 B		11 J		0.33 J
Endosulfan I	ug/kg			0.097 J		43 J		
Endosulfan II	ug/kg		0.021 J	0.16 J		5.4 J		0.94 J
Endosulfan sulfate	ug/kg			0.3 J		54 J		0.48 J
Endrin	ug/kg	1800		0.056 B		4.1 J	0.073 J	0.3 J
Endrin aldehyde	ug/kg			0.27 J	0.097 J	10 J		1.4 J
Endrin ketone	ug/kg			0.29 J		11 J	0.4 J	0.68 J
gamma-BHC(Lindane)	ug/kg	520	0.039 B			14 J		
gamma-Chlordane	ug/kg		0.02 J	0.1 J	0.019 J	0.76 J		
Heptachlor	ug/kg	110	0.041 B	0.31 J		13 J		
Heptachlorepoxide	ug/kg	53		0.024 B		3.6 J		
Methoxychlor	ug/kg	31000	0.11 B	0.23 B		40 J		0.44 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

PKSB45-17_3 is a grab sample collected at PKSB45 at 17.3 feet below ground surface

Table 34
Asbestos Detected in Asbestos Pile Soil Borings

Analyte	Result Unit	Sample Location	APSB01020304-CW-2535	APSB01020304-NS-2536	APSB01020304-WA-2537	APSB02-SS-2538
Subarea			**1**	**1**	**1**	**1**
Asbestos, chrysotile	%	Asbestos Pile	0.1	0.1	***12***	***1.1***

Analyte	Result Unit	Sample Location	APSB08131617-NS-2721	APSB08131617-WA-2722	APSB09101112-CW-2618	APSB09101112-NS-2619
Subarea			**3**	**3**	**2**	**2**
Asbestos, chrysotile	%	Asbestos Pile	0.1	***1.5***	0.4	0.1

Analyte	Result Unit	Sample Location	APSB09101112-WA-2620	APSB10-SS-2621	APSB13-SS-2720	APSB15212325-WA-2675
Subarea			**2**	**2**	**3**	**4**
Asbestos, chrysotile	%	Asbestos Pile	0.8	0.1	***1.3***	***1.2***

Analyte	Result Unit	Sample Location	APSB20-21-2641	APSB21-SS-2674	APSB24262728-NS-2701	APSB24262728-WA-2700
Subarea			**4**	**4**	**5**	**5**
Asbestos, chrysotile	%	Asbestos Pile	***12***	***1.2***	***1.1***	***1.8***

Analyte	Result Unit	Sample Location	APSB24-SS-2699	APSB303132-CW-2995	APSB303132-NS-2994	APSB303132-WA-2993
Subarea			**5**	**6**	**6**	**6**
Asbestos, chrysotile	%	Asbestos Pile	***1.1***	***15***	***12***	***20***

Analyte	Result Unit	Sample Location	APSB32D-SS-2992	APSB32-SS-2991	APSB33-SS-3578	APSB34-SS-3579
Subarea			**6**	**6**	**3**	**5**
Asbestos, chrysotile	%	Asbestos Pile	***12***	***15***	***12***	***15***

Notes:

AP - Asbestos Pile

SB - Soil Borings

Bold and italicized values exceed RSL of 1% total asbestos.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 35
Volatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB03-CW	APSB03-NS	APSB03-WA	APSB10-CW	APSB10-NS	APSB10-SS	APSB10-WA	APSB13-NS
Subarea			1	1	1	2	2	2	2	3
1,1-Dichloroethene	ug/kg	24000					1.6 B	0.79 B	1.9 B	
1,2,3-Trichlorobenzene	ug/kg	4900	1.7 B							
2-Butanone	ug/kg	2800000								8.9 B
2-Hexanone	ug/kg	21000	3.4 B							
4-Methyl-2-pentanone	ug/kg	530000		5.8 J					13 J	
Acetone	ug/kg	6100000		10 B		4.3 B	45 B	3.3 B	120 B	99 B
Benzene	ug/kg	1100				1.1 J				
Carbon Disulfide	ug/kg	82000				1.6 J				
Carbontetrachloride	ug/kg	250								
Chloroform	ug/kg	290			120 L		32		130 L	72 L
Cyclohexane	ug/kg	700000								
Ethylbenzene	ug/kg	5400								
Isopropylbenzene	ug/kg	210000								1.8 J
m,p-Xylene	ug/kg									
Methylcyclohexane	ug/kg									
Methylene chloride	ug/kg	11000		1.5 B						1.7 B
o-Xylene	ug/kg	380000								
Tetrachloroethene	ug/kg	550				0.8 J				
Toluene	ug/kg	500000				1.4 B	2.7 B	0.84 B	3 B	0.86 B
Trichloroethene	ug/kg	2800			7.1 J		1.7 J		36	22

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 35
Volatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB13-SS	APSB13-WA	APSB20-21	APSB21D-NS	APSB21-NS	APSB21-SS	APSB21-WA	APSB24-NS
Subarea			3	3	4	4	4	4	4	5
1,1-Dichloroethene	ug/kg	24000	2.6 B		5.1 B	0.84 B	1.2 B	2.8 B	5 B	0.86 B
1,2,3-Trichlorobenzene	ug/kg	4900								
2-Butanone	ug/kg	2800000		340 B	20 J			58		4.5 J
2-Hexanone	ug/kg	21000			72 B				130	12 B
4-Methyl-2-pentanone	ug/kg	530000			19 J		1.5 J			1.8 J
Acetone	ug/kg	6100000	21 B	1300 B	230 B	14 B	14 B	14 B	26 B	15 B
Benzene	ug/kg	1100			4.5 J					
Carbon Disulfide	ug/kg	82000								
Carbontetrachloride	ug/kg	250							26 J	
Chloroform	ug/kg	290		**630 L**	**300 J**	44 L	55 J			1.3 J
Cyclohexane	ug/kg	700000							3.5 J	
Ethylbenzene	ug/kg	5400		42 J						
Isopropylbenzene	ug/kg	210000								
m,p-Xylene	ug/kg			170	3.3 J					
Methylcyclohexane	ug/kg				4.5 J					
Methylene chloride	ug/kg	11000		11 B						
o-Xylene	ug/kg	380000		130	3.7 J					
Tetrachloroethene	ug/kg	550								
Toluene	ug/kg	500000		29 B	6.6 B				7.3 B	
Trichloroethene	ug/kg	2800		250	69 J	4 J	7.2 J			

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
AP – Asbestos Pile
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 35
Volatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB24-SS	APSB24-WA	APSB32-CW	APSB32D-SS	APSB32-NS	APSB32-SS	APSB32-WA
Subarea			**5**	**5**	**6**	**6**	**6**	**6**	**6**
1,1-Dichloroethene	ug/kg	24000							
1,2,3-Trichlorobenzene	ug/kg	4900					0.68 B		
2-Butanone	ug/kg	2800000							25
2-Hexanone	ug/kg	21000			92 B	82 B	14 B	92 B	25 B
4-Methyl-2-pentanone	ug/kg	530000							
Acetone	ug/kg	6100000		4.2 B					72 B
Benzene	ug/kg	1100							
Carbon Disulfide	ug/kg	82000							
Carbontetrachloride	ug/kg	250							
Chloroform	ug/kg	290					0.92 B	3.4 B	1.4 B
Cyclohexane	ug/kg	700000							
Ethylbenzene	ug/kg	5400							
Isopropylbenzene	ug/kg	210000							
m,p-Xylene	ug/kg								
Methylcyclohexane	ug/kg								
Methylene chloride	ug/kg	11000		1.4 B					
o-Xylene	ug/kg	380000							
Tetrachloroethene	ug/kg	550							
Toluene	ug/kg	500000	1.6 B			6.9 J		3.4 J	1.5 J
Trichloroethene	ug/kg	2800							

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 36
Semivolatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS
Subarea			1	1	1	1	3
2-Methylnaphthalene	ug/kg	31000	85 J		38 J		
Acenaphthene	ug/kg	340000	550		43 J		
Acenaphthylene	ug/kg		140 J				
Anthracene	ug/kg	1700000	1900		140 J	96 J	31 J
Benzo(a)anthracene	ug/kg	150	**4100 J**	54 J	**630**	**550**	42 J
Benzo(a)pyrene	ug/kg	15	**4800**	**45 J**	**400**	**560**	**38 J**
Benzo(b)fluoranthene	ug/kg	150	**4800 J**	51 J	**830**	**780**	43 J
Benzo(g,h,i)perylene	ug/kg		1700 J	39 J	240 J	230 J	
Benzo(k)fluoranthene	ug/kg	1500	**2700**	23 J	300	330 J	
Bis(2-ethylhexyl)phthalate	ug/kg	35000	77 J	33 J	73 J	41 J	
Butylbenzylphthalate	ug/kg	260000	110 J			48 J	
Carbazole	ug/kg		360 J				
Chrysene	ug/kg	15000	3800 J	64 J	680	590	38 J
Dibenzofuran	ug/kg	7800	450				
Di-n-butylphthalate	ug/kg	610000					
Fluoranthene	ug/kg	230000	8700 J	93 J	1100	1100	110 J
Fluorene	ug/kg	230000	970		66 J		
Indeno(1,2,3-cd)pyrene	ug/kg	150	**2200 J**	31 J	**290 J**	**280 J**	22 J
Naphthalene	ug/kg	3600	72 J				
Phenanthrene	ug/kg		5100	56 J	630	390 J	110 J
Pyrene	ug/kg	170000	6400 J	86 J	870	850	93 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 36
Semivolatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB08131617-WA	APSB09101112-CW	APSB09101112-NS	APSB09101112-WA	APSB10-SS
Subarea			**3**	**2**	**2**	**2**	**2**
2-Methylnaphthalene	ug/kg	31000	270 J				
Acenaphthene	ug/kg	340000		530 J			120 J
Acenaphthylene	ug/kg						
Anthracene	ug/kg	1700000		2300			520
Benzo(a)anthracene	ug/kg	150		**4900**		62 J	**1500**
Benzo(a)pyrene	ug/kg	15		**3900**			**1300**
Benzo(b)fluoranthene	ug/kg	150		**5000**		53 J	**1700**
Benzo(g,h,i)perylene	ug/kg			1200			560
Benzo(k)fluoranthene	ug/kg	1500		**2000**			630
Bis(2-ethylhexyl)phthalate	ug/kg	35000		91 J		53 J	
Butylbenzylphthalate	ug/kg	260000					
Carbazole	ug/kg			210 J			140 J
Chrysene	ug/kg	15000		4500		79 J	1400
Dibenzofuran	ug/kg	7800		290 J			81 J
Di-n-butylphthalate	ug/kg	610000					
Fluoranthene	ug/kg	230000		13000 J	22 J	91 J	2900
Fluorene	ug/kg	230000		720 J			210 J
Indeno(1,2,3-cd)pyrene	ug/kg	150		**1800**			**730**
Naphthalene	ug/kg	3600					
Phenanthrene	ug/kg		2500	6100			1700
Pyrene	ug/kg	170000		9200		74 J	2200

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 36
Semivolatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB13-SS	APSB15212325-WA	APSB20-21	APSB21-SS	APSB24262728-NS	APSB24262728-WA
Subarea			3	4	4	4	5	5
2-Methylnaphthalene	ug/kg	31000						
Acenaphthene	ug/kg	340000						
Acenaphthylene	ug/kg							
Anthracene	ug/kg	1700000		200 J				
Benzo(a)anthracene	ug/kg	150	37 J		**31000 J**			49 J
Benzo(a)pyrene	ug/kg	15	**48 J**		**520 J**			
Benzo(b)fluoranthene	ug/kg	150	68 J			52 J		
Benzo(g,h,i)perylene	ug/kg			430 J				
Benzo(k)fluoranthene	ug/kg	1500						
Bis(2-ethylhexyl)phthalate	ug/kg	35000						44 J
Butylbenzylphthalate	ug/kg	260000						
Carbazole	ug/kg							
Chrysene	ug/kg	15000	53 J		**87000 J**	42 J		82 J
Dibenzofuran	ug/kg	7800						
Di-n-butylphthalate	ug/kg	610000					22 J	
Fluoranthene	ug/kg	230000	97 J		390 J	78 J		41 J
Fluorene	ug/kg	230000						
Indeno(1,2,3-cd)pyrene	ug/kg	150		130 J				
Naphthalene	ug/kg	3600					22 J	
Phenanthrene	ug/kg		42 J	750 J		42 J		65 J
Pyrene	ug/kg	170000	75 J			58 J		100 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

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CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 36
Semivolatiles Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB24-SS	APSB303132-CW	APSB32D-SS	APSB32-SS
Subarea			**5**	**6**	**6**	**6**
2-Methylnaphthalene	ug/kg	31000	38 J			
Acenaphthene	ug/kg	340000	260			
Acenaphthylene	ug/kg					
Anthracene	ug/kg	1700000	380			
Benzo(a)anthracene	ug/kg	150	**1000**	**250 J**	**240 J**	**290 J**
Benzo(a)pyrene	ug/kg	15	**820**		**280 J**	**290 J**
Benzo(b)fluoranthene	ug/kg	150	**1100**	**440 J**		**450 J**
Benzo(g,h,i)perylene	ug/kg		290			
Benzo(k)fluoranthene	ug/kg	1500	450	200 J		180 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000	48 J	94 J		
Butylbenzylphthalate	ug/kg	260000	22 J	110 J	120 J	80 J
Carbazole	ug/kg		130 J			
Chrysene	ug/kg	15000	1000	340 J	310 J	290 J
Dibenzofuran	ug/kg	7800	76 J			
Di-n-butylphthalate	ug/kg	610000				
Fluoranthene	ug/kg	230000	2300	550 J	460 J	480 J
Fluorene	ug/kg	230000	180 J			
Indeno(1,2,3-cd)pyrene	ug/kg	150	**430**	**230 J**	**190 J**	**200 J**
Naphthalene	ug/kg	3600	27 J			
Phenanthrene	ug/kg		1500			190 J
Pyrene	ug/kg	170000	1800	370 J	360 J	360 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

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Bold values = RSL exceeded

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CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 37
Inorganics Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (mg/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS	APSB08131617-WA
Subarea			**1**	**1**	**1**	**1**	**3**	**3**
Aluminum	mg/kg	7700	7490	**9400**	**7750**	**9300**	**14200**	**8550**
Arsenic	mg/kg	0.39	**4.9**	**1.6**	**9**	**3.8**		**1.1 J**
Barium	mg/kg	1500	89.2	124	108	111	51.9 J	177
Beryllium	mg/kg	16	0.53 J	0.86	0.34 J	0.76		0.58 J
Cadmium	mg/kg	7	0.29 J		2.3	0.38 J		
Calcium	mg/kg		15100	33200	87900	22300	180000	20000
Chromium	mg/kg		19.5	27.8	30.4	28.8	115	12.4
Cobalt	mg/kg	2.3	**8.3**	**9.7**	**6.1 J**	**12.2**	**20.7**	**6.1 J**
Copper	mg/kg	310	24.6	24.1	42.6	30.5	32.4	29.1
Iron	mg/kg	5500	**14200 J**	**14000 J**	**21100 J**	**22500 J**	**12000**	**8150**
Lead	mg/kg	40	**94.5**	**111**	**52.9**	**40.7**	13.1 K	16.7 K
Magnesium	mg/kg		7520	5640	6750	12700	57300	2570
Manganese	mg/kg	180	**339 J**	**237 J**	**285 J**	**488 J**	**314**	**231**
Mercury	mg/kg	0.56		0.04 J	0.074 J	0.054 J		
Nickel	mg/kg	150	17.7	24.3	37.3	23.8	**315**	15.5
Potassium	mg/kg		1000	1440	720 J	2720		771
Sodium	mg/kg					208 J		
Vanadium	mg/kg	0.55	**25.1**	**21.3**	**16.1**	**37.5**	**19.1**	**14.7**
Zinc	mg/kg	2300	72.5	64.2	52.3	109	36.5	23.4

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

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Bold values = RSL exceeded

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SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 37
Inorganics Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (mg/kg)	APSB09101112-CW	APSB09101112-NS	APSB09101112-WA	APSB10-SS	APSB13-SS	APSB15212325D-NS
Subarea			**2**	**2**	**2**	**2**	**3**	**4**
Aluminum	mg/kg	7700	**9850**	**12700**	**14900**	**13500**	**14800**	**11900**
Arsenic	mg/kg	0.39	**3.5**	**3.8**	**2.9**	**3.5**	**3.1**	**2.9**
Barium	mg/kg	1500	69.9	142	95.7	68.8	77.3	141
Beryllium	mg/kg	16	0.61 J	0.76	0.43 J	0.31 J		0.51 J
Cadmium	mg/kg	7	0.23 J				1.5	
Calcium	mg/kg		16600	19800	176000	4090	130000	14400
Chromium	mg/kg		20.9	27.9	42.9	13.3	44.9	18.7
Cobalt	mg/kg	2.3	**8.4**	**10.9**	**12.1 J**	**5.4 J**	**13.7**	**12.1**
Copper	mg/kg	310	15.7	31.4	105	9.6	35.7	14.1
Iron	mg/kg	5500	**14800 J**	**19300 J**	**13200 J**	**12800 J**	**11300 J**	**17200 J**
Lead	mg/kg	40	**57**	33	27.6	14.9	**47.5**	7.7
Magnesium	mg/kg		6320	9430	23700	2870	37000	2620
Manganese	mg/kg	180	**489 J**	**409 J**	**288 J**	167 J	**335 J**	**424 J**
Mercury	mg/kg	0.56	0.084 J	0.056 J		0.037 J	0.13 J	
Nickel	mg/kg	150	19	49	113	8.8	**153**	14.4
Potassium	mg/kg		588 J	1420		618	1180	1250
Sodium	mg/kg			215 J				
Vanadium	mg/kg	0.55	**28.2**	**29.4**	**22.4**	**22.3**	**23**	**28.3**
Zinc	mg/kg	2300	51.8	53.1	53.7	25.1	124	27.6

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

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Bold values = RSL exceeded

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SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 37
Inorganics Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (mg/kg)	APSB15212325-NS	APSB15212325-WA	APSB20-21	APSB21-SS	APSB24262728-NS	APSB24262728-WA
Subarea			**4**	**4**	**4**	**4**	**5**	**5**
Aluminum	mg/kg	7700	**10500**	**11100**	**17600**	**13200**	**8350**	**10600**
Arsenic	mg/kg	0.39	**2.4**	**1.2 J**		**2.3**	**2.7**	**2.1**
Barium	mg/kg	1500	155	114	101	94.3	102	165
Beryllium	mg/kg	16	0.46 J				0.64 J	0.33 J
Cadmium	mg/kg	7		0.87 J		2.3		
Calcium	mg/kg		17900	164000	249000	125000	15400	211000
Chromium	mg/kg		17.3	144	65.1	57.3	23	34.4
Cobalt	mg/kg	2.3	**14.6**	**26.2**	**17 J**	**15.6**	**10.4**	**11.1**
Copper	mg/kg	310	15.2	39.8	**311**	80.5	14.2	47.2
Iron	mg/kg	5500	**14900 J**	**14900 J**	**22100 J**	**11500 J**	**13800 J**	**13200 J**
Lead	mg/kg	40	7.2	21.5	34.3	**58.9**	13.3	**112**
Magnesium	mg/kg		3590	71000	38600	41100	7070	23700
Manganese	mg/kg	180	**426 J**	**334 J**	**307 J**	**328 J**	**466 J**	**252 J**
Mercury	mg/kg	0.56		0.076 J		0.23	0.04 J	0.068 J
Nickel	mg/kg	150	21.8	**388**	**214**	**189**	71	109
Potassium	mg/kg		1050			506 J	779	1010
Sodium	mg/kg							320 J
Vanadium	mg/kg	0.55	**22**	**17.9**	**21.3 J**	**24.6**	**19.3**	**14.6**
Zinc	mg/kg	2300	21.9	63.6	150	176	30.4	43.7

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

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Bold values = RSL exceeded

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WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 37
Inorganics Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (mg/kg)	APSB24-SS	APSB303132-CW	APSB303132-WA	APSB3132-NS	APSB32D-SS	APSB32-SS
Subarea			**5**	**6**	**6**	**6**	**6**	**6**
Aluminum	mg/kg	7700	5480	**9730**	**10300**	6590	**9390**	**8100**
Arsenic	mg/kg	0.39	**4.1**	**4.2**	**3.5**	**2.3**	**4.6**	**3.8**
Barium	mg/kg	1500	45.3	106	129	116	109	93.5
Beryllium	mg/kg	16	0.33 J			0.59 J		
Cadmium	mg/kg	7	0.54 J	2.5			1.7	1.4
Calcium	mg/kg		26400	73500	255000	38200	54100	46000
Chromium	mg/kg		54.1	110	46.6	13.4	134	124
Cobalt	mg/kg	2.3	**11.9**	**19.2**	**8.5 J**	**7.7**	**22.2**	**20.5**
Copper	mg/kg	310	21.6	75.5	163	23.2	82.6	71.5
Iron	mg/kg	5500	**11800 J**	**13300**	**9310**	**9720**	**14300**	**12800**
Lead	mg/kg	40	**41.3**	**171**	**47.4**	10.4	**206**	**167**
Magnesium	mg/kg		24300	49800	19300	4390	60100	56300
Manganese	mg/kg	180	**217 J**	**399**	**184**	**388**	**427**	**373**
Mercury	mg/kg	0.56	0.1 J	0.39 B	0.094 B		0.33 B	0.34 B
Nickel	mg/kg	150	145	**315**	129	27.7	**371**	**345**
Potassium	mg/kg		584 J	1150 J	537 J	626 J	1220 J	1210 J
Sodium	mg/kg							
Vanadium	mg/kg	0.55	**19**	**28.4**	**11.2**	**10.1**	**32.4**	**28.2**
Zinc	mg/kg	2300	71.8	255	95.8	22.1	285	231

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 38
Pesticides/PCBs Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS	APSB08131617-WA
Subarea			1	1	1	1	3	3
Aroclor-1016	ug/kg	390	33 J					
Aroclor-1254	ug/kg	220	62 J					16 J
Aroclor-1260	ug/kg	220						
4,4'-DDD	ug/kg	2000	0.36 J	0.095 J	0.052 J	0.17 J		
4,4'-DDE	ug/kg	1400	0.097 J		0.38 J	0.53 J		
4,4'-DDT	ug/kg	1700	0.19 J	0.13 J	0.42 J	0.85 J		0.99 J
Aldrin	ug/kg	29	0.17 J		0.068 J	0.071 J		1.2 J
alpha-BHC	ug/kg	77	0.041 J		0.026 J	0.02 J		
alpha-Chlordane	ug/kg		0.27 J		0.16 J	0.21 J		
beta-BHC	ug/kg	270	0.26 B	0.11 B	0.12 B	0.16 B		
delta-BHC	ug/kg		0.076 J		0.082 J	0.043 J		
Dieldrin	ug/kg	30	0.76 J	0.026 J	0.39 J	0.42 J		3.4 J
Endosulfan I	ug/kg		0.6 J		0.12 J	0.024 J		1.2 J
Endosulfan II	ug/kg		5.1	0.27 J	4.2 J	1 J		2.6 J
Endosulfan sulfate	ug/kg		0.57 J	0.15 J	0.23 J	0.068 J		2.7 J
Endrin	ug/kg	1800	1.1 J	0.15 J	0.12 J	0.28 J		
Endrin aldehyde	ug/kg		0.91 J	0.086 J	0.28 J	0.33 J	0.25 J	6.1 J
Endrin ketone	ug/kg		3.5 J	0.1 J	0.91 J	0.19 J		
gamma-BHC(Lindane)	ug/kg	520	0.069 J			0.035 J		
gamma-Chlordane	ug/kg		0.46 J		0.041 J	0.18 J		
Heptachlor	ug/kg	110	0.29 J		0.21 J	0.086 J		5.6 J
Heptachlorepoxide	ug/kg	53	0.11 J		0.028 J	0.079 J		
Methoxychlor	ug/kg	31000	0.79 J	0.42 B	0.26 B	0.17 B		9.7 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 3b
Pesticides/PCBs Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB09101112-CW	APSB09101112-NS	APSB09101112-WA	APSB10-SS	APSB13-SS	APSB15212325D-NS
Subarea			2	2	2	2	3	4
Aroclor-1016	ug/kg	390						
Aroclor-1254	ug/kg	220						
Aroclor-1260	ug/kg	220					27 J	
4,4'-DDD	ug/kg	2000	0.14 J		0.13 J	0.17 J		0.031 J
4,4'-DDE	ug/kg	1400	0.26 J			0.028 J		
4,4'-DDT	ug/kg	1700	2.7 J		0.22 J	0.11 J	1.5 J	
Aldrin	ug/kg	29	0.22 J			0.069 J		
alpha-BHC	ug/kg	77						
alpha-Chlordane	ug/kg		4.4		0.45 J	0.28 J		
beta-BHC	ug/kg	270	0.25 B		0.18 B	0.31 B	0.61 J	
delta-BHC	ug/kg		0.073 J			0.073 J		
Dieldrin	ug/kg	30	0.36 J		0.38 J	0.26 J		
Endosulfan I	ug/kg		0.22 J		0.31 J	0.12 J		
Endosulfan II	ug/kg		0.34 J	0.1 J		2.3 J		0.14 J
Endosulfan sulfate	ug/kg		0.34 J		0.084 J	0.45 J	0.43 J	0.08 J
Endrin	ug/kg	1800	0.38 J		0.071 J	0.58 J		0.03 J
Endrin aldehyde	ug/kg		0.19 J		0.12 J	0.64 J		
Endrin ketone	ug/kg		1.1 J	0.088 J	0.36 J	1.8 J	1.4 J	0.16 J
gamma-BHC(Lindane)	ug/kg	520	0.087 J			0.27 J		
gamma-Chlordane	ug/kg		4.3 J	0.052 J	0.32 J	0.19 J		0.032 J
Heptachlor	ug/kg	110	0.1 J	0.041 J	0.085 J	0.18 J		0.042 J
Heptachlorepoxide	ug/kg	53	0.85 J			0.023 J		
Methoxychlor	ug/kg	31000	0.26 B	0.19 B	1.2 J	0.34 B		0.22 B

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
AP – Asbestos Pile
SB – Soil Boring
CW – Cover Waste
NS – Native Soil
WA – Waste Layer
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 3d
Pesticides/PCBs Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB15212325-NS	APSB15212325-WA	APSB20-21	APSB21-SS	APSB24262728-WA	APSB24-SS	APSB303132-CW
Subarea			4	4	4	4	5	5	6
Aroclor-1016	ug/kg	390							
Aroclor-1254	ug/kg	220							
Aroclor-1260	ug/kg	220		6.5 J		31 J		5.6 J	18 J
4,4'-DDD	ug/kg	2000	0.083 J	0.46 J	0.62 J	0.083 J	0.51 J		0.28 J
4,4'-DDE	ug/kg	1400		0.25 J	0.17 J			0.73 J	0.47 J
4,4'-DDT	ug/kg	1700		0.29 J	13 J	1.1 J	0.76 J	1.1 J	5.5 J
Aldrin	ug/kg	29		0.15 J	0.69 J				
alpha-BHC	ug/kg	77							
alpha-Chlordane	ug/kg			0.15 J	0.42 J	0.096 J			0.28 J
beta-BHC	ug/kg	270		0.27 B	0.57 B	0.24 B		0.56 J	0.71 B
delta-BHC	ug/kg			0.17 J					
Dieldrin	ug/kg	30	0.053 J	1.3 J	10 J	0.55 J	0.63 J		0.7 J
Endosulfan I	ug/kg			0.14 J	0.99 J	0.05 J			
Endosulfan II	ug/kg		0.17 J		1.4 J	0.11 J	0.78 J	0.9 J	1.3 J
Endosulfan sulfate	ug/kg		0.096 J	0.2 J	1.6 J	0.37 J		0.45 J	0.083 J
Endrin	ug/kg	1800	0.082 J	0.15 J	0.53 J	0.07 J			0.27 J
Endrin aldehyde	ug/kg			0.5 J	4 J		0.99 J		0.19 J
Endrin ketone	ug/kg		0.089 J	1.6 J	25 J	0.77 J		2.5 J	3.8 J
gamma-BHC(Lindane)	ug/kg	520						1.7 J	0.23 J
gamma-Chlordane	ug/kg			0.56 J	0.67 J	0.069 J		0.29 J	0.14 J
Heptachlor	ug/kg	110	0.037 J	0.12 J	0.32 J	0.097 J		0.37 J	0.21 B
Heptachlorepoxide	ug/kg	53		0.098 J	1.2 J	0.11 J			0.24 J
Methoxychlor	ug/kg	31000	0.093 B	0.23 B	6.6 J	0.33 B	0.47 J		0.66 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Tab...8
Pesticides/PCBs Detected in Asbestos Pile Soil

Analyte	Result Unit	RSL (ug/kg)	APSB303132-WA	APSB3132-NS	APSB32D-SS	APSB32-SS	APTF01-SS	APTF02-SS
Subarea			**6**	**6**	**6**	**6**	**None**	**None**
Aroclor-1016	ug/kg	390						
Aroclor-1254	ug/kg	220						
Aroclor-1260	ug/kg	220			12 J	12 J	14 J	**370**
4,4'-DDD	ug/kg	2000	0.26 J		0.10 J	0.21 J		
4,4'-DDE	ug/kg	1400	0.073 J		0.47 J	0.49 J		
4,4'-DDT	ug/kg	1700	0.17 J	0.21 J	4.1 J	4.2 J		
Aldrin	ug/kg	29	0.045 J	0.036 J				
alpha-BHC	ug/kg	77						
alpha-Chlordane	ug/kg					0.13 J		
beta-BHC	ug/kg	270	0.11 B	0.061 B	0.42 B	0.46 B		
delta-BHC	ug/kg			0.029 J				
Dieldrin	ug/kg	30	0.24 J	0.049 J	0.31 J	0.64 J		
Endosulfan I	ug/kg		0.056 J					
Endosulfan II	ug/kg		0.28 J		1.3 J	0.7 J		
Endosulfan sulfate	ug/kg		0.54 J	0.033 J	0.13 J	0.25 J		
Endrin	ug/kg	1800	0.13 J	0.058 J	0.17 J	0.44 J		
Endrin aldehyde	ug/kg		0.57 J		0.16 J	0.12 J		
Endrin ketone	ug/kg		0.3 J		3.3 J	2.5 J		
gamma-BHC(Lindane)	ug/kg	520			0.091 J	0.17 J		
gamma-Chlordane	ug/kg		0.18 J	0.043 J	0.13 J	0.26 J		
Heptachlor	ug/kg	110	0.06 B		0.12 B	0.18 B		
Heptachlorepoxide	ug/kg	53	0.08 J		0.12 J	0.19 J		
Methoxychlor	ug/kg	31000	2.1 J	0.48 B	0.36 B	0.39 B		

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

APSB20-21 is a grab sample collected at APSB20 at 21 feet below ground surface

Table 39
Asbestos Detected in Reservoir Soil

Analyte	Result Unit	Sample Location	RVSB011920-CW-2852	RVSB011920-NS-2853	RVSB020304-CW-2923	RVSB020304-WA-2925
Subarea			**1**	**1**	**2**	**2**
Total Asbestos	%	Reservoir	0.1	0.1	***12***	***15***
Asbestos, chrysotile	%	Reservoir	0.1	-	12	15

Analyte	Result Unit	Sample Location	RVSB04-SS-2926	RVSB05060708-NS-2928	RVSB05060708-WA-2929	RVSB050607-CW-2927
Subarea			**2**	**3**	**3**	**3**
Total Asbestos	%	Reservoir	0.4	0.4	***12***	0.7
Asbestos, chrysotile	%	Reservoir	0.4	0.4	12	0.7

Analyte	Result Unit	Sample Location	RVSB08-SS-2930	RVSB09101112-CW-2889	RVSB091011-WA-2891	RVSB12-SS-2892
Subarea			**3**	**4**	**4**	**4**
Total Asbestos	%	Reservoir	***1.2***	0.2	***12***	0.5
Asbestos, chrysotile	%	Reservoir	1.2	0.2	12	0.5

Analyte	Result Unit	Sample Location	RVSB15161718-CW-2583	RVSB15161718-WA-2585	RVSB19-SS-2862	RVSB21222324-WA-2961
Subarea			**5**	**5**	**1**	**6**
Total Asbestos	%	Reservoir	***1.1***	***12***	0.1	***15***
Asbestos, chrysotile	%	Reservoir	1.1	12	0.1	15

Analyte	Result Unit	Sample Location	RVSB25-SS-3580	RVSB26-SS-3581	RVSB27-SS-3582
Subarea			**No Subarea**	**4**	**No Subarea**
Total Asbestos	%	Reservoir	0.8	***1.1***	0.1
Asbestos, chrysotile	%	Reservoir	0.8	1.1	-

Notes:
RV - Reservoir
SO - Soil
Bold and italicized values exceed RSL of 1% total asbestos.

Tab. 40

Volatiles Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB04-CW	RVSB04-NS	RVSB04-SS	RVSB04-WA	RVSB08-NS	RVSB08-SS	RVSB08-WA
Subarea			**2**	**2**	**2**	**2**	**3**	**3**	**3**
1,1-Dichloroethene	ug/kg	24000			3.4 B				
1,2,3-Trichlorobenzene	ug/kg	4900	2.3 B					0.48 J	
1,2,4-Trichlorobenzene	ug/kg	22000							
2-Butanone	ug/kg	2800000				21	40	17	24
2-Hexanone	ug/kg	21000	45 B	7.6 B	14 B	17 B	42 B	17 B	18 B
4-Methyl-2-pentanone	ug/kg	530000		1.2 B		1.8 J			
Acetone	ug/kg	6100000	31 B	5.8 B	11 B	34 B	26 B	14 B	28 B
Benzene	ug/kg	1100	2.6 B						
Chloroform	ug/kg	290	1.9 B	0.66 B	1.1 B	3.4 B	3 B	1 B	27
Chloromethane	ug/kg	12000							
Methylacetate	ug/kg	7800000	3 J		2.6 J	2 J			
Methylene chloride	ug/kg	11000							
Toluene	ug/kg	500000	2.4 B						

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 10
Volatiles Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB12-CW	RVSB12-NS	RVSB12-SS	RVSB17-CW	RVSB17-NS	RVSB17-SS	RVSB17-WA
Subarea			**4**	**4**	**4**	**5**	**5**	**5**	**5**
1,1-Dichloroethene	ug/kg	24000				0.89 B	0.84 B	1.5 B	1.5 B
1,2,3-Trichlorobenzene	ug/kg	4900							
1,2,4-Trichlorobenzene	ug/kg	22000							
2-Butanone	ug/kg	2800000			32				
2-Hexanone	ug/kg	21000	7.6 B	5.7 B	30 B				
4-Methyl-2-pentanone	ug/kg	530000					1.5 J		1.6 J
Acetone	ug/kg	6100000	11 B	6 B	22 B	3.5 B	3.1 B	9.3 B	6.6 B
Benzene	ug/kg	1100	1.8 B	0.91 B	1.9 B				
Chloroform	ug/kg	290	0.79 B	0.58 B	0.98 B				
Chloromethane	ug/kg	12000					0.77 J		
Methylacetate	ug/kg	7800000							
Methylene chloride	ug/kg	11000	1.1 B	0.55 B	2 J				
Toluene	ug/kg	500000	1.5 B	0.57 B	1.6 B	1.1 B	1 B	2.5 B	1.8 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 40
Volatiles Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB19-CW	RVSB19-NS	RVSB19-SS	RVSB24-CW	RVSB24-SS	RVSB24-WA
Subarea			**1**	**1**	**1**	**6**	**6**	**6**
1,1-Dichloroethene	ug/kg	24000	1.2 B		5.2 B			
1,2,3-Trichlorobenzene	ug/kg	4900		1.2 B				
1,2,4-Trichlorobenzene	ug/kg	22000	0.85 B	0.84 B				
2-Butanone	ug/kg	2800000			31 J			
2-Hexanone	ug/kg	21000	8.1 B	8.4 B	23 B	23 B	22 B	18 B
4-Methyl-2-pentanone	ug/kg	530000						
Acetone	ug/kg	6100000	8.9 B	59 B	180			
Benzene	ug/kg	1100	1.9 B	2 B	6.7 B			
Chloroform	ug/kg	290	0.81 B	1.1 B	2.8 B			
Chloromethane	ug/kg	12000						
Methylacetate	ug/kg	7800000						
Methylene chloride	ug/kg	11000						
Toluene	ug/kg	500000	1.8 B	3.1 B	4.9 B		1.4 J	1.2 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 41
Semivolatiles Detected in Reservior Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB011920-CW	RVSB011920-NS	RVSB020304-CW	RVSB020304-NS	RVSB020304-WA	RVSB04-SS
Subarea			1	1	2	2	2	2
2-Methylnaphthalene	ug/kg	31000						
Acenaphthene	ug/kg	340000						
Acenaphthylene	ug/kg							
Anthracene	ug/kg	1700000	79 J		26 J			
Benzo(a)anthracene	ug/kg	150	**610**		**230 J**		27 J	140 J
Benzo(a)pyrene	ug/kg	15	**670**		**260**			**160 J**
Benzo(b)fluoranthene	ug/kg	150	**910**		**410**			**240 L**
Benzo(g,h,i)perylene	ug/kg		240 J		140 J			
Benzo(k)fluoranthene	ug/kg	1500	330		130 J			91 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000	98 J		57 J			23 J
Butylbenzylphthalate	ug/kg	260000	70 J					
Carbazole	ug/kg		48 J		28 J			
Chrysene	ug/kg	15000	750		320		35 J	190 J
Dibenzo(a,h)anthracene	ug/kg	15			**54 J**			
Di-n-butylphthalate	ug/kg	610000	46 J	20 J		19 J		28 J
Fluoranthene	ug/kg	230000	1200		630		59 J	370 L
Fluorene	ug/kg	230000						
Indeno(1,2,3-cd)pyrene	ug/kg	150	**260 J**		**160 J**			120 J
Naphthalene	ug/kg	3600						
Phenanthrene	ug/kg		450		210 J			140 J
Pyrene	ug/kg	170000	1000		440		51 J	270 L

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 41
Semivolatiles Detected in Reservior Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB050607-CW	RVSB08-SS	RVSB09101112-CW	RVSB12-SS	RVSB15161718-CW
Subarea			3	3	4	4	5
2-Methylnaphthalene	ug/kg	31000					
Acenaphthene	ug/kg	340000					24 J
Acenaphthylene	ug/kg						55 J
Anthracene	ug/kg	1700000			23 J		180 J
Benzo(a)anthracene	ug/kg	150	40 J	130 J	72 J	120 J	**490**
Benzo(a)pyrene	ug/kg	15		**140 J**	**68 J**	**140 J**	**340**
Benzo(b)fluoranthene	ug/kg	150		**210 J**	89 J	**180 J**	**640**
Benzo(g,h,i)perylene	ug/kg						200 J
Benzo(k)fluoranthene	ug/kg	1500		70 J	29 J	75 J	230
Bis(2-ethylhexyl)phthalate	ug/kg	35000	27 J	39 J		89 J	84 J
Butylbenzylphthalate	ug/kg	260000				420 J	
Carbazole	ug/kg						38 J
Chrysene	ug/kg	15000	51 J	160 J	79 J	140 J	530
Dibenzo(a,h)anthracene	ug/kg	15		**28 J**			
Di-n-butylphthalate	ug/kg	610000		36 J		29 J	
Fluoranthene	ug/kg	230000	71 J	310	140 J	190 J	830
Fluorene	ug/kg	230000					39 J
Indeno(1,2,3-cd)pyrene	ug/kg	150	32 J	85 J	28 J	67 J	**240 J**
Naphthalene	ug/kg	3600					
Phenanthrene	ug/kg			130 J	120 J	96 J	480
Pyrene	ug/kg	170000	69 J	230 J	130 J	200 J	720

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 41
Semivolatiles Detected in Reservior Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB15161718-NS	RVSB15161718-WA	RVSB17-SS	RVSB19-SS	RVSB21222324-CW
Subarea			**5**	**5**	**5**	**1**	**6**
2-Methylnaphthalene	ug/kg	31000		35 J			28 J
Acenaphthene	ug/kg	340000			45 J		
Acenaphthylene	ug/kg				41 J		
Anthracene	ug/kg	1700000			160 J		
Benzo(a)anthracene	ug/kg	150		35 J	**740**	**380 J**	
Benzo(a)pyrene	ug/kg	15		**35 J**	**850**	**400 J**	
Benzo(b)fluoranthene	ug/kg	150		57 J	**1200**	**540**	
Benzo(g,h,i)perylene	ug/kg				360 J		
Benzo(k)fluoranthene	ug/kg	1500		20 J	480	190 J	
Bis(2-ethylhexyl)phthalate	ug/kg	35000	21 J	27 J	71 J	160 J	33 J
Butylbenzylphthalate	ug/kg	260000			38 J	220 J	
Carbazole	ug/kg				84 J		
Chrysene	ug/kg	15000		75 J	880	440 J	
Dibenzo(a,h)anthracene	ug/kg	15					
Di-n-butylphthalate	ug/kg	610000			36 J	91 J	
Fluoranthene	ug/kg	230000		71 J	1600	610	
Fluorene	ug/kg	230000			52 J		
Indeno(1,2,3-cd)pyrene	ug/kg	150		20 J	**460 J**	**170 J**	
Naphthalene	ug/kg	3600		23 J			
Phenanthrene	ug/kg			56 J	720	230 J	
Pyrene	ug/kg	170000		59 J	1300	630	

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Tab. 1
Semivolatiles Detected in Reservior Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB21222324-WA	RVSB24-SS
Subarea			**6**	**6**
2-Methylnaphthalene	ug/kg	31000		36 J
Acenaphthene	ug/kg	340000		
Acenaphthylene	ug/kg			
Anthracene	ug/kg	1700000		
Benzo(a)anthracene	ug/kg	150	64 J	47 J
Benzo(a)pyrene	ug/kg	15	**55 J**	
Benzo(b)fluoranthene	ug/kg	150	85 J	63 J
Benzo(g,h,i)perylene	ug/kg			
Benzo(k)fluoranthene	ug/kg	1500	29 J	26 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000		31 J
Butylbenzylphthalate	ug/kg	260000		
Carbazole	ug/kg			
Chrysene	ug/kg	15000	76 J	44 J
Dibenzo(a,h)anthracene	ug/kg	15		
Di-n-butylphthalate	ug/kg	610000		
Fluoranthene	ug/kg	230000	190 J	68 J
Fluorene	ug/kg	230000		
Indeno(1,2,3-cd)pyrene	ug/kg	150	28 J	31 J
Naphthalene	ug/kg	3600		
Phenanthrene	ug/kg		60 J	
Pyrene	ug/kg	170000	120 J	60 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 42
Inorganics Detected in Reservior Soil

Analyte	Result Unit	RSL (mg/kg)	RVSB011920-CW	RVSB011920-NS	RVSB020304-CW	RVSB020304-NS	RVSB020304-WA	RVSB04-SS
Subarea			**1**	**1**	**2**	**2**	**2**	**2**
Aluminum	mg/kg	7700	7570	6450	6740	**9300**	**9500**	**9840**
Antimony	mg/kg	3.1						
Arsenic	mg/kg	0.39	**5.3**	**2.2**	**5.9**	**3.6**	**10.7**	**6.3**
Barium	mg/kg	1500	71.4	122	119	86.3	92.7	95
Beryllium	mg/kg	16	0.37 J	0.71	0.44 J	0.63	0.96	0.65 J
Cadmium	mg/kg	7	0.51 J		0.77 J		0.32 J	1.2
Calcium	mg/kg		2610	891	34000	2710	41800	18100
Chromium	mg/kg		19.2	12.7	19.9	15.1	23.9	22.6
Cobalt	mg/kg	2.3	**4.2 J**	**5.6 J**	**6.9 J**	**7.7**	**11.5**	**11.1**
Copper	mg/kg	310	23.5	13.2	43.1	8.9	33.9	30.8
Iron	mg/kg	5500	**18600**	**9930**	**14700**	**13900**	**12900**	**22500**
Lead	mg/kg	40	**80.4**	7.5	**148**	13.1	**50.3**	**86.4**
Magnesium	mg/kg		1850	2190	5360	2110	6530	5840
Manganese	mg/kg	180	117	**187**	**388**	**498**	**298**	**719**
Mercury	mg/kg	0.56	0.052 B		0.19		0.069 J	0.13 J
Nickel	mg/kg	150	8.6	10.4	36.3	9	40.7	31.7
Potassium	mg/kg		596 J	651	979	610	1180	1110
Selenium	mg/kg	39						
Vanadium	mg/kg	0.55	**28.4**	**19.2**	**21.4**	**24.3**	**26**	**29.7**
Zinc	mg/kg	2300	120	25.3	509	21.8	144	**2440**

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 42
Inorganics Detected in Reservior Soil

Analyte	Result Unit	RSL (mg/kg)	RVSB05060708-NS	RVSB05060708-WA	RVSB050607-CW	RVSB08-SS	RVSB09101112-CW
Subarea			**3**	**3**	**3**	**3**	**4**
Aluminum	mg/kg	7700	6870	**11800**	**10900**	5190	6760
Antimony	mg/kg	3.1					
Arsenic	mg/kg	0.39	**3.9**	**2.8**	**6.2**	**3.8**	**3.9**
Barium	mg/kg	1500	64	134	114	68.4	138
Beryllium	mg/kg	16	0.56 J	0.33 J	0.74	0.36 J	0.75
Cadmium	mg/kg	7			0.3 J	0.59 J	
Calcium	mg/kg		2340	116000	10800	23300	1880
Chromium	mg/kg		11	33.5	21.4	13.8	12.6
Cobalt	mg/kg	2.3	**6.3**	**13**	**10.3**	**5.1 J**	**7.1**
Copper	mg/kg	310	9	22.2	27.7	24.1	13.1
Iron	mg/kg	5500	**9190**	**10100**	**19600**	**9410**	**10000**
Lead	mg/kg	40	11.3	16.9	**46.8**	**84.5**	**44.2**
Magnesium	mg/kg		1950	36400	4460	4720	1980
Manganese	mg/kg	180	**367**	**220**	**499**	**335**	**321**
Mercury	mg/kg	0.56	0.046 J			0.13 J	0.051 J
Nickel	mg/kg	150	12.4	138	18.6	24.5	11.9
Potassium	mg/kg		338 J	442 J	1630	844 J	568 J
Selenium	mg/kg	39					
Vanadium	mg/kg	0.55	**15.4**	**18.8**	**31.2**	**15.2**	**19.8**
Zinc	mg/kg	2300	18.9	24.2	69	121	39.3

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 42
Inorganics Detected in Reservior Soil

Analyte	Result Unit	RSL (mg/kg)	RVSB091011-WA	RVSB1112-NS	RVSB12-SS	RVSB15161718-CW	RVSB15161718-NS
Subarea			**4**	**4**	**4**	**5**	**5**
Aluminum	mg/kg	7700	**11500**	6120	7030	6900	**10400**
Antimony	mg/kg	3.1					
Arsenic	mg/kg	0.39	**3**	**1.8**	**3.3**	**5.4**	**3.2**
Barium	mg/kg	1500	108	81.9	87.3	89.3	193
Beryllium	mg/kg	16	0.39 J	0.72	0.53 J	0.81	0.63 J
Cadmium	mg/kg	7			0.38 J	0.35 J	
Calcium	mg/kg		109000	1920	17100	31200	2000
Chromium	mg/kg		27.7	9.6	11.6	14.3	18.7
Cobalt	mg/kg	2.3	**8.9**	**6.8**	**6.2 J**	**7.1**	**5 J**
Copper	mg/kg	310	20.2	9.9	19.8	25.4	9.5
Iron	mg/kg	5500	**11400**	**7230**	**9030**	**13400 J**	**17700 J**
Lead	mg/kg	40	**60.9**	20.1	**66.3**	**53**	12.9
Magnesium	mg/kg		13400	1650	3450	16900	1540
Manganese	mg/kg	180	**243**	82.8	**346**	**562 J**	**538 J**
Mercury	mg/kg	0.56		0.097 J	0.078 J	**1.8**	
Nickel	mg/kg	150	105	8	17.5	16.7	7
Potassium	mg/kg		432 J	545 J	628 J	705	652
Selenium	mg/kg	39					
Vanadium	mg/kg	0.55	**17.2**	**18**	**15.5**	**21.3**	**31.4**
Zinc	mg/kg	2300	66.6	25.1	113	89.1	20.6

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

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Bold values = RSL exceeded

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Data Qualifiers:

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Table 42
Inorganics Detected in Reservior Soil

Analyte	Result Unit	RSL (mg/kg)	RVSB15161718-WA	RVSB17-SS	RVSB19-SS	RVSB21222324-CW	RVSB21222324-WA	RVSB24-SS
Subarea			**5**	**5**	**1**	**6**	**6**	**6**
Aluminum	mg/kg	7700	3890	7290	3220	**8930**	**12200**	**8350**
Antimony	mg/kg	3.1					**3.6 J**	
Arsenic	mg/kg	0.39	**2.4**	**5.4**	**7.1**	**4.9**	**35.2**	**5.6**
Barium	mg/kg	1500	82.3	100	86.5	80.7	108	74.9
Beryllium	mg/kg	16	0.3 J	1.2		0.99	0.42 J	0.7
Cadmium	mg/kg	7		0.51 J	1.4 J	0.22 J	2	0.25 J
Calcium	mg/kg		44600	11100	6170	3320	146000	3840
Chromium	mg/kg		18.2	13.1	25	17.1	28.7	16.3
Cobalt	mg/kg	2.3	**5.1 J**	**7.9**		**9.5**	**10.9**	**9.5**
Copper	mg/kg	310	26.1	23.4	63.2	18.1	**358**	17.7
Iron	mg/kg	5500	5170 J	**15200 J**	**13500**	**18500**	**28000**	**17100**
Lead	mg/kg	40	22.7	**81**	**153**	19.6	**216**	21.6
Magnesium	mg/kg		4370	6030	1530 J	2560	16100	2670
Manganese	mg/kg	180	84 J	**890 J**	108	**643**	**296**	**588**
Mercury	mg/kg	0.56		**5**	0.19 J	0.06 B	0.15 B	0.06 B
Nickel	mg/kg	150	26	12.9	12.6	10.6	81.3	10.7
Potassium	mg/kg		882	722	937 J	1100	1090	971
Selenium	mg/kg	39					8	
Vanadium	mg/kg	0.55	**10.1**	**22.9**	**26.6**	**26.5**	**20.1**	**25.1**
Zinc	mg/kg	2300	34.1	135	190	45.3	440	45.8

Notes:

mg/kg - milligram per kilogram

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Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 3
Pesticides/PCBs Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB011920-CW	RVSB011920-NS	RVSB020304-CW	RVSB020304-NS	RVSB020304-WA	RVSB04-SS
Subarea			1	1	2	2	2	2
Aroclor-1248	ug/kg	220						
Aroclor-1254	ug/kg	220						
Aroclor-1260	ug/kg	220			5.7 J			5.7 J
4,4'-DDD	ug/kg	2000	0.89 J		0.13 J		0.11 J	0.67 J
4,4'-DDE	ug/kg	1400	0.4 J		0.73 J		0.36 J	5.8 J
4,4'-DDT	ug/kg	1700	1.7 J		1.6 J		0.37 J	6.9 J
Aldrin	ug/kg	29	0.06 J					
alpha-BHC	ug/kg	77					0.014 J	0.028 J
alpha-Chlordane	ug/kg		0.3 J				0.074 J	0.4 J
beta-BHC	ug/kg	270	0.29 B	0.07 B	0.17 B	0.055 J	0.083 J	0.1 J
delta-BHC	ug/kg			0.015 B	0.0053 J	0.078 J	0.073 J	0.04 J
Dieldrin	ug/kg	30	0.11 J		0.071 J	0.018 J	0.14 J	1.1 J
Endosulfan I	ug/kg		0.048 J					
Endosulfan II	ug/kg		0.086 J		0.47 J		0.36 J	0.75 J
Endosulfan sulfate	ug/kg		0.051 J		0.053 J	0.043 J	0.11 J	0.18 J
Endrin	ug/kg	1800	0.53 J		0.2 J		0.045 J	0.51 J
Endrin aldehyde	ug/kg		0.25 J	0.024 J	0.078 J	0.11 J		0.14 J
Endrin ketone	ug/kg		1.8 J		1 J		0.56 J	2.2 J
gamma-BHC(Lindane)	ug/kg	520			0.13 J		0.26 J	0.27 J
gamma-Chlordane	ug/kg		0.26 J		0.026 J		0.045 J	0.17 J
Heptachlor	ug/kg	110	0.11 B	0.04 B	0.072 B	0.085 J	0.048 J	0.081 J
Heptachlorepoxide	ug/kg	53	0.22 J		0.025 J	0.034 J	0.054 J	0.074 J
Methoxychlor	ug/kg	31000	0.16 B		0.13 B		0.1 J	0.28 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

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Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 3
Pesticides/PCBs Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB05060708-NS	RVSB05060708-WA	RVSB050607-CW	RVSB08-SS	RVSB09101112-CW	RVSB091011-WA
Subarea			3	3	3	3	4	4
Aroclor-1248	ug/kg	220						
Aroclor-1254	ug/kg	220						
Aroclor-1260	ug/kg	220			3.6 J	8.1 J		
4,4'-DDD	ug/kg	2000	0.024 J	0.1 J	0.38 J	0.14 J	0.23 B	0.089 J
4,4'-DDE	ug/kg	1400	0.045 J	0.24 J	1.8 J	0.8 J	0.15 J	0.065 J
4,4'-DDT	ug/kg	1700		0.33 J	1.2 J	21 J	0.38 J	0.053 J
Aldrin	ug/kg	29			0.033 J	0.061 J	0.028 J	
alpha-BHC	ug/kg	77	0.016 J	0.047 J	0.016 J	0.092 J	0.027 J	
alpha-Chlordane	ug/kg				0.089 J			
beta-BHC	ug/kg	270	0.046 J		0.068 J	0.21 J	0.16 B	0.1 B
delta-BHC	ug/kg		0.021 J	0.15 J	0.034 J	0.029 J	0.02 B	0.018 B
Dieldrin	ug/kg	30	0.065 J		0.7 J	0.13 J	0.13 J	0.04 J
Endosulfan I	ug/kg							
Endosulfan II	ug/kg		0.044 J	0.36 J	0.2 J	0.33 J	0.19 J	0.13 J
Endosulfan sulfate	ug/kg			0.063 J	0.07 J	0.038 J		0.066 J
Endrin	ug/kg	1800		0.067 J	0.076 J	0.067 J	0.052 J	0.043 J
Endrin aldehyde	ug/kg				0.058 J	0.18 J		
Endrin ketone	ug/kg		0.24 J	0.57 J	0.42 J	1.1 J	0.77 J	0.043 J
gamma-BHC(Lindane)	ug/kg	520			0.061 J	0.12 J		0.16 J
gamma-Chlordane	ug/kg		0.056 J		0.16 J	0.075 J	0.098 B	0.026 B
Heptachlor	ug/kg	110	0.057 J	0.11 J	0.17 J	0.07 J	0.094 B	0.074 B
Heptachlorepoxide	ug/kg	53	0.042 J	0.057 J		0.043 J	0.046 J	
Methoxychlor	ug/kg	31000	0.13 J	0.52 J	0.54 J	0.22 J	0.14 B	0.10 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 43
Pesticides/PCBs Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB1112-NS	RVSB12-SS	RVSB15161718-CW	RVSB15161718-NS	RVSB15161718-WA	RVSB17-SS
Subarea			**4**	**4**	**5**	**5**	**5**	**5**
Aroclor-1248	ug/kg	220						
Aroclor-1254	ug/kg	220						
Aroclor-1260	ug/kg	220			7.9 J		4.4 J	5.1 J
4,4'-DDD	ug/kg	2000		0.08 B	1.1 J		0.17 J	0.1 J
4,4'-DDE	ug/kg	1400		0.2 J	9.9		0.34 J	0.063 J
4,4'-DDT	ug/kg	1700		0.86 J	29		0.1 J	1.1 J
Aldrin	ug/kg	29			0.034 J			
alpha-BHC	ug/kg	77		0.07 J	0.023 J			0.022 J
alpha-Chlordane	ug/kg			0.09 J	0.2 J			0.19 J
beta-BHC	ug/kg	270	0.11 B	0.31 B	0.19 B	0.12 B	0.095 B	0.27 B
delta-BHC	ug/kg			0.019 B	0.092 J		0.058 J	0.16 J
Dieldrin	ug/kg	30		0.51 J	0.056 J		0.23 J	0.24 J
Endosulfan I	ug/kg				0.09 J	0.036 J	0.058 J	0.64 J
Endosulfan II	ug/kg			0.68 J	0.042 J	0.038 J	0.15 J	0.57 J
Endosulfan sulfate	ug/kg			0.17 J	0.054 J		0.055 J	0.11 J
Endrin	ug/kg	1800		0.05 J	0.025 J		0.067 J	0.32 J
Endrin aldehyde	ug/kg			0.13 J	0.97 J		0.098 J	1.1 J
Endrin ketone	ug/kg			0.19 J	0.7 J	0.034 J	0.52 J	0.34 J
gamma-BHC(Lindane)	ug/kg	520			0.42 J		0.035 J	0.05 J
gamma-Chlordane	ug/kg		0.024 B	0.2 B	0.34 J		0.058 J	0.25 J
Heptachlor	ug/kg	110	0.062 B	0.097 B	0.15 J	0.031 J	0.027 J	0.12 J
Heptachlorepoxide	ug/kg	53		0.033 J	0.041 J		0.035 J	0.04 J
Methoxychlor	ug/kg	31000	0.23 B	0.19 B	0.28 B	0.13 B	0.22 B	1 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

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WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 3
Pesticides/PCBs Detected in Reservoir Soil

Analyte	Result Unit	RSL (ug/kg)	RVSB19-SS	RVSB21222324-CW	RVSB21222324-WA	RVSB24-SS
Subarea			**1**	**6**	**6**	**6**
Aroclor-1248	ug/kg	220		55		120
Aroclor-1254	ug/kg	220		25 J		140
Aroclor-1260	ug/kg	220				
4,4'-DDD	ug/kg	2000	0.65 B	2.6 J	0.35 J	0.9 J
4,4'-DDE	ug/kg	1400	0.23 J	3.1 J	36	3.8 J
4,4'-DDT	ug/kg	1700	0.95 J	3.3 J	14	4.1 J
Aldrin	ug/kg	29	0.084 J	0.17 J		1.2 J
alpha-BHC	ug/kg	77	0.093 J			0.032 J
alpha-Chlordane	ug/kg		0.38 J	0.53 J	0.043 J	1.5 J
beta-BHC	ug/kg	270	0.35 B	0.15 B	0.11 B	0.56 J
delta-BHC	ug/kg		0.11 B	0.027 J	0.027 J	0.024 J
Dieldrin	ug/kg	30	0.34 J	1.1 J	0.068 J	1.7 J
Endosulfan I	ug/kg		0.16 J	0.19 J	0.021 J	0.97 J
Endosulfan II	ug/kg		1.3 J	0.21 J	0.1 J	0.41 J
Endosulfan sulfate	ug/kg		0.44 J	0.033 J	0.11 J	0.059 J
Endrin	ug/kg	1800	0.15 J	0.03 J	0.77 J	0.098 J
Endrin aldehyde	ug/kg		0.44 J	0.23 J	0.089 J	0.09 J
Endrin ketone	ug/kg		0.29 J	0.35 J	0.26 J	0.5 J
gamma-BHC(Lindane)	ug/kg	520		0.13 J		0.12 J
gamma-Chlordane	ug/kg		0.22 B	0.49 J	0.084 J	0.94 J
Heptachlor	ug/kg	110	0.16 B	0.058 B	0.17 B	0.064 B
Heptachlorepoxide	ug/kg	53	0.29 J	0.048 J	0.021 J	0.057 J
Methoxychlor	ug/kg	31000	0.29 B	0.12 B	1.2 B	0.11 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SB – Soil Boring

CW – Cover Waste

NS – Native Soil

WA – Waste Layer

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 44

Asbestos Detected in Future Potential Activity Based Sampling Locations

Analyte	Result Unit	APSB33-SS-3578	APSB34-SS-3579	PKSB53-SS-3547	RVSB25-SS-3580	RVSB26-SS-3581	RVSB27-SS-3582
Subarea		**3**	**5**	**3**	**None**	**4**	**None**
Total Asbestos	%	***12***	***15***	0.9	0.8	***1.1***	0.1
Asbestos, chrysotile	%	***12***	***15***	0.9	0.8	***1.1***	-

Notes:

PK - Park

AP - Asbestos Pile

RV - Reservoir

SB - Soil Boring

SS - Surface Soil

Bold and italicized values exceed 1% total asbestos

Table 45
Asbestos Detected in Park Groundwater

Analyte	Result Unit	Sample Location	MCL (mfl)	PKPZ01-RI-01-2760	PKPZ02D-RI01-2757	PKPZ02-RI-01-2761	PKPZ03-RI-01-2763
Subarea				**5**	**5**	**5**	**5**
Asbestos, chrysotile	MFL	Park	7	***6057.04***	***4547.02***	***7838.52***	***2076.7***

Notes:

MFL - millions of fibers per liter

PK - Park

PZ - Piezometer

MCL - Maximum Contaminant Level

Blank cells indicate analyte not detected

Bold and italicized values = MCL exceeded

Table 46
Volatiles Detected in Park Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ02-RI-01	PKPZ03-RI-01
Subarea			**5**	**5**	**5**	**5**
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5900			0.12 J	
2-Butanone	ug/L	710	350 L	21 L	46 L	52 L
Acetone	ug/L	2200	3.7 B	6.8 B	5.4 B	7.1 B
Benzene	ug/L	0.41		**5.1**	**6**	**2.6**
Carbon Disulfide	ug/L	100	0.089 B	0.71	0.57 B	0.49 B
Chloromethane	ug/L	19	0.14 B		0.079 B	
Ethylbenzene	ug/L	1.5		0.11 J	0.11 J	0.28 J
m,p-Xylene	ug/L			0.4 J	0.43 J	2.6
Methylcyclohexane	ug/L					1.2
Methylene chloride	ug/L	4.8	0.075 B			
o-Xylene	ug/L	120		0.21 J	0.23 J	0.63
Tetrachloroethene	ug/L	0.11	0.075 J	0.084 J	0.074 J	
Toluene	ug/L	230	0.056 J	1.2	1.4	0.77
Trichlorofluoromethane	ug/L	130	0.067 J			

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 47
Semivolatiles Detected in Park Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ03-RI-01
Subarea			**5**
2-Methylnaphthalene	ug/L	15	1.7 J
Carbazole	ug/L		0.58 J
Naphthalene	ug/L	0.14	**2.1 J**

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 48
Inorganics Detected in Park Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ02-RI-01	PKPZ03-RI-01
Subarea			**5**	**5**	**5**	**5**
Aluminum	ug/L	3700	**6760**	**10500**	**8250**	**3760**
Arsenic	ug/L	0.045	**4.1 J**	**15.2**	**17.2**	**12.2**
Barium	ug/L	730	**1600**	**2430**	**2820**	154 J
Beryllium	ug/L	7.3	**8.8**	**16.9**	**18.2**	
Cadmium	ug/L	1.8	**2.9 J**			
Calcium	ug/L		97200	61300	79900	34700
Chromium	ug/L		15.7	28	26.9	14
Cobalt	ug/L	1.1	**92**	**62.6**	**72.5**	
Copper	ug/L	150	**158**			
Cyanide	ug/L	73	7.9 J			
Iron	ug/L	2600	**5320**	**85600**	**111000**	**8710**
Lead	ug/L		512	29.4	17.1	26.8
Magnesium	ug/L		25400	7770	9360	2550 J
Manganese	ug/L	88	**5150**	**3750**	**5670**	**148**
Mercury	ug/L	0.057	**0.067 B**	**0.069 B**	**0.069 B**	**0.069 B**
Nickel	ug/L	73	51.3	41.5	39.4 J	18.5 J
Potassium	ug/L		41300	60000	65900	49200
Sodium	ug/L		18900	56700	59900	18400
Vanadium	ug/L	0.26	**53.3**	**203**	**189**	**25.4 J**
Zinc	ug/L	1100	900	117	118	91.8

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 49

Pesticides/PCBs Detected in Park Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ03-RI-01
Subarea			**5**	**5**	**5**
beta-BHC	ug/L	0.037			0.0087 J
Endosulfan sulfate	ug/L			0.0080 J	
Methoxychlor	ug/L	18	0.0064 J	0.0071 J	

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

PK – Park

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 50

Asbestos Detected in Asbestos Pile in Groundwater

Analyte	Result Unit	Sample Location	MCL (mfl)	APPZ01-RI-01-2751	APPZ02-RI-01-2753	APPZ03-RI-01-2756	APSB12-RI-01-2642
Subarea				**5**	**5**	**5**	**2**
Asbestos, chrysotile	MFL	Asbestos Pile	7	***4008.33***	***19952.59***	***34204.44***	***24940.74***

Analyte	Result Unit	Sample Location	MCL (mfl)	APSB18-R1-01-2551
Subarea				**5**
Asbestos, chrysotile	MFL	Asbestos Pile	7	***1068888.89***

Notes:

MFL - millions of fibers per liter

AP - Asbestos Pile

SB - Soil Boring

PZ - Piezometer

MCL - Maximum Contaminant Level

Blank cells indicate analyte not detected

Bold and italicized values = MCL exceeded

Multiple samples were collected for locations APPZ01, APPZ02, APPZ03, and APSB12. Only the highest detection is shown on the table.

Table 51
Volatiles Detected in Asbestos Pile Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01
Subarea			**5**	**5**	**5**	**2**	**5**
1,1-Dichloroethene	ug/L	34				0.74 B	
2-Butanone	ug/L	710	14 L	78 L	**1400 L**		
2-Hexanone	ug/L	4.7					**10**
Acetone	ug/L	2200	5.6 B	5.7 B	3.3 B	5.5 B	
Benzene	ug/L	0.41					**0.54 J**
Carbon Disulfide	ug/L	100	0.43 B	0.73	1.1		
Chloromethane	ug/L	19	0.15 B		0.098 B		
Methylene chloride	ug/L	4.8	0.086 B				
Toluene	ug/L	230	0.056 J	0.054 J			

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 52
Semivolatiles Detected in Asbestos Pile Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APSB12-RI-01	APSB18-RI-01
Subarea			**5**	**5**	**2**	**5**
3-Nitroaniline	ug/L			9.2 J		
Caprolactam	ug/L	1800			3.6 J	9.9 J
Dibenzofuran	ug/L	3.7	2.6 J			
Fluoranthene	ug/L	150	5.1 J		0.77 J	
Pentachlorophenol	ug/L	0.56				**5.9 B**
Phenanthrene	ug/L		11 J			
Pyrene	ug/L	110	4.5 J		0.71 J	

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 53
Inorganics Detected in Asbestos Pile Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01
Subarea			**5**	**5**	**5**	**2**	**5**
Aluminum	ug/L	3700		1340	**7380**	256 B	134 B
Arsenic	ug/L	0.045	**6.3 J**	**22.7**	**28.9**		
Barium	ug/L	730	317	**924**	**1810**	164 J	262
Beryllium	ug/L	7.3			**10.3**		
Calcium	ug/L		729000	472000	146000	673000	756000
Chromium	ug/L			8.2 J	25.3	29.8	
Cobalt	ug/L	1.1			**42.2 J**		
Copper	ug/L	150			33.3	26.5	11.7 J
Cyanide	ug/L	73	4.9 J				
Iron	ug/L	2600	**19800**	**27800**	**87300**		92.4 J
Lead	ug/L		5.7 J	5.5 J	69.6	7.3 J	6.3 J
Magnesium	ug/L		179000	17100	23500	2130 J	47600
Manganese	ug/L	88	**1180**	**7210**	**11500**	7.7 J	**844**
Mercury	ug/L	0.057	**0.087 B**	**0.071 B**	**0.064 B**	0.046 J	
Nickel	ug/L	73	11.5 J	22.1 J	51.6		40.3
Potassium	ug/L		60900	24100	18300	11300	8040
Sodium	ug/L		11800	8830	31100	10600	11700
Vanadium	ug/L	0.26			**134**		
Zinc	ug/L	1100	**1280**	84	128		

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 54

Pesticides/PCBs Detected in Asbestos Pile Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APSB12-RI-01	APSB18-RI-01
Subarea			**5**	**5**	**2**	**5**
4,4'-DDD	ug/L	0.28	0.0057 J			
alpha-Chlordane	ug/L				0.0075 J	
beta-BHC	ug/L	0.037	0.0058 J			
Dieldrin	ug/L	0.0042			**0.014 J**	
Endosulfan II	ug/L		0.0096 J			0.01 J
Endosulfan sulfate	ug/L			0.0076 J	0.0098 J	
Endrin ketone	ug/L		0.01 J			
gamma-Chlordane	ug/L				0.0087 J	
Methoxychlor	ug/L	18		0.051 J		0.032 J

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

AP – Asbestos Pile

SB – Soil Boring

PZ – Piezometer

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 55
Asbestos Detected in Creek Floodplain Shallow Soil

Analyte	Result Unit	Sample Location	CKFP02-S-3122	CKFP03-S-3089	CKFP03-S-3090	CKFP03-S-3091
Asbestos, chrysotile	%	Creek	0.5	0.4	0.1	0.1

Analyte	Result Unit	Sample Location	CKFP04-S-3099	CKFP05-S-3544	CKFP07-S-3124	CKFP08-S-3179
Asbestos, chrysotile	%	Creek	0.5	0.1	0.1	0.1

Notes:

CK - Creek

FP- Floodplain

Bold and italicized values exceed RSL of 1% total asbestos.

Table 56
Volatiles Detected in Shallow Floodplain Soil

Analyte	Result Unit	RSL (ug/kg)	CKFP01-S	CKFP02-S	CKFP03-S	CKFP04-S	CKFP05-S	CKFP07-S	CKFP08-S
1,1-Dichloroethene	ug/kg	24000					0.94 B		
2-Butanone	ug/kg	2800000					21		
2-Hexanone	ug/kg	21000	17 B	23 B	25 B	15 B	23 B	29 B	12 B
Acetone	ug/kg	6100000					13 B	26 B	
Chloroform	ug/kg	290	0.88 B				0.73 B	0.77 B	
Toluene	ug/kg	500000					2 B		

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 57
Semivolatiles Detected in Shallow Floodplain Soil

Analyte	Result Unit	RSL (ug/kg)	CKFP01-S	CKFP02-S	CKFP03-S	CKFP04-S	CKFP05-S	CKFP07-S	CKFP08-S
Acenaphthene	ug/kg	340000		74 J		96 J	40 J	220 J	
Acenaphthylene	ug/kg			42 J					
Anthracene	ug/kg	1700000	430 J	320	360 J	400	110 J	440 J	52 J
Benzo(a)anthracene	ug/kg	150	**2000**	**2100 L**	**1700**	**1300**	**490**	**2600**	**300 L**
Benzo(a)pyrene	ug/kg	15	**1700**	**2300**	**1500**	**1100**	**460**	**2600**	**220**
Benzo(b)fluoranthene	ug/kg	150	**2800**	**3500**	**1900**	**1600**	**540**	**3800**	**310**
Benzo(g,h,i)perylene	ug/kg				740	550	150 J		
Benzo(k)fluoranthene	ug/kg	1500	810	970	860	530	230	1300	100 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000					31 J		
Carbazole	ug/kg		330 J	170 J	220 J	240 J	58 J	220 J	
Chrysene	ug/kg	15000	2000	2100 L	1800	1300	520	2400	270 L
Dibenzo(a,h)anthracene	ug/kg	15	**400 J**	**400**				**620**	
Dibenzofuran	ug/kg	7800				89 J			
Di-n-butylphthalate	ug/kg	610000			150 J				
Fluoranthene	ug/kg	230000	7000	5400	3900	3500	1100	5300	480 L
Fluorene	ug/kg	230000				170 J	52 J	150 J	
Indeno(1,2,3-cd)pyrene	ug/kg	150	**980**	**1100**	**810**	**570**	**250**	**1200**	140 J
Phenanthrene	ug/kg		3800	2800	2300	2300	670	3600	330
Pyrene	ug/kg	170000	3700	3900 L	2900	2300	980	4600	390 L

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 58
Inorganics Detected in Shallow Floodplain Soil

Analyte	Result Unit	RSL (mg/kg)	CKFP01-S	CKFP02-S	CKFP03-S	CKFP04-S	CKFP05-S	CKFP07-S	CKFP08-S
Aluminum	mg/kg	7700	3580	6830	7090	6670	**7770**	5670	6930
Arsenic	mg/kg	0.39	**2.1**	**3.6**	**2.8**	**2.2**	**4.1**	**2.9**	**3.8**
Barium	mg/kg	1500	86.5	159	131	81.2	120	101	120
Beryllium	mg/kg	16	0.45 J	0.71 J	0.65 J	0.66 J	0.68	0.69	0.74
Cadmium	mg/kg	7	0.31 J	0.82 J	0.47 J	0.27 J	0.44 J	0.41 J	0.35 J
Calcium	mg/kg		8760	6460	5900	15300	1760 J	2400	2890 J
Chromium	mg/kg		10	19	17	15.7	27	23.1	18.4
Cobalt	mg/kg	2.3	**5.2 J**	**7.9 J**	**6.3 J**	**5.5 J**	**8.8**	**7.8**	**8.1**
Copper	mg/kg	310	15.8	35.4	26.9	25.5	25 J	24.1	20.7 J
Iron	mg/kg	5500	**11900**	**13500**	**13500**	**14200**	**16900**	**13300**	**16200**
Lead	mg/kg	40	**69.1**	**178**	**58.6**	36.9	**53.8 K**	**55.6**	**101 K**
Magnesium	mg/kg		4540	3070	2820	5730	2190 J	1930	2670 J
Manganese	mg/kg	180	**353**	**543**	**537**	**385**	**574**	**508**	**561**
Mercury	mg/kg	0.56	0.073 B	0.35 B	0.1 B	0.056 B	0.29	0.18 B	0.14
Nickel	mg/kg	150	8.6	16.9	15	11.4	14.1	11.8	13.2
Potassium	mg/kg		676	990	587 J	1640	664	691	781
Vanadium	mg/kg	0.55	**13.2**	**23.1**	**20.8**	**21.6**	**24.9**	**20.4**	**22.4**
Zinc	mg/kg	2300	111	199	115	74.1	95.2	92.6	87.5

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 59
Pesticides/PCBs Detected in Shallow Floodplain Soil

Analyte	Result Unit	RSL (ug/kg)	CKFP01-S	CKFP02-S	CKFP03-S	CKFP04-S	CKFP05-S	CKFP07-S	CKFP08-S
Aroclor-1254	ug/kg	220		32 J	24 J	9.6 J		16 J	
Aroclor-1260	ug/kg	220	7.9 J				10 J		6.3 J
4,4'-DDD	ug/kg	2000	0.59 J	0.52 J	1.5 J	1.1 J	0.3 J	0.45 J	0.2 J
4,4'-DDE	ug/kg	1400	2.4 J	0.89 J	2.4 J	0.46 J	0.91 J	0.44 J	0.25 J
4,4'-DDT	ug/kg	1700	6.8	6.1	60	2.7 J	5.2	9.7 J	0.91 J
Aldrin	ug/kg	29	0.019 J	0.36 J	0.12 J	0.14 J	0.018 J	0.041 J	0.038 J
alpha-BHC	ug/kg	77	0.024 J	0.02 J	0.054 J	0.042 J	0.073 J	0.084 J	
alpha-Chlordane	ug/kg		1.9 J	0.54 J	2.1 J	0.5 J	0.46 J	0.68 J	0.18 J
beta-BHC	ug/kg	270	0.18 B	0.63 J	0.12 B	0.17 B	0.27 J	0.35 B	0.29 B
delta-BHC	ug/kg		0.052 J	0.11 J	0.074 J	0.13 J	0.092 J	0.3 J	0.078 B
Dieldrin	ug/kg	30	1.8 J	0.2 J	0.24 J	0.88 J	1.2 J	0.18 J	0.47 J
Endosulfan I	ug/kg		0.12 J	0.38 J	1.4 J	0.13 J	0.12 J	0.31 J	
Endosulfan II	ug/kg		0.17 J	0.51 J	3.1 J	0.084 J	1.4 J	2.4 J	0.12 J
Endosulfan sulfate	ug/kg		0.17 J	0.29 J	0.25 J	0.18 J	0.093 J	0.32 J	0.18 J
Endrin	ug/kg	1800	0.13 J	0.094 J	0.53 J	0.081 J	0.12 J	0.15 J	0.048 J
Endrin aldehyde	ug/kg		0.089 J	0.64 J	1.4 J	0.34 J	0.5 J	1.5 J	0.38 J
Endrin ketone	ug/kg		5.1 J	12 J	6.6 J	4.9 J	4 J	12 J	2.1 J
gamma-BHC(Lindane)	ug/kg	520	0.047 J	0.28 J	0.21 J	0.089 J		0.13 J	0.29 J
gamma-Chlordane	ug/kg		1.6 J	0.45 J	1.3 J	0.44 J	0.12 J	0.19 J	0.13 J
Heptachlor	ug/kg	110	0.16 B	0.28 B	0.16 B	0.13 B	0.12 J	0.22 B	0.13 B
Heptachlorepoxide	ug/kg	53	0.29 J	0.24 J	0.23 J	0.1 J	0.047 J	0.12 J	0.037 J
Methoxychlor	ug/kg	31000	0.34 B	0.56 B	0.22 B	0.78 B	0.3 J	0.43 B	0.11 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 60
Total Organic Carbon Detected in Shallow Floodplain Soil

Analyte	Result Unit	RSL (mg/kg)	CKFP01-S	CKFP02-S	CKFP03-S	CKFP04-S	CKFP05-S	CKFP07-S	CKFP08-S
Total Organic Carbon	mg/kg		19800 K	33700 K	30000 K	28900 K	8010 J	15400 K	12400 K

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
CK – Creek
FP – Floodplain
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 61

Asbestos Detected in Creek Floodplain Deep Soil

Analyte	Result Unit	Sample Location	CKFP01-D-3169	CKFP02-D-3121	CKFP03-D-3088	CKFP04-D-3098
Asbestos, chrysotile	%	Creek	***1.2***	***12***	0.3	0.2

Analyte	Result Unit	Sample Location	CKFP05-D-3540	CKFP05D-D-3541	CKFP06-D-3543	CKFP07-D-3123
Asbestos, chrysotile	%	Creek	0.1	0.3	***1.3***	0.2

Analyte	Result Unit	Sample Location	CKFP08-D-3178
Asbestos, chrysotile	%	Creek	0.2

Notes:

CK - Creek

FP- Floodplain

Bold and italicized values exceed RSL of 1% total asbestos.

Table 2
Volatiles Detected in Deep Floodplain Soil

Analyte	Result Unit	RSL (ug/kg)	CKFP01-D	CKFP02-D	CKFP03-D	CKFP04-D	CKFP05-D	CKFP05D-D	CKFP06-D	CKFP07-D	CKFP08-D
1,1-Dichloroethene	ug/kg	24000					1.1 B		1.2 B		
1,2,3-Trichlorobenzene	ug/kg	4900					1.2 B	0.82 B	1.5 B		
1,2,4-Trichlorobenzene	ug/kg	22000					1 B	0.64 B	1.4 B		
2-Butanone	ug/kg	2800000		22 B					330		
2-Hexanone	ug/kg	21000	11 B	23 B	53 B	14 B	14 B	12 B	23 B	11 B	17 B
Acetone	ug/kg	6100000	2600	48 B			21 B	9 B	410		
Benzene	ug/kg	1100					0.88 J		2 J		
Chloroform	ug/kg	290	0.78 B	42 L	0.99 B	0.65 B	0.82 B	0.73 B	0.87 B		0.66 B
Ethylbenzene	ug/kg	5400							8.1 J		
m,p-Xylene	ug/kg			1 J							
Toluene	ug/kg	500000					0.93 B	1.1 B	550		
Trichloroethene	ug/kg	2800		2.6 J							

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 63
Semivolatiles Detected in Deep Floodplain Soil

Analyte	Result Unit	RSL (ug/kg)	CKFP02-D	CKFP03-D	CKFP04-D	CKFP05-D	CKFP05D-D	CKFP06-D	CKFP07-D	CKFP08-D
2-Methylnaphthalene	ug/kg	31000						57 J	2100	
4-Methylphenol	ug/kg	31000						460 J		
Acenaphthene	ug/kg	340000			390 J	69 J	62 J	340 J	2700	27 J
Acenaphthylene	ug/kg							150 J		
Anthracene	ug/kg	1700000	160 J	440 J	1500 J	180 J	130 J	1200 J	3100	86 J
Benzo(a)anthracene	ug/kg	150	**950**	**2000**	**2900**	**800**	**690**	**5500 J**	**7700**	**420**
Benzo(a)pyrene	ug/kg	15	**850**	**1500**	**2100**	**780**	**680**	**5400 J**	**5600**	**390**
Benzo(b)fluoranthene	ug/kg	150	**1100**	**2100**	**2700**	**930**	**810**	**4300 J**	**7500**	**470**
Benzo(g,h,i)perylene	ug/kg			820 J	990 J	280	220	1600 J	2300	150 J
Benzo(k)fluoranthene	ug/kg	1500	490 J	810 J	1000 J	320	390	**2900 J**	**2800**	200 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000					75 J	220 J		35 B
Carbazole	ug/kg		72 J	290 J	590 J	95 J	88 J	620 J	1800 J	52 J
Chrysene	ug/kg	15000	850	2000	2700	860	740	5800 J	7200	490
Dibenzo(a,h)anthracene	ug/kg	15	**250 J**							
Dibenzofuran	ug/kg	7800			620 J	24 J		160 J	1200 J	
Fluoranthene	ug/kg	230000	2000	4300	6000	1900	1300	11000 J	17000	880
Fluorene	ug/kg	230000			980 J	86 J	72 J	510 J	1700 J	37 J
Indeno(1,2,3-cd)pyrene	ug/kg	150	**460 J**	**850 J**	**1000 J**	**390**	**340**	**2700 J**	**2700**	**250**
Naphthalene	ug/kg	3600			490 J			55 J	480 J	
Phenanthrene	ug/kg		1000	2900	6800	1100	950	5500 J	15000	530
Pyrene	ug/kg	170000	1300	3000	4800	1700	1400	11000 J	12000	870 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 4
Inorganics Detected in Deep Floodplain Soil

Analyte	Result Unit	RSL (mg/kg)	CKFP01-D	CKFP02-D	CKFP03-D	CKFP04-D	CKFP05-D	CKFP05D-D	CKFP06-D	CKFP07-D	CKFP08-D
Aluminum	mg/kg	7700	4160	**11100**	**7760**	7590	**8530**	**7790**	4980	6600	6350
Arsenic	mg/kg	0.39	**2.4**	**4.2**	**3**	**2.3**	**5.7**	**4.1**	**4.8**	**3.1**	**4.1**
Barium	mg/kg	1500	158	211	129	110	146	124	126	99	117
Beryllium	mg/kg	16	0.57 J	0.64 J	0.73	0.71	0.86	0.66	0.43 J	0.94	0.67
Cadmium	mg/kg	7	0.39 J	0.8 J	0.49 J	0.38 J	0.43 J	0.48 J	0.56 J	0.5 J	0.42 J
Calcium	mg/kg		8870	76700	4720	3910	3080 J	1500 J	3530 J	2340	2890 J
Chromium	mg/kg		10.6	21.5	23.1	19.2	28.5	31	15.3	22.2	19
Cobalt	mg/kg	2.3	**5.3 J**	**8.3 J**	**7.8**	**6.8**	**10.8**	**8.5**	**5 J**	**7.6**	**8.1**
Copper	mg/kg	310	23.6	50.5	26.9	22	30.1 J	24.3 J	24 J	27.4	21.6 J
Iron	mg/kg	5500	**12300**	**13200**	**16300**	**15000**	**20600**	**16300**	**14300**	**13700**	**14700**
Lead	mg/kg	40	**62.1**	**240**	**82.6**	**55.2**	**43.4 K**	**50.4 K**	**141 K**	**120**	**74.5 K**
Magnesium	mg/kg		4890	10700	3420	3830	3470 J	2020 J	2960 J	2310	2510 J
Manganese	mg/kg	180	**533**	**435**	**516**	**267**	**700**	**555**	**566**	**638**	**524**
Mercury	mg/kg	0.56	0.054 B	0.33 B	0.15 B	0.12 B	0.13	0.2	0.091 J	0.21 B	0.16
Nickel	mg/kg	150	10.4	57.7	16.6	18.7	17.6	14.1	13.4	11.7	13.9
Potassium	mg/kg		779	926	781	682	682	561 J	480 J	788	538 J
Vanadium	mg/kg	0.55	**14**	**22**	**23.6**	**23.6**	**30.9**	**24.9**	**15.4**	**25.1**	**21.3**
Zinc	mg/kg	2300	121	213	123	101	94.4	90.5	127	128	95.4

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 65
Pesticides/PCBs Detected in Deep Floodplain Soil

Analyte	Result Unit	RSL (ug/kg)	CKFP01-D	CKFP02-D	CKFP03-D	CKFP04-D	CKFP05-D	CKFP05D-D	CKFP06-D	CKFP07-D	CKFP08-D
Aroclor-1248	ug/kg	220	20 J								
Aroclor-1254	ug/kg	220		9.3 J	72	17 J				32 J	
Aroclor-1260	ug/kg	220	15 J				15 J	11 J	29 J		8.9 J
4,4'-DDD	ug/kg	2000	0.88 J	0.32 J	0.72 J	0.21 J	0.2 J	0.43 J	2.1 J	0.67 J	0.18 J
4,4'-DDE	ug/kg	1400	4.7	0.12 J	0.44 J	0.17 J	2.6 J	1.5 J	4.2	0.8 J	0.34 J
4,4'-DDT	ug/kg	1700	16 J	0.86 J	16	1.9 J	7.4	6.5	28	1 J	1.7 J
Aldrin	ug/kg	29	0.091 J	0.15 J	0.031 J	0.038 J	0.045 J	0.065 J	0.076 J	0.27 J	0.095 J
alpha-BHC	ug/kg	77	0.037 J		0.076 J		0.04 J	0.025 J	0.058 J	0.039 J	
alpha-Chlordane	ug/kg		1.9 J		1.3 J	0.39 J	0.055 J	0.32 J	0.3 J	0.3 J	
beta-BHC	ug/kg	270	0.12 B	0.36 B	0.25 B	0.11 B	0.21 J	0.17 J	0.3 J	0.22 B	0.096 B
delta-BHC	ug/kg		0.056 J	0.046 J	0.16 J	0.058 J	0.12 J	0.086 J	0.47 J	0.074 J	
Dieldrin	ug/kg	30	2 J	0.22 J	0.24 J	0.66 J	5.2 J	3.7 J	0.11 J	1.1 J	0.31 J
Endosulfan I	ug/kg		0.092 J	0.12 J	0.98 J	0.059 J	0.087 J	0.17 J	0.48 J	0.19 J	0.045 J
Endosulfan II	ug/kg		2.3 J	3.1 J	2.2 J	0.15 J	0.92 J	0.45 J	0.87 J	0.6 J	0.19 J
Endosulfan sulfate	ug/kg		0.20 J	0.33 J	0.14 J	0.061 J	0.12 J	0.18 J	0.5 J	0.80 J	0.052 J
Endrin	ug/kg	1800	0.073 J	0.15 J	3.4 J	0.031 J	0.072 J	0.14 J	0.13 J	0.33 J	0.061 J
Endrin aldehyde	ug/kg		1.8 J	0.14 J	1.3 J	0.19 J	0.96 J	0.56 J	0.24 J	1.2 J	0.39 J
Endrin ketone	ug/kg		7.6 J	8.9 J	6.4 J	2.9 J	5.7 J	3.9 J	22 J	16 J	0.26 J
gamma-BHC(Lindane)	ug/kg	520	0.25 J		0.12 J				0.25 J	0.17 J	0.038 J
gamma-Chlordane	ug/kg		1.5 J	0.094 J	0.62 J	0.43 J	0.1 J	0.071 J	0.78 J	0.34 J	0.18 J
Heptachlor	ug/kg	110	0.36 J	0.22 B	0.12 B	0.093 B	0.27 J	0.03 J	0.26 J	0.25 B	0.09 B
Heptachlorepoxide	ug/kg	53	0.4 J	0.054 J	0.3 J	0.076 J	0.09 J	0.054 J	0.63 J	0.26 J	0.12 J
Methoxychlor	ug/kg	31000	0.71 B	0.33 B	0.28 B	0.24 B	0.27 J	0.25 J	1 J	2.7 J	0.13 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

FP – Floodplain

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 66
Total Organic Carbon Detected in Deep Floodplain Soil

Analyte	Result Unit	RSL (mg/kg)	CKFP01-D	CKFP02-D	CKFP03-D	CKFP04-D	CKFP05-D	CKFP05D-D	CKFP06-D	CKFP07-D	CKFP08-D
Total Organic Carbon	mg/kg		11100 K	30400 K	13700 K	13400 K	7230 J	5610 J	15400 J	21900 K	22800 K

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
CK – Creek
FP – Floodplain
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 67

Asbestos Detected in Soil Borings on the Other Side of the Wissahickon

Analyte	Result Unit	Sample Location	OWSB02-SS-3181
Asbestos, chrysotile	%	Creek	0.1

Notes:

OW - Other side of the Wissahickon

SB - Soil Boring

Bold and italicized values exceed RSL of 1% total asbestos.

Table 68
Volatiles Detected in Other Side of Wissahickon Creek

Analyte	Result Unit	RSL (ug/kg)	OWSB01-SS	OWSB02-SS	OWSB03-SS
1,1-Dichloroethene	ug/kg	24000			0.71 J
2-Hexanone	ug/kg	21000	24 B	23 B	17 B
Chloroform	ug/kg	290	0.91 B	1.1 B	0.84 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

OW – Other side of the Wissahickon

SB – Soil Boring

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 69
Semivolatiles Detected in Other Side of Wissahickon Creek

Analyte	Result Unit	RSL (ug/kg)	OWSB01-SS	OWSB02-SS	OWSB03-SS
Acetophenone	ug/kg	780000			78 B
Anthracene	ug/kg	1700000		44 J	72 J
Benzo(a)anthracene	ug/kg	150	120 J	**230 J**	**380**
Benzo(a)pyrene	ug/kg	15	**140 J**	**200 J**	**360**
Benzo(b)fluoranthene	ug/kg	150	**160 J**	**210 J**	**430**
Benzo(g,h,i)perylene	ug/kg		55 J		180 J
Benzo(k)fluoranthene	ug/kg	1500	71 J	110 J	190 J
Bis(2-ethylhexyl)phthalate	ug/kg	35000	35 B		30 B
Carbazole	ug/kg		24 J		56 J
Chrysene	ug/kg	15000	160 J	210 J	460
Fluoranthene	ug/kg	230000	260 L	470 L	930
Fluorene	ug/kg	230000			40 J
Indeno(1,2,3-cd)pyrene	ug/kg	150	88 J		**210 J**
Phenanthrene	ug/kg		220 J	240 J	550
Pyrene	ug/kg	170000	230 J	310 L	790 J

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
OW – Other side of the Wissahickon
SB – Soil Boring
SS - Surface Soil
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

Table 70

Inorganics Detected in Other Side of Wissahickon Creek

Analyte	Result Unit	RSL (mg/kg)	OWSB01-SS	OWSB02-SS	OWSB03-SS
Aluminum	mg/kg	7700	**8170**	**8450**	6860
Arsenic	mg/kg	0.39	**3.8**	**4.6**	**3.7**
Barium	mg/kg	1500	122	141	109
Beryllium	mg/kg	16	0.77	0.7 J	0.6 J
Cadmium	mg/kg	7		0.41 J	0.32 J
Calcium	mg/kg		2050 J	2620 J	1620 J
Chromium	mg/kg		17.6	24	19.4
Cobalt	mg/kg	2.3	**8.7**	**9.1**	**8**
Copper	mg/kg	310	18.4 J	23.6 J	21.5 J
Iron	mg/kg	5500	**16000**	**15800**	**14500**
Lead	mg/kg	40	23 K	**42.5 K**	36.5 K
Magnesium	mg/kg		1930 J	2080 J	1850 J
Manganese	mg/kg	180	**518**	**769**	**585**
Mercury	mg/kg	0.56	0.16	0.16	0.23
Nickel	mg/kg	150	11.8	13.2	11.6
Potassium	mg/kg		649 J	600 J	723
Vanadium	mg/kg	0.55	**23.9**	**24.9**	**21.9**
Zinc	mg/kg	2300	58.3	85.6	75.3

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

OW – Other side of the Wissahickon

SB – Soil Boring

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 71
Pesticides/PCBs Detected in Other Side of Wissahickon Creek

Analyte	Result Unit	RSL (ug/kg)	OWSB01-SS	OWSB02-SS	OWSB03-SS
Aroclor-1254	ug/kg	220		14 J	
4,4'-DDD	ug/kg	2000	0.24 J	0.11 J	0.14 J
4,4'-DDE	ug/kg	1400	0.11 J	0.35 J	0.37 J
4,4'-DDT	ug/kg	1700	0.74 J	1.3 J	1.5 J
Aldrin	ug/kg	29	0.062 J	0.027 J	0.015 J
alpha-BHC	ug/kg	77		0.042 J	0.035 J
alpha-Chlordane	ug/kg		0.13 J	0.17 J	0.11 J
beta-BHC	ug/kg	270	0.14 B	0.17 B	0.18 B
delta-BHC	ug/kg			0.058 B	0.061 B
Dieldrin	ug/kg	30	0.078 J	0.5 J	0.54 J
Endosulfan I	ug/kg		0.067 J	0.057 J	0.026 J
Endosulfan II	ug/kg		0.21 J	0.15 J	0.23 J
Endosulfan sulfate	ug/kg		0.075 J	0.14 J	0.038 J
Endrin	ug/kg	1800	0.028 J	0.027 J	0.029 J
Endrin aldehyde	ug/kg		0.13 J	0.19 J	0.18 J
Endrin ketone	ug/kg		0.034 J	0.22 J	0.22 J
gamma-BHC(Lindane)	ug/kg	520		0.047 J	0.056 J
gamma-Chlordane	ug/kg		0.11 J	0.26 J	0.13 J
Heptachlor	ug/kg	110		0.097 B	0.11 B
Heptachlorepoxide	ug/kg	53	0.053 J	0.11 J	0.055 J
Methoxychlor	ug/kg	31000	0.1 B	0.12 B	0.26 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

OW – Other side of the Wissahickon

SB – Soil Boring

SS - Surface Soil

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 72
Asbestos Detected in Reservoir Sediment

Analyte	Result Unit	Sample Location	RVSD01-RI-01-2240	RVSD02-RI-01-2141	RVSD04-RI-01-2157	RVSD05D-RI-01-2153
Asbestos, chrysotile	%	Reservoir	0.1	0.3	0.2	0.1

Analyte	Result Unit	Sample Location	RVSD05-RI-01-2154	RVSD06-RI-01-2242	RVSD07-RI-01-2162	RVSD07-RI-01-2163
Asbestos, chrysotile	%	Reservoir	0.1	0.2	0.4	0.5

Analyte	Result Unit	Sample Location	RVSD08-RI-01-2243	RVSD09-RI-01-2156	RVSD10-RI-01-2165	RVSD11-RI-01-2164
Asbestos, chrysotile	%	Reservoir	0.1	0.2	0.2	0.2

Analyte	Result Unit	Sample Location	RVSD12-RI-01-2244	RVSD13-RI-01-2245	RVSD14-RI-01-2246	RVSD15-RI-01-2247
Asbestos, chrysotile	%	Reservoir	0.3	0.3	0.1	0.1

Notes:

RV - Reservoir

SD - Sediment

Bold and italicized values exceed RSL of 1% total asbestos.

Table 73
Volatiles Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01
1,1-Dichloroethene	ug/kg	240000	1.1 B	5.5 B		8.6 B	
2-Butanone	ug/kg	28000000	32	57 J	32	150	88 J
2-Hexanone	ug/kg	210000	9.8 B	65 B	4.9 B	63 B	39 B
4-Methyl-2-pentanone	ug/kg	5300000					
Acetone	ug/kg	61000000	210	87 B	25 B	300 B	110 B
Carbon Disulfide	ug/kg	820000				17 J	8.9 J
Methylene chloride	ug/kg	110000		4.7 B		7.4 B	
Toluene	ug/kg	5000000	0.83 B	22 B		14 B	12 B

Analyte	Result Unit	RSL (ug/kg)	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01	RVSD09-RI-01
1,1-Dichloroethene	ug/kg	240000	4.6 B	1.9 J		7.8 J	37 B
2-Butanone	ug/kg	28000000	90	170	210	150	
2-Hexanone	ug/kg	210000	38 B	22 B	66 B	61 B	310 B
4-Methyl-2-pentanone	ug/kg	5300000			44 B		
Acetone	ug/kg	61000000	160 B	370	990	210 B	
Carbon Disulfide	ug/kg	820000	12 J		32 J	22 J	46 J
Methylene chloride	ug/kg	110000				8 B	
Toluene	ug/kg	5000000	5.7 B	6.5 B	20 B	24 B	33 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 73
Volatiles Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01
1,1-Dichloroethene	ug/kg	240000	13 B				
2-Butanone	ug/kg	28000000	180 J	110 J	110	72	170
2-Hexanone	ug/kg	210000	88 B	45 B	55 B	16 B	82 B
4-Methyl-2-pentanone	ug/kg	5300000					
Acetone	ug/kg	61000000	410 B	250 B	230 B	130 B	250 B
Carbon Disulfide	ug/kg	820000	28 J	21 J	20 J	4.1 J	28 J
Methylene chloride	ug/kg	110000	11 B		8 B	1.6 B	
Toluene	ug/kg	5000000	12 B		18 B	4.1 B	14 B

Analyte	Result Unit	RSL (ug/kg)	RVSD15-RI-01
1,1-Dichloroethene	ug/kg	240000	6.9 J
2-Butanone	ug/kg	28000000	190
2-Hexanone	ug/kg	210000	60 B
4-Methyl-2-pentanone	ug/kg	5300000	
Acetone	ug/kg	61000000	
Carbon Disulfide	ug/kg	820000	26 J
Methylene chloride	ug/kg	110000	9.7 B
Toluene	ug/kg	5000000	7.3 B

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
RV – Reservoir
SD – Sediment
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 74
Semivolatiles Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01
Anthracene	ug/kg	17000000						
Benzo(a)anthracene	ug/kg	1500	35 J				97 J	110 J
Benzo(a)pyrene	ug/kg	150	31 J				130 J	140 J
Benzo(b)fluoranthene	ug/kg	1500	44 J			130 J	200 J	200 J
Benzo(k)fluoranthene	ug/kg	15000						85 J
Bis(2-ethylhexyl)phthalate	ug/kg	350000	51 J				82 J	
Butylbenzylphthalate	ug/kg	2600000						
Carbazole	ug/kg							
Chrysene	ug/kg	150000	32 J				130 J	150 J
Dibenzo(a,h)anthracene	ug/kg	150						
Di-n-butylphthalate	ug/kg	6100000	29 J		40 J		72 J	
Fluoranthene	ug/kg	2300000	50 J	92 J		160 J	230 J	250 J
Indeno(1,2,3-cd)pyrene	ug/kg	1500					82 J	92 J
Phenanthrene	ug/kg							
Pyrene	ug/kg	1700000	43 J	86 J		130 J	190 J	210 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 74
Semivolatiles Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD06-RI-01	RVSD08-RI-01	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01
Anthracene	ug/kg	17000000	120 J					
Benzo(a)anthracene	ug/kg	1500	410 J					
Benzo(a)pyrene	ug/kg	150	**370 J**		**220 J**			**210 J**
Benzo(b)fluoranthene	ug/kg	1500	470		310 J			200 J
Benzo(k)fluoranthene	ug/kg	15000	170 J					
Bis(2-ethylhexyl)phthalate	ug/kg	350000	72 J			160 J		
Butylbenzylphthalate	ug/kg	2600000					200 J	
Carbazole	ug/kg		47 J					
Chrysene	ug/kg	150000	410 J					
Dibenzo(a,h)anthracene	ug/kg	150	65 J					
Di-n-butylphthalate	ug/kg	6100000	59 J			250 J	200 J	
Fluoranthene	ug/kg	2300000	910	240 J	370 J			280 J
Indeno(1,2,3-cd)pyrene	ug/kg	1500	190 J					
Phenanthrene	ug/kg		480					
Pyrene	ug/kg	1700000	720		310 J			230 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 74
Semivolatiles Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD15-RI-01
Anthracene	ug/kg	17000000	
Benzo(a)anthracene	ug/kg	1500	
Benzo(a)pyrene	ug/kg	150	**240 J**
Benzo(b)fluoranthene	ug/kg	1500	290 J
Benzo(k)fluoranthene	ug/kg	15000	
Bis(2-ethylhexyl)phthalate	ug/kg	350000	230 J
Butylbenzylphthalate	ug/kg	2600000	
Carbazole	ug/kg		
Chrysene	ug/kg	150000	220 J
Dibenzo(a,h)anthracene	ug/kg	150	
Di-n-butylphthalate	ug/kg	6100000	340 J
Fluoranthene	ug/kg	2300000	410 J
Indeno(1,2,3-cd)pyrene	ug/kg	1500	
Phenanthrene	ug/kg		
Pyrene	ug/kg	1700000	350 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 5
Inorganics Detected in Reservoir Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01
Aluminum	mg/kg	77000	3440	8560	1430	10200	6140	5490
Arsenic	mg/kg	3.9	1.2 J	**5.2**	0.55 J	**5.1 J**	3.3 J	3.5
Barium	mg/kg	15000	29.2	114	10 J	110 J	89.8	73.4
Beryllium	mg/kg	160	0.24 J					
Cadmium	mg/kg	70					1 J	0.79 J
Calcium	mg/kg		921	20800	465 J	9760	5060	4240
Chromium	mg/kg		7.2	36.6	2.8	40.9	35.8	30.4
Cobalt	mg/kg	23	2.6 J	11.1 J			7.5 J	6.6 J
Copper	mg/kg	3100	8.1	49.8	2.7 J	62	41	34.9
Iron	mg/kg	55000	5460	17400	1590	19500	15000	13200
Lead	mg/kg	400	7.4	40.3	2.8	56.6	49.2	42
Magnesium	mg/kg		1080	11600	356 J	4780	2270	1940
Manganese	mg/kg	1800	64.6	329	38.3	302	291	246
Mercury	mg/kg	5.6				0.2 J	0.15 J	0.15 J
Nickel	mg/kg	1500	4.8 J	82.9	1.8 J	33.4	18.4	15.9
Potassium	mg/kg		417 J	796 J		993 J	658 J	545 J
Vanadium	mg/kg	5.5	**8.8**	**23.5**	2.2 J	**29.5 J**	**13.4 J**	**11.9 J**
Zinc	mg/kg	23000	17.1	110	11.3	190	196	169

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 5
Inorganics Detected in Reservoir Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01
Aluminum	mg/kg	77000	3730	10600	12700	10300	11800	12500
Arsenic	mg/kg	3.9	**4**	**5.8**	**7.4 J**	**5.2 J**	**5.6 J**	**6.8 J**
Barium	mg/kg	15000	55.7	131	161 J	132 J	161 J	173 J
Beryllium	mg/kg	160	0.4 J					
Cadmium	mg/kg	70	0.3 J		2 J	1.5 J	1.6 J	1.9 J
Calcium	mg/kg		5700	9710	9860	9290	10300	12700
Chromium	mg/kg		12.8	36.8	65.5	53.2	52.2	57
Cobalt	mg/kg	23	5.5 J	10 J				
Copper	mg/kg	3100	28.1	72.1	90.9	70.8	73.7	82
Iron	mg/kg	55000	10800	18900	25600	22200	22200	24100
Lead	mg/kg	400	20.3	65.4	96	78.4	78.2	85.2
Magnesium	mg/kg		3180	6810	3900 J	3490	3930 J	3910 J
Manganese	mg/kg	1800	542	334	323	292	303	326
Mercury	mg/kg	5.6	0.12 J	0.16 J	0.25 J	0.28 J	0.3 J	0.36 J
Nickel	mg/kg	1500	13.1	42	34.1	30.1	29.4 J	32.3 J
Potassium	mg/kg		320 J	895 J				
Vanadium	mg/kg	5.5	**11.6**	**32**	**32 J**	**27.4 J**	**33.4 J**	**35 J**
Zinc	mg/kg	23000	81.9	171	354	282	268	307

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Reside

Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise

Table 75
Inorganics Detected in Reservoir Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01	RVSD15-RI-01
Aluminum	mg/kg	77000	11400	3450	11500	11800
Arsenic	mg/kg	3.9	**6.6 J**	2.2	**6.3 J**	**7.6 J**
Barium	mg/kg	15000	171 J	43.1	169 J	197 J
Beryllium	mg/kg	160				
Cadmium	mg/kg	70	1.6 J			
Calcium	mg/kg		21300	3860	11300	15900
Chromium	mg/kg		57.2	7.5	42.4	50.1
Cobalt	mg/kg	23		3.5 J		
Copper	mg/kg	3100	82.5	9.3	66.4	77
Iron	mg/kg	55000	21400	5570	20100	22500
Lead	mg/kg	400	81.9	10.5	67.4	81.4
Magnesium	mg/kg		6350	1850	4070 J	4890 J
Manganese	mg/kg	1800	389	109	292	338
Mercury	mg/kg	5.6				
Nickel	mg/kg	1500	39.8	9.2	28.3 J	32.9 J
Potassium	mg/kg					
Vanadium	mg/kg	5.5	**31.9 J**	**10.1 J**	**31.4 J**	**33.3 J**
Zinc	mg/kg	23000	268	25	216	250

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Reside

Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise

Table 76
Pesticides/PCBs Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01
4,4'-DDD	ug/kg	20000	0.13 B	0.27 B			0.53 B	0.49 B
4,4'-DDE	ug/kg	14000	0.069 J	0.3 J	0.03 J	0.45 J	0.64 J	0.66 J
4,4'-DDT	ug/kg	17000		0.34 B		0.35 B	0.58 B	0.45 B
Aldrin	ug/kg	290	0.036 B		0.035 B			
alpha-BHC	ug/kg	770	0.035 J	0.073 J		0.18 J	0.13 J	0.11 J
alpha-Chlordane	ug/kg		0.036 J	0.041 J	0.083 J			0.27 J
beta-BHC	ug/kg	2700	0.15 B	0.47 B	0.14 B	0.58 B	0.33 B	0.3 B
delta-BHC	ug/kg		0.036 B	0.14 B		0.13 B	0.15 B	0.14 B
Dieldrin	ug/kg	300	0.039 J	0.33 J	0.048 J	0.26 J	0.29 J	0.3 J
Endosulfan I	ug/kg		0.037 J	0.13 J	0.043 J		0.12 J	0.12 J
Endosulfan II	ug/kg		0.058 J	0.4 J			0.1 J	0.29 J
Endosulfan sulfate	ug/kg			0.19 B			0.15 B	
Endrin	ug/kg	18000		0.26 J			0.19 J	0.12 J
Endrin aldehyde	ug/kg		0.026 J		0.098 J		0.17 J	
Endrin ketone	ug/kg		0.057 J	0.17 J		0.19 J	0.22 J	0.13 J
gamma-BHC(Lindane)	ug/kg	5200		0.16 J		0.27 J	0.17 J	
gamma-Chlordane	ug/kg		0.053 B	0.17 B	0.05 B	0.27 B	0.17 B	0.17 B
Heptachlor	ug/kg	1100	0.059 B	0.28 B	0.042 B	0.28 B	0.22 B	0.24 B
Heptachlorepoxide	ug/kg	530				0.21 J	0.14 J	0.15 J
Methoxychlor	ug/kg	310000	0.28 B	0.22 B	0.098 B	1.4 B	0.79 B	0.64 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 76
Pesticides/PCBs Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01	RVSD09-RI-01	RVSD10-RI-01
4,4'-DDD	ug/kg	20000	1.4 J			0.63 B	0.47 B
4,4'-DDE	ug/kg	14000	0.95 J	0.37 J	1.1 J	0.95 J	1.4 J
4,4'-DDT	ug/kg	17000	0.39 B		0.36 B		0.93 B
Aldrin	ug/kg	290	0.16 B				0.22 B
alpha-BHC	ug/kg	770		0.14 J	0.34 J	0.33 J	0.52 J
alpha-Chlordane	ug/kg		0.83 J				0.38 J
beta-BHC	ug/kg	2700	0.15 B	0.27 B	1.5 B	1.2 B	0.5 B
delta-BHC	ug/kg		0.11 B	0.14 B	0.28 B	0.21 B	0.12 B
Dieldrin	ug/kg	300	0.19 J	0.32 J		0.5 J	0.32 J
Endosulfan I	ug/kg			0.17 J			
Endosulfan II	ug/kg		0.33 J		0.56 J	0.52 J	0.67 J
Endosulfan sulfate	ug/kg		0.12 B			0.57 B	
Endrin	ug/kg	18000	1.3 J				0.18 J
Endrin aldehyde	ug/kg		0.58 J				0.45 J
Endrin ketone	ug/kg		3.5 J		0.37 J	0.36 J	0.46 J
gamma-BHC(Lindane)	ug/kg	5200	0.26 J	0.19 J	0.44 J	0.32 J	0.27 J
gamma-Chlordane	ug/kg		0.6 J	0.21 B	0.51 B	0.51 B	0.74 B
Heptachlor	ug/kg	1100	0.23 B	0.22 B	0.9 B	0.38 B	0.27 B
Heptachlorepoxide	ug/kg	530			0.29 J	0.49 J	0.4 J
Methoxychlor	ug/kg	310000	0.44 B	1.8 B	12 J	1.7 B	2 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 76
Pesticides/PCBs Detected in Reservoir Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01	RVSD15-RI-01
4,4'-DDD	ug/kg	20000	0.54 B	0.17 B	0.4 J	0.42 B	1.4 B
4,4'-DDE	ug/kg	14000	2 J	0.83 J	0.27 J	1.3 J	2.6 J
4,4'-DDT	ug/kg	17000	0.88 B	0.11 B	0.098 B	0.62 B	1.8 B
Aldrin	ug/kg	290	0.26 B		0.22 B	0.39 B	0.3 B
alpha-BHC	ug/kg	770	0.39 J	0.25 J	0.16 J	0.45 J	0.63 J
alpha-Chlordane	ug/kg		0.2 J		0.087 J		0.23 J
beta-BHC	ug/kg	2700	0.53 B	0.91 B	0.12 B	1.2 B	1 B
delta-BHC	ug/kg		0.13 B	0.18 B	0.063 B	0.22 B	0.31 B
Dieldrin	ug/kg	300	0.31 J	1.1 J	0.33 J	0.57 J	0.43 J
Endosulfan I	ug/kg		0.33 J	0.22 J	0.11 J	0.33 J	
Endosulfan II	ug/kg		0.26 J		0.13 J	0.6 J	1.4 J
Endosulfan sulfate	ug/kg		0.32 B	0.15 B	0.091 B		0.51 B
Endrin	ug/kg	18000	0.53 J	0.56 J	0.27 J	0.14 J	0.64 J
Endrin aldehyde	ug/kg		0.21 J		0.09 J		
Endrin ketone	ug/kg		0.21 J	0.23 J	0.24 J	0.23 J	0.24 J
gamma-BHC(Lindane)	ug/kg	5200	0.28 J	0.25 J	0.13 J	0.33 J	0.52 J
gamma-Chlordane	ug/kg		0.85 B	0.43 B	0.18 B	0.84 B	1.3 B
Heptachlor	ug/kg	1100	0.27 B	0.31 B	0.14 B	0.51 B	0.88 B
Heptachlorepoxide	ug/kg	530	0.3 J	0.17 J	0.25 J	0.18 J	0.31 J
Methoxychlor	ug/kg	310000	2.3 B	1.6 B	0.58 B	0.98 B	3.9 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 77
Total Organic Carbon and Grain Size Detected in Reservoir Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01
Total Organic Carbon	mg/kg		5350	67400	5890	25600	47500

Analyte	Result Unit	RSL (mg/kg)	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01	RVSD09-RI-01
Total Organic Carbon	mg/kg		46400	36300	108000	97400	48900

Analyte	Result Unit	RSL (mg/kg)	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01
Total Organic Carbon	mg/kg		86500	84500	93600	24900	49300

Analyte	Result Unit	RSL (mg/kg)	RVSD15-RI-01
Total Organic Carbon	mg/kg		61400

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
RV – Reservoir
SD – Sediment

Table 78
Asbestos Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	Sample Location	CKSD02-RI-01-3429	CKSD03-RI-01-3432	CKSD04-RI-01-3340	CKSD07-RI-01-3310
Asbestos, chrysotile	%	Creek	0.1	0.8	0.1	0.3
Crocidolite	%	Creek	-	-	-	0.1
Total Asbestos	%	Creek	0.1	0.8	0.1	0.4

Notes:

CK - Creek

SD - Sediment

"-" - Not detected

Bold and italicized values exceed RSL of 1% total asbestos.

Table 79
Volatiles Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01
1,1-Dichloroethene	ug/kg	240000						
2-Butanone	ug/kg	28000000				16		
2-Hexanone	ug/kg	210000	15 B	12 B	14 B	17 B	12 B	12 B
Acetone	ug/kg	61000000						
Chloroform	ug/kg	2900			0.78 B	1 B	0.81 B	0.84 B
Methylene chloride	ug/kg	110000	1.2 B	1.5 B	1.1 B	1.3 B		

Analyte	Result Unit	RSL (ug/kg)	CKSD07-RI-01	CKSD08-RI-01
1,1-Dichloroethene	ug/kg	240000		
2-Butanone	ug/kg	28000000		
2-Hexanone	ug/kg	210000	15 B	16 B
Acetone	ug/kg	61000000	23 B	
Chloroform	ug/kg	2900	1 B	1.2 B
Methylene chloride	ug/kg	110000		

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 80
Semivolatiles Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01
Acenaphthene	ug/kg	3400000	64 J		40 J	58 J	
Acenaphthylene	ug/kg						
Acetophenone	ug/kg	7800000	58 B	75 B			
Anthracene	ug/kg	17000000	210	44 J	120 J	170 J	52 J
Benzo(a)anthracene	ug/kg	1500	730	170 J	460	710	250
Benzo(a)pyrene	ug/kg	150	**540**	**150 J**	**400**	**650**	**240**
Benzo(b)fluoranthene	ug/kg	1500	470	170 J	580	810	320
Benzo(g,h,i)perylene	ug/kg		93 J	46 J	130 J	260	100 J
Benzo(k)fluoranthene	ug/kg	15000	190	64 J	230	300	150 J
Bis(2-ethylhexyl)phthalate	ug/kg	350000			36 B		31 B
Butylbenzylphthalate	ug/kg	2600000			27 J		
Carbazole	ug/kg				120 J	100 J	30 J
Chrysene	ug/kg	150000	850	120 J	680	780	300
Dibenzofuran	ug/kg	78000			25 J	34 J	
Fluoranthene	ug/kg	2300000	810	250	1400	1600	490
Fluorene	ug/kg	2300000	56 J		49 J	82 J	
Indeno(1,2,3-cd)pyrene	ug/kg	1500	150 J	69 J	220	350	130 J
Phenanthrene	ug/kg		570	170 J	810	1100	320
Pyrene	ug/kg	1700000	1900	260	1100	1300 J	450 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 80
Semivolatiles Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01
Acenaphthene	ug/kg	3400000	120 J	140 J	25 J
Acenaphthylene	ug/kg			25 J	
Acetophenone	ug/kg	7800000			
Anthracene	ug/kg	17000000	330	320	150 J
Benzo(a)anthracene	ug/kg	1500	1200	1100	750
Benzo(a)pyrene	ug/kg	150	**990**	**950**	**640**
Benzo(b)fluoranthene	ug/kg	1500	1300	1100	740
Benzo(g,h,i)perylene	ug/kg		420	360	260
Benzo(k)fluoranthene	ug/kg	15000	500	480	300
Bis(2-ethylhexyl)phthalate	ug/kg	350000	65 B		26 B
Butylbenzylphthalate	ug/kg	2600000			
Carbazole	ug/kg		230	190 J	45 J
Chrysene	ug/kg	150000	1300	1200	800
Dibenzofuran	ug/kg	78000	57 J	61 J	
Fluoranthene	ug/kg	2300000	2600	2400	1200
Fluorene	ug/kg	2300000	140 J	180 J	38 J
Indeno(1,2,3-cd)pyrene	ug/kg	1500	550	510	330
Phenanthrene	ug/kg		1900	1900	610
Pyrene	ug/kg	1700000	2200 J	2000 J	1100 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 81
Inorganics Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (mg/kg)	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01
Aluminum	mg/kg	77000	5730	6190	3020	3250	4210
Arsenic	mg/kg	3.9	3.1	**4.3**	1.7	2.6	3
Barium	mg/kg	15000	78.5	122	84.4	47.7	59.3
Beryllium	mg/kg	160	0.82	1	0.25 J	0.33 J	0.54 J
Cadmium	mg/kg	70					
Calcium	mg/kg		1240 J	3140 J	5140 J	3630 J	1130 J
Chromium	mg/kg		17.6	18.9	6.3	8.4	13.7
Cobalt	mg/kg	23	9.7	10.1	2.8 J	3.8 J	8.9
Copper	mg/kg	3100	15.3 J	15.4 J	18.2	9.1 J	10.2 J
Iron	mg/kg	55000	18000	22100	6250	9340	14300
Lead	mg/kg	400	11.4 K	13.1 K	24.2 K	16.7 K	13.5 K
Magnesium	mg/kg		2880 J	4100 J	3380 J	2690 J	1620 J
Manganese	mg/kg	1800	341	517	240	195	465
Mercury	mg/kg	5.6	0.036 J	0.039 J		0.038 J	
Nickel	mg/kg	1500	14.1	15.9	5.2 J	6.5	7.6
Potassium	mg/kg		1370	1510	332 J	549 J	553
Vanadium	mg/kg	5.5	**21.4**	**25.1**	**8.6**	**11.3**	**18.9**
Zinc	mg/kg	23000	73.9	86.8	49.2	51.4	46.4

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 81
Inorganics Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (mg/kg)	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01
Aluminum	mg/kg	77000	3710	6260	4380
Arsenic	mg/kg	3.9	1.9	**6.5**	2.9
Barium	mg/kg	15000	66.8	216	75.9
Beryllium	mg/kg	160	0.47 J	0.92	0.5 J
Cadmium	mg/kg	70	0.22 J	0.32 J	0.22 J
Calcium	mg/kg		6150 J	1840 J	26000 J
Chromium	mg/kg		10.6	25.2	12.2
Cobalt	mg/kg	23	4.6 J	11.1	6.9
Copper	mg/kg	3100	18.1 J	25.4 J	14.6 J
Iron	mg/kg	55000	14800	21500	18300
Lead	mg/kg	400	41.6 K	27.6 K	26.1 K
Magnesium	mg/kg		4300 J	2830 J	18300 J
Manganese	mg/kg	1800	366	**2010**	502
Mercury	mg/kg	5.6		0.079 J	
Nickel	mg/kg	1500	9.6	16.2	12.4
Potassium	mg/kg		867	1050	911
Vanadium	mg/kg	5.5	**13.1**	**26.5**	**17.1**
Zinc	mg/kg	23000	153	86.8	97.3

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 82
Pesticides/PCBs Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01
Aroclor-1254	ug/kg	2200			66		5.2 J	
Aroclor-1260	ug/kg	2200					2.8 J	
4,4'-DDD	ug/kg	20000	0.082 J	0.093 J	3.3 J	0.53 J	0.13 J	0.54 J
4,4'-DDE	ug/kg	14000	0.15 J	0.035 J	1.9 J	0.15 J	0.14 J	0.45 J
4,4'-DDT	ug/kg	17000	0.19 J	0.093 J	4.3	0.082 J	0.57 J	1 J
Aldrin	ug/kg	290	0.03 J	0.029 J	0.48 J	0.03 J	0.036 J	0.039 J
alpha-BHC	ug/kg	770	0.026 J	0.033 J	0.028 J			
alpha-Chlordane	ug/kg		0.072 J	0.091 J	1.2 J	0.89 J	0.38 J	2.1 J
beta-BHC	ug/kg	2700		0.014 J	0.22 J	0.14 B	0.12 B	0.062 B
delta-BHC	ug/kg			0.04 J			0.021 B	0.062 B
Dieldrin	ug/kg	300	0.24 J	1 J	1.3 J	0.88 J	0.64 J	2.6 J
Endosulfan I	ug/kg			0.3 J	0.25 J	0.11 J	0.096 J	0.048 J
Endosulfan II	ug/kg		0.06 J	0.1 J	0.83 J	0.065 J	0.095 J	
Endosulfan sulfate	ug/kg			0.028 J	0.091 J	0.17 J	0.082 J	0.16 J
Endrin	ug/kg	18000	0.057 J	0.044 J	0.072 J	0.18 J	0.028 J	0.11 J
Endrin aldehyde	ug/kg		0.29 J	0.13 J	0.53 J	0.53 J	0.11 J	0.45 J
Endrin ketone	ug/kg		0.096 J	0.047 J	4.1 J	0.47 J	0.19 J	0.3 J
gamma-BHC(Lindane)	ug/kg	5200	0.028 J		0.13 J			
gamma-Chlordane	ug/kg		0.19 J	0.22 J	0.73 J	0.46 J	0.27 J	1.5 J
Heptachlor	ug/kg	1100	0.025 J	0.027 J	0.1 J	0.15 J		0.1 B
Heptachlorepoxide	ug/kg	530	0.028 J	0.06 J	0.22 J	0.26 J	0.13 J	0.36 J
Methoxychlor	ug/kg	310000			0.27 J	0.27 B	0.077 B	0.22 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 82
Pesticides/PCBs Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD07-RI-01	CKSD08-RI-01
Aroclor-1254	ug/kg	2200		
Aroclor-1260	ug/kg	2200	9.5 J	
4,4'-DDD	ug/kg	20000	1.2 J	0.3 J
4,4'-DDE	ug/kg	14000	0.37 J	0.31 J
4,4'-DDT	ug/kg	17000	1.6 J	0.66 J
Aldrin	ug/kg	290	1.7 J	0.012 J
alpha-BHC	ug/kg	770		
alpha-Chlordane	ug/kg		0.78 J	0.72 J
beta-BHC	ug/kg	2700	0.13 B	0.044 B
delta-BHC	ug/kg		0.096 B	0.026 B
Dieldrin	ug/kg	300	8.3	0.75 J
Endosulfan I	ug/kg		0.089 J	0.022 J
Endosulfan II	ug/kg		0.59 J	0.75 J
Endosulfan sulfate	ug/kg		0.056 J	0.048 J
Endrin	ug/kg	18000	0.024 J	0.04 J
Endrin aldehyde	ug/kg		0.4 J	0.13 J
Endrin ketone	ug/kg		0.44 J	0.18 J
gamma-BHC(Lindane)	ug/kg	5200	0.061 J	
gamma-Chlordane	ug/kg		0.42 J	0.5 J
Heptachlor	ug/kg	1100	0.079 B	0.041 B
Heptachlorepoxide	ug/kg	530	0.14 J	0.11 J
Methoxychlor	ug/kg	310000	0.37 J	0.1 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 83
Total Organic Carbon and Grain Size Detected in Normal Deposition Creek Sediment

Analyte	Result Unit	RSL (mg/kg)	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01
Total Organic Carbon	mg/kg		3120 J	7100 J	6810 J	11200 J	10200 K	12000 K	5120 K	7060 K

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected.
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
CK – Creek
SD – Sediment
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 84
Asbestos Detected in Heavy Deposition Creek Sediment

Analyte	Result Unit	Sample Location	CKSD10-RI-01-3341	CKSD12D-RI-01-3312	CKSD12-RI-01-3313
Asbestos, chrysotile	%	Creek	0.1	0.1	0.1
Crocidolite	%	Creek	-	-	-
Total Asbestos	%	Creek	0.1	0.1	0.1

Notes:

CK - Creek

SD - Sediment

"-" - Not detected

Bold and italicized values exceed RSL of 1% total asbestos.

Table 85
Volatiles Detected in Heavy Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01
1,1-Dichloroethene	ug/kg	240000			0.98 J	0.96 J
2-Butanone	ug/kg	28000000				
2-Hexanone	ug/kg	210000	15 B	20 B	12 B	13 B
Acetone	ug/kg	61000000				
Chloroform	ug/kg	2900			1.1 B	0.98 B
Methylene chloride	ug/kg	110000	1.4 B	2 B		

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 86
Semivolatiles Detected in Heavy Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01
Acenaphthene	ug/kg	3400000		100 J	70 J	70 J
Acenaphthylene	ug/kg			26 J		
Acetophenone	ug/kg	7800000	45 B			79 B
Anthracene	ug/kg	17000000		310	200 J	260 J
Benzo(a)anthracene	ug/kg	1500	79 J	1100	910	1000
Benzo(a)pyrene	ug/kg	150	84 J	**1000**	**800**	**910**
Benzo(b)fluoranthene	ug/kg	1500	96 J	1300	1000	1100
Benzo(g,h,i)perylene	ug/kg		37 J	360	350	310 J
Benzo(k)fluoranthene	ug/kg	15000	54 J	540	390	440
Bis(2-ethylhexyl)phthalate	ug/kg	350000		180 B	100 B	85 B
Butylbenzylphthalate	ug/kg	2600000		26 J	42 J	
Carbazole	ug/kg			150 J	120 J	130 J
Chrysene	ug/kg	150000	82 J	1300	1000	1100
Dibenzofuran	ug/kg	78000		64 J	47 J	40 J
Fluoranthene	ug/kg	2300000	110 J	2700	1800	2300
Fluorene	ug/kg	2300000		150 J	89 J	100 J
Indeno(1,2,3-cd)pyrene	ug/kg	1500	53 J	570	460	520
Phenanthrene	ug/kg		61 J	1900	1200	1500
Pyrene	ug/kg	1700000	130 J	2100 J	1500 J	1900

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 87
Inorganics Detected in Heavy Deposition Creek Sediment

Analyte	Result Unit	RSL (mg/kg)	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01
Aluminum	mg/kg	77000	6210	4650	4250	3260
Arsenic	mg/kg	3.9	**4.6**	3.1	2.7	2
Barium	mg/kg	15000	91.7	87.5	66.4	51.6
Beryllium	mg/kg	160	1.1	0.43 J	0.46 J	0.36 J
Cadmium	mg/kg	70	0.2 J	0.3 J	0.25 J	
Calcium	mg/kg		3760 J	4640 J	3880 J	3970 J
Chromium	mg/kg		20.3	13.3	11.4	9.7
Cobalt	mg/kg	23	11.7	5.3 J	5.8 J	5.9 J
Copper	mg/kg	3100	15 J	20.4 J	16.4 J	10.1 J
Iron	mg/kg	55000	21200	10600	16700	10500
Lead	mg/kg	400	27.5 K	53.2 K	26.9 K	18.4 K
Magnesium	mg/kg		4320 J	2820 J	3130 J	2720 J
Manganese	mg/kg	1800	447	372	349	317
Mercury	mg/kg	5.6	0.043 J	0.091 J		
Nickel	mg/kg	1500	16	10.8	10.2	7.7
Potassium	mg/kg		1080	469 J	761	606 J
Vanadium	mg/kg	5.5	**27.4**	**14.9**	**15.2**	**12.2**
Zinc	mg/kg	23000	95.1	85.7	104	60.3

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 88
Pesticides/PCBs Detected in Heavy Deposition Creek Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01
Aroclor-1254	ug/kg	2200		71		
Aroclor-1260	ug/kg	2200				
4,4'-DDD	ug/kg	20000	0.2 J	1.5 J	0.8 J	1.4 J
4,4'-DDE	ug/kg	14000	0.095 J	0.52 J	0.26 J	0.82 J
4,4'-DDT	ug/kg	17000	0.15 J	7.5	0.92 J	2.2 J
Aldrin	ug/kg	290	0.051 J	0.37 J	0.019 J	0.02 J
alpha-BHC	ug/kg	770	0.027 J		0.035 J	0.039 J
alpha-Chlordane	ug/kg		0.51 J	1.5 J	1.1 J	0.52 J
beta-BHC	ug/kg	2700	0.041 J	0.14 B	0.13 B	0.12 B
delta-BHC	ug/kg		0.13 J	0.072 B	0.075 B	0.11 J
Dieldrin	ug/kg	300	0.26 J	0.87 J	1.5 J	1.7 J
Endosulfan I	ug/kg		0.096 J	0.37 J	0.067 J	0.074 J
Endosulfan II	ug/kg		0.098 J	1.1 J	0.18 J	0.11 J
Endosulfan sulfate	ug/kg		0.12 J	0.11 J	0.077 J	0.11 J
Endrin	ug/kg	18000	0.073 J	0.15 J	0.075 J	0.029 J
Endrin aldehyde	ug/kg		0.055 J	0.43 J	0.32 J	0.074 J
Endrin ketone	ug/kg		4.7 J	0.32 J	4.1 J	4.7 J
gamma-BHC(Lindane)	ug/kg	5200		0.099 J		
gamma-Chlordane	ug/kg		0.59 J	0.9 J	0.69 J	1 J
Heptachlor	ug/kg	1100	0.093 J	0.12 B	0.091 B	0.097 B
Heptachlorepoxide	ug/kg	530	0.065 J	0.26 J	0.16 J	0.15 J
Methoxychlor	ug/kg	310000	0.13 J	0.25 B	0.24 B	0.33 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not detected.

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 89
Total Organic Carbon and Grain Size Detected in Heavy Deposition Creek Sediment

Analyte	Result Unit	RSL (mg/kg)	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01
Total Organic Carbon	mg/kg		7310 J	8140 J	5650 K	8790 K

Notes:
mg/kg - milligram per kilogram
Blank cells indicate analyte not detected.
RSL - Regional Screening Level
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
Bold values = RSL exceeded
CK – Creek
SD – Sediment
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

Table 90
Asbestos Detected in Reservoir Surface Water

Analyte	Result Unit	Sample Location	MCL (mfl)	RVSW01-RI-01-2019	RVSW03D-RI-01-2056	RVSW03-RI-01-2058	RVSW04-RI-01-2061
Asbestos, chrysotile	MFL	Reservoir	7	1.9	***160.33***	***42.76***	***635.4***

Analyte	Result Unit	Sample Location	MCL (mfl)	RVSW05-RI-01-2062
Asbestos, chrysotile	MFL	Reservoir	7	***27.5***

Notes:

MFL - millions of fibers per liter

RV - Reservoir

SW - Surface Water

MCL - Maximum Contaminant Level

Blank cells indicate analyte not detected

Bold and italicized values = MCL exceeded

Multiple samples were collected for locations RVSW03, RVSW04, and RVSW05. Only the highest detection is shown on the table.

Table 91
Volatiles Detected in Reservoir Surface Water

Analyte	Result Unit	RSL (ug/L)	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01	RVSW03-RI-01
1,1-Dichloroethene	ug/L	340	0.96 B	0.89 B	0.99 B	1 B

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SW – Surface Water

Data Qualifiers:

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 92
Semivolatiles Detected in Reservoir Surface Water

Analyte	Result Unit	RSL (ug/L)	RVSW02-RI-01
Bis(2-ethylhexyl)phthalate	ug/L	48	0.52 J

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 93
Inorganics Detected in Reservoir Surface Water

Analyte	Result Unit	RSL (ug/L)	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01
Aluminum	ug/L	37000	170 B	110 B	1470	3520	107 B	187 B
Arsenic	ug/L	0.45		**3.7 J**	**4.5 J**	**5.1 J**		
Barium	ug/L	7300	72.7 J	69.1 J	230	297	72.7 J	74.8 J
Calcium	ug/L		35600	34400	41000	43200	36000	36700
Chromium	ug/L				5.8 J	10.4		
Copper	ug/L	1500			15.5 J	23.2 J		
Iron	ug/L	26000	78.2 B	82.2 B	1840	3930	81 B	87.9 B
Lead	ug/L			3.6 J	27.9	54.4	3.6 J	4.3 J
Magnesium	ug/L		5850	5670	6930	7680	5940	5980
Manganese	ug/L	880	47.4	42.9	206	311	42.5	40.2
Potassium	ug/L		10500	9960	11100	11000	10500	10700
Sodium	ug/L		7280	7080	7560	7220	7380	7430
Vanadium	ug/L	2.6				**22.3 J**		
Zinc	ug/L	11000			86	176		

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 94
Pesticides/PCBs Detected in Reservoir Surface Water

Analyte	Result Unit	RSL (ug/L)	RVSW03D-RI-01	RVSW03-RI-01	RVSW04-RI-01
beta-BHC	ug/L	0.37	0.0075 J	0.0069 J	0.0058 J

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

RV – Reservoir

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

Table 95
Asbestos Detects in Creek Surface Water

Analyte	Result Unit	Sample Location	MCL (mfl)	CKSW04-RI-01-3434	CKSW05-RI-01-3314	CKSW07-RI-01-3319	CKSW08D-RI-01-3321
Asbestos, chrysotile	MFL	Creek	7	1.78	***29.99***	***23.99***	0.18

Analyte	Result Unit	Sample Location	MCL (mfl)	CKSW08-RI-01-3322
Asbestos, chrysotile	MFL	Creek	7	0.18

Notes:
CK - Creek
SW - Surface Water
MFL - millions of fibers per liter
MCL - Maximum Contaminant Level
Blank cells indicate analyte not detected
Bold and italicized values = MCL exceeded
Multiple samples were collected for locations CKSW05, CKSW07, and CKSW08. Only the highest detection is shown on the table.

Table 96
Volatiles Detected in Creek Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01	CKSW04-RI-01	CKSW05-RI-01
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	59000		0.13 J			
Acetone	ug/L	22000	3 B		1.9 B	2.2 B	0.29 B
Benzene	ug/L	4.1					
Bromodichloromethane	ug/L	1.2		0.082 J			
Carbon Disulfide	ug/L	1000					
Chloroform	ug/L	1.9	0.28 B	0.19 B	0.087 B	0.17 B	0.19 B
Chloromethane	ug/L	190	0.21 B	0.15 B	0.2 B		
Dibromochloromethane	ug/L	1.5					0.054 J
Methylene chloride	ug/L	48	0.081 B	0.091 B	0.064 B	0.096 B	0.088 B
Tetrachloroethene	ug/L	1.1		0.052 J	0.16 J		0.072 J
Toluene	ug/L	2300					0.078 B
Trichloroethene	ug/L	20	0.076 J				
Trichlorofluoromethane	ug/L	1300		0.08 J			

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SW – Surface Water

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 96
Volatiles Detected in Creek Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	59000				
Acetone	ug/L	22000	2.7 B	2.2 B	2.6 B	2.5 B
Benzene	ug/L	4.1	0.068 J			
Bromodichloromethane	ug/L	1.2		0.084 J	0.074 J	
Carbon Disulfide	ug/L	1000				0.062 B
Chloroform	ug/L	1.9	0.14 B	0.17 B	0.17 B	0.2 B
Chloromethane	ug/L	190	0.24 B	0.25 B		
Dibromochloromethane	ug/L	1.5		0.058 J		
Methylene chloride	ug/L	48	0.084 B	0.08 B	0.12 B	
Tetrachloroethene	ug/L	1.1		0.072 J	0.053 J	0.055 J
Toluene	ug/L	2300	0.09 B	0.067 B	0.059 B	0.059 B
Trichloroethene	ug/L	20				
Trichlorofluoromethane	ug/L	1300				

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SW – Surface Water

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 97
Semivolatiles Detected in Creek Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW04-RI-01	CKSW06-RI-01
Acetophenone	ug/L	3700		0.8 B
Benzo(g,h,i)perylene	ug/L		1.3 J	
Dibenzo(a,h)anthracene	ug/L	0.029	**1.1 J**	
Indeno(1,2,3-cd)pyrene	ug/L	0.29	**1.2 J**	

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SW – Surface Water

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 98
Inorganics Detected in Creek Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01	CKSW04-RI-01	CKSW05-RI-01
Aluminum	ug/L	37000					212
Barium	ug/L	7300	107 J	113 J	136 J	107 J	121 J
Calcium	ug/L		53000	53800	32300	52100	54000
Chromium	ug/L			4.4 J			
Cyanide	ug/L	730	4.6 J				
Iron	ug/L	26000	161 B	138 B	114 B	161 B	1050
Lead	ug/L		3 J				6.3 J
Magnesium	ug/L		17800	17700	12200	17400	17300
Manganese	ug/L	880	34.4	36.6	13.6 J	36.9	334
Potassium	ug/L		4110 J	4280 J	2170 J	4080 J	3970 J
Sodium	ug/L		121000	126000	40700	122000	112000

Analyte	Result Unit	RSL (ug/L)	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01
Aluminum	ug/L	37000		179 J	134 J	118 J
Barium	ug/L	7300	179 J	113 J	115 J	111 J
Calcium	ug/L		52700	50800	50800	48200
Chromium	ug/L		3.3 J			
Cyanide	ug/L	730				
Iron	ug/L	26000	77.4 B	318 B	230 B	214 B
Lead	ug/L		2.8 J			
Magnesium	ug/L		15700	16900	16900	16000
Manganese	ug/L	880	41.2	44.1	41.2	39.9
Potassium	ug/L		2760 J	4080 J	4070 J	3920 J
Sodium	ug/L		64100	118000	118000	114000

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SW – Surface Water

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 99
Pesticides/PCBs Detected in Creek Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW01-RI-01	CKSW03-RI-01	CKSW04-RI-01	CKSW05-RI-01	CKSW06-RI-01
Dieldrin	ug/L	0.042		0.0093 J			0.0094 J
Endrin aldehyde	ug/L		0.006 J		0.0056 J		
Methoxychlor	ug/L	180		0.031 B		0.043 B	0.043 B

Analyte	Result Unit	RSL (ug/L)	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01
Dieldrin	ug/L	0.042			
Endrin aldehyde	ug/L				
Methoxychlor	ug/L	180	0.051 B	0.053 B	0.025 B

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not detected

RSL - Regional Screening Level

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

Bold values = RSL exceeded

CK – Creek

SW – Surface Water

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

Table 100
Volatiles Detected in Tannery Run Bank Soil

Analyte	Result Unit	RSL (ug/kg)	CKSB01-WA
2-Hexanone	ug/kg	21000	20 B
Acetone	ug/kg	6100000	17 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

CK – Creek

SB – Soil Boring

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table 101
Semivolatiles Detected in Tannery Run Bank Soil

Analyte	Result Unit	RSL (ug/kg)	CKSB01-WA
Benzo(a)anthracene	ug/kg	150	33 J
Chrysene	ug/kg	15000	26 J
Fluoranthene	ug/kg	230000	55 J
Pyrene	ug/kg	170000	45 J

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

CK – Creek

SB – Soil Boring

RV – Reservoir

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table 102
Metals Detected in Tannery Run Bank Soil

Analyte	Result Unit	RSL (mg/kg)	CKSB01-WA
Aluminum	mg/kg	7700	1930
Arsenic	mg/kg	0.39	**3**
Barium	mg/kg	1500	28.2 J
Calcium	mg/kg		289000
Chromium	mg/kg		1.4 J
Copper	mg/kg	310	29.5
Iron	mg/kg	5500	2150
Lead	mg/kg	40	**85.4**
Magnesium	mg/kg		9080
Manganese	mg/kg	180	**222**
Mercury	mg/kg	0.56	0.15 B
Nickel	mg/kg	150	3.1 J
Selenium	mg/kg	39	2 J
Vanadium	mg/kg	0.55	**6 J**
Zinc	mg/kg	2300	26.9

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

CK – Creek

SB – Soil Boring

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

U - Analyte not detected

Table 103
Pesticides Detected in Tannery Run Bank Soil

Analyte	Result Unit	RSL (ug/kg)	CKSB01-WA
Aldrin	ug/kg	29	0.021 J
beta-BHC	ug/kg	270	0.061 B
delta-BHC	ug/kg		0.036 J
Heptachlor	ug/kg	110	0.033 B

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

CK – Creek

SB – Soil Boring

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table 104
Borit Asbestos Superfund Site
Personal Exposure Results

Sample Number			PE-00001	PE-00002	PE-00003	PE-00004	PE-00006
Lab Sample ID			040928940-0001	040928940-0002	040929030-0001	040929116-0001	040929116-0002
Sampling Date			01-Dec-09	01-Dec-09	02-Dec-09	03-Dec-09	03-Dec-09
Parcel Sampled			Park	Park	Park	Park	Park
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	N/A	<0.038	N/A	<0.036	N/A
Fibers	8 Hour TWA	f/cc	<0.004	N/A	<0.004	N/A	0.003

Sample Number			PE-00007	PE-00008	PE-00009	PE-00010	PE-00011
Lab Sample ID			040929116-0003	040929116-0004	040929234-0001	040929234-0002	040929234-0003
Sampling Date			03-Dec-09	03-Dec-09	04-Dec-09	04-Dec-09	04-Dec-09
Parcel Sampled			Park	Park	Park	Park	Park
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	<0.036	N/A	<0.036	N/A	N/A
Fibers	8 Hour TWA	f/cc	N/A	<0.006	N/A	<0.005	<0.004

Sample Number			PE-00012	PE-00013	PE-00014	PE-00015	PE-00016
Lab Sample ID			040929234-0004	040929320-0001	040929320-0002	040929320-0003	040929320-0004
Sampling Date			04-Dec-09	07-Dec-09	07-Dec-09	07-Dec-09	07-Dec-09
Parcel Sampled			Park	Park	Park	Park	Park
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	<0.032	<0.036	N/A	<0.036	N/A
Fibers	8 Hour TWA	f/cc	N/A	N/A	<0.005	N/A	<0.005

Sample Number			PE-00017	PE-00018	PE-00019	PE-00020	PE-00021
Lab Sample ID			040929403-0001	040929403-0002	040929403-0003	040929403-0004	040929602-0001
Sampling Date			08-Dec-09	08-Dec-09	08-Dec-09	08-Dec-09	10-Dec-09
Parcel Sampled			Park	Park	Park	Park	Reservoir
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	<0.036	N/A	<0.036	N/A	0.022
Fibers	8 Hour TWA	f/cc	N/A	<0.016	N/A	<0.011	N/A

Sample Number			PE-00022	PE-00023	PE-00024	PE-00025	PE-00026
Lab Sample ID			040929687-0001	040929602-0002	040929687-0003	040929687-0004	040929687-0002
Sampling Date			11-Dec-09	10-Dec-09	11-Dec-09	11-Dec-09	11-Dec-09
Parcel Sampled			Asbestos Pile	Reservoir	Asbestos Pile	Asbestos Pile	Asbestos Pile
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	N/A	N/A	N/A	<0.036	<0.036
Fibers	8 Hour TWA	f/cc	<0.007	0.02	<0.009	N/A	N/A

Table 104
Borit Asbestos Superfund Site
Personal Exposure Results

Sample Number			PE-00027	PE-00028	PE-00029	PE-00030	PE-00031
Lab Sample ID			040929771-0001	040929771-0002	040929771-0003	040929771-0004	040929851-0001
Sampling Date			14-Dec-09	14-Dec-09	14-Dec-09	14-Dec-09	15-Dec-09
Parcel Sampled			Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	<0.036	N/A	N/A	0.049	N/A
Fibers	8 Hour TWA	f/cc	N/A	<0.008	<0.006	N/A	<0.005

Sample Number			PE-00032	PE-00033	PE-00034	PE-00035	PE-00036
Lab Sample ID			040929851-0002	040929851-0003	040929851-0004	040929963-0001	040929963-0002
Sampling Date			15-Dec-09	15-Dec-09	15-Dec-09	16-Dec-09	16-Dec-09
Parcel Sampled			Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	<0.036	<0.036	N/A	<0.036	N/A
Fibers	8 Hour TWA	f/cc	N/A	N/A	<0.005	N/A	<0.016

Sample Number			PE-00037	PE-00038	PE-00039	PE-00040	PE-00041
Lab Sample ID			040929963-0003	040929963-0004	040930057-0001	040930151-0001	040930057-0002
Sampling Date			16-Dec-09	16-Dec-09	17-Dec-09	18-Dec-09	17-Dec-09
Parcel Sampled			Asbestos Pile	Asbestos Pile	Asbestos Pile	Park	Asbestos Pile
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	<0.036	N/A	N/A	<0.035	N/A
Fibers	8 Hour TWA	f/cc	N/A	<0.016	<0.008	N/A	<0.004

Sample Number			PE-00042	PE-00043	PE-00044	PE-00045	PE-00046
Lab Sample ID			040930151-0002	040930151-0003	040930151-0004	041000564-0001	041000564-0002
Sampling Date			18-Dec-09	18-Dec-09	18-Dec-09	07-Jan-10	07-Jan-10
Parcel Sampled			Park	Park	Park	Reservoir	Reservoir
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	N/A	0.066	N/A	<0.031	N/A
Fibers	8 Hour TWA	f/cc	<0.007	N/A	0.015	N/A	<0.012

Sample Number			PE-00047	PE-00048	PE-00051	PE-00052	PE-00053
Lab Sample ID			041000576-0001	041000570-0001	041000719-0001	041000719-0002	041000804-0001
Sampling Date			08-Jan-10	11-Jan-10	13-Jan-10	13-Jan-10	14-Jan-10
Parcel Sampled			Reservoir	Reservoir	Reservoir	Reservoir	Asbestos Pile
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	N/A	N/A	N/A	<0.036	N/A
Fibers	8 Hour TWA	f/cc	<0.012	<0.015	0.007	N/A	<0.008

Table 104
Borit Asbestos Superfund Site
Personal Exposure Results

Sample Number			PE-00054	PE-00055	PE-00056	PE-00057	PE-00058
Lab Sample ID			041000804-0002	041000893-0001	041000893-0002	041000967-0001	041000967-0002
Sampling Date			14-Jan-10	15-Jan-10	15-Jan-10	18-Jan-10	18-Jan-10
Parcel Sampled			Asbestos Pile	Creek Flood Plain	Creek Flood Plain	Creek Flood Plain	Creek Flood Plain
Analyte	Activity	Units					
Fibers	30 Minute Excursion	f/cc	0.026	N/A	<0.036	<0.027	N/A
Fibers	8 Hour TWA	f/cc	N/A	<0.007	N/A	N/A	<0.008

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00001	PA-00002	PA-00003	PA-00004	PA-00010	PA-00011	PA-00012
Lab Sample ID		040928943-0001	040928943-0002	040928943-0003	040928943-0004	040929037-0001	040929037-0002	040929037-0003
Sample Date		12/01/09	12/01/09	12/01/09	12/01/09	12/02/09	12/02/09	12/02/09
Sampled Parcel		Park	Park	Park	Park	Park	Park	Park
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0	0	0	0	0	0
Total Chrysotile (CH)	AHERA	0	0	0	0	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0	0	0	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0	0	0	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00013	PA-00015	PA-00016	PA-00017	PA-00018	PA-00020	PA-00021
Lab Sample ID		040929037-0004	040929125-0001	040929125-0002	040929125-0003	040929125-0004	040929241-0001	040929241-0002
Sample Date		12/02/09	12/03/09	12/03/09	12/03/09	12/03/09	12/04/09	12/04/09
Sampled Parcel		Park	Park	Park	Park	Park	Park	Park
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0	0	0	0	0	0
Total Chrysotile (CH)	AHERA	0	0	0	0	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0	0	0	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0	0	0	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00022	PA-00023	PA-00025	PA-00026	PA-00027	PA-00028	PA-00030
Lab Sample ID		040929241-0003	040929241-0004	040929333-0001	040929333-0002	040929333-0003	040929333-0004	040929411-0001
Sample Date		12/04/09	12/04/09	12/07/09	12/07/09	12/07/09	12/07/09	12/08/09
Sampled Parcel		Park	Park	Park	Park	Park	Park	Park
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0	0	0	0	0	0
Total Chrysotile (CH)	AHERA	0	0	0	0	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0	0	0	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0	0	0	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00031	PA-00032	PA-00033	PA-00035	PA-00036	PA-00037	PA-00038
Lab Sample ID		040929411-0002	040929411-0003	040929411-0004	041000150-0001	041000150-0002	041000150-0003	041000150-0004
Sample Date		12/08/09	12/08/09	12/08/09	12/10/09	12/10/09	12/10/09	12/10/09
Sampled Parcel		Park	Park	Park	Reservoir	Reservoir	Reservoir	Reservoir
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0	0	0	0	0	0
Total Chrysotile (CH)	AHERA	0	0	0	0	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0	0	0	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0	0	0	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00040	PA-00042	PA-00043	PA-00045	PA-00046	PA-00047	PA-00048
Lab Sample ID		040929689-0001	040929689-0002	040929689-0003	040929776-0001	040929776-0002	040929776-0003	040929776-0004
Sample Date		12/11/09	12/11/09	12/11/09	12/14/09	12/14/09	12/14/09	12/14/09
Sampled Parcel		Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0	0	0.0019	0	0	0
Total Chrysotile (CH)	AHERA	0	0	0	0.0019	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0	0	0.0019	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0	0	0.0019	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00050	PA-00051	PA-00052	PA-00053	PA-00055	PA-00056	PA-00057
Lab Sample ID		040930062-0001	040930062-0002	040930062-0003	040930062-0004	040930066-0001	040930066-0002	040930066-0003
Sample Date		12/15/09	12/15/09	12/15/09	12/15/09	12/16/09	12/16/09	12/16/09
Sampled Parcel		Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0.00098	0	0	0	0	0
Total Chrysotile (CH)	AHERA	0	0.00098	0	0	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0.00098	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0.00098	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0.00098	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0.00098	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0.00098	0	0	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0.00098	0	0	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00058	PA-00060	PA-00062	PA-00063	PA-00085	PA-00086	PA-00087
Lab Sample ID		040930066-0004	040930079-0001	040930079-0002	040930079-0003	041004547-0001	041004547-0002	041004547-0003
Sample Date		12/16/09	12/17/09	12/17/09	12/17/09	1/12/10	1/12/10	1/12/10
Sampled Parcel		Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Reservoir	Reservoir	Reservoir
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0.003	0	0	0	0.0038	0
Total Chrysotile (CH)	AHERA	0	0.003	0	0	0	0.0038	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0.003	0	0	0	0.0048	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0.003	0	0	0	0.0048	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00088	PA-00095	PA-00096	PA-00097	PA-00098	PA-00105	PA-00106
Lab Sample ID		041004547-0004	041004554-0001	041004554-0002	041004554-0003	041004554-0004	041004562-0001	041004562-0002
Sample Date		1/12/10	1/14/10	1/14/10	1/14/10	1/14/10	1/18/10	1/18/10
Sampled Parcel		Reservoir	Asbestos Pile	Asbestos Pile	Asbestos Pile	Asbestos Pile	Creek Flood Plain	Creek Flood Plain
Sample Units		s/cc	s/cc	s/cc	s/cc	s/cc	s/cc	s/cc
Mineral Class	Binning Rule							
actinolite (AC)	AHERA	0	0	0	0	0	0	0
amosite (AM)	AHERA	0	0	0	0	0	0	0
anthophyllite (AN)	AHERA	0	0	0	0	0	0	0
crocidolite (CR)	AHERA	0	0	0	0	0	0	0
Libby amphibole (LA)	AHERA	0	0	0	0	0	0	0
other amphibole (OA)	AHERA	0	0	0	0	0	0	0
other mineral class (OM)	AHERA	0	0	0	0	0	0	0
Solid Soln: Amosite	AHERA	0	0	0	0	0	0	0
Solid Soln: Trem-Act	AHERA	0	0	0	0	0	0	0
Total Amphibole	AHERA	0	0	0	0	0	0	0
Total Asbestos	AHERA	0	0	0	0	0	0	0
Total Chrysotile (CH)	AHERA	0	0	0	0	0	0	0
tremolite (TR)	AHERA	0	0	0	0	0	0	0
actinolite (AC)	BCPS (2003)	0	0	0	0	0	0	0
amosite (AM)	BCPS (2003)	0	0	0	0	0	0	0
anthophyllite (AN)	BCPS (2003)	0	0	0	0	0	0	0
crocidolite (CR)	BCPS (2003)	0	0	0	0	0	0	0
Libby amphibole (LA)	BCPS (2003)	0	0	0	0	0	0	0
other amphibole (OA)	BCPS (2003)	0	0	0	0	0	0	0
other mineral class (OM)	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Amosite	BCPS (2003)	0	0	0	0	0	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0	0	0	0	0	0
Total Amphibole	BCPS (2003)	0	0	0	0	0	0	0
Total Asbestos	BCPS (2003)	0	0	0	0	0	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0	0	0	0	0	0
tremolite (TR)	BCPS (2003)	0	0	0	0	0	0	0
actinolite (AC)	PCME	0	0	0	0	0	0	0
amosite (AM)	PCME	0	0	0	0	0	0	0
anthophyllite (AN)	PCME	0	0	0	0	0	0	0
crocidolite (CR)	PCME	0	0	0	0	0	0	0
Libby amphibole (LA)	PCME	0	0	0	0	0	0	0
other amphibole (OA)	PCME	0	0	0	0	0	0	0
other mineral class (OM)	PCME	0	0	0	0	0	0	0
Solid Soln: Amosite	PCME	0	0	0	0	0	0	0
Solid Soln: Trem-Act	PCME	0	0	0	0	0	0	0
Total Amphibole	PCME	0	0	0	0	0	0	0
Total Asbestos	PCME	0	0	0	0	0	0	0
Total Chrysotile (CH)	PCME	0	0	0	0	0	0	0
tremolite (TR)	PCME	0	0	0	0	0	0	0
actinolite (AC)	Total TEM-EPASM	0	0	0	0	0	0	0
amosite (AM)	Total TEM-EPASM	0	0	0	0	0	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0	0	0	0	0	0
crocidolite (CR)	Total TEM-EPASM	0	0	0	0	0	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0	0	0	0	0	0
other amphibole (OA)	Total TEM-EPASM	0	0	0	0	0	0	0
other mineral class (OM)	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0	0	0	0	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0	0	0	0	0	0
Total Amphibole	Total TEM-EPASM	0	0	0	0	0	0	0
Total Asbestos	Total TEM-EPASM	0	0	0	0	0	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0	0	0	0	0	0
tremolite (TR)	Total TEM-EPASM	0	0	0	0	0	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Table 105
Borit Asbestos Superfund Site
Perimeter Air Monitoring Results

CDM Sample ID		PA-00107	PA-00108
Lab Sample ID		041004562-0003	041004562-0004
Sample Date		1/18/10	1/18/10
Sampled Parcel		Creek Flood Plain	Creek Flood Plain
Sample Units		s/cc	s/cc
Mineral Class	Binning Rule		
actinolite (AC)	AHERA	0	0
amosite (AM)	AHERA	0	0
anthophyllite (AN)	AHERA	0	0
crocidolite (CR)	AHERA	0	0
Libby amphibole (LA)	AHERA	0	0
other amphibole (OA)	AHERA	0	0
other mineral class (OM)	AHERA	0	0
Solid Soln: Amosite	AHERA	0	0
Solid Soln: Trem-Act	AHERA	0	0
Total Amphibole	AHERA	0	0
Total Asbestos	AHERA	0	0
Total Chrysotile (CH)	AHERA	0	0
tremolite (TR)	AHERA	0	0
actinolite (AC)	BCPS (2003)	0	0
amosite (AM)	BCPS (2003)	0	0
anthophyllite (AN)	BCPS (2003)	0	0
crocidolite (CR)	BCPS (2003)	0	0
Libby amphibole (LA)	BCPS (2003)	0	0
other amphibole (OA)	BCPS (2003)	0	0
other mineral class (OM)	BCPS (2003)	0	0
Solid Soln: Amosite	BCPS (2003)	0	0
Solid Soln: Trem-Act	BCPS (2003)	0	0
Total Amphibole	BCPS (2003)	0	0
Total Asbestos	BCPS (2003)	0	0
Total Chrysotile (CH)	BCPS (2003)	0	0
tremolite (TR)	BCPS (2003)	0	0
actinolite (AC)	PCME	0	0
amosite (AM)	PCME	0	0
anthophyllite (AN)	PCME	0	0
crocidolite (CR)	PCME	0	0
Libby amphibole (LA)	PCME	0	0
other amphibole (OA)	PCME	0	0
other mineral class (OM)	PCME	0	0
Solid Soln: Amosite	PCME	0	0
Solid Soln: Trem-Act	PCME	0	0
Total Amphibole	PCME	0	0
Total Asbestos	PCME	0	0
Total Chrysotile (CH)	PCME	0	0
tremolite (TR)	PCME	0	0
actinolite (AC)	Total TEM-EPASM	0	0
amosite (AM)	Total TEM-EPASM	0	0
anthophyllite (AN)	Total TEM-EPASM	0	0
crocidolite (CR)	Total TEM-EPASM	0	0
Libby amphibole (LA)	Total TEM-EPASM	0	0
other amphibole (OA)	Total TEM-EPASM	0	0
other mineral class (OM)	Total TEM-EPASM	0	0
Solid Soln: Amosite	Total TEM-EPASM	0	0
Solid Soln: Trem-Act	Total TEM-EPASM	0	0
Total Amphibole	Total TEM-EPASM	0	0
Total Asbestos	Total TEM-EPASM	0	0
Total Chrysotile (CH)	Total TEM-EPASM	0	0
tremolite (TR)	Total TEM-EPASM	0	0

Notes:
OSHA STEL - 1.0 fibers/cc
OSHA PEL - 0.1 fibers/cc
OSHA STEL during sampling - 0.5 fibers/cc
OSHA PEL during sampling - 0.05 fibers/cc
s/cc - structures per cubic centimeters
PEL - permissable exposure limit
STEL - short-term exposure limit

Appendix A
TPI Environmental
Geophysical Survey Report

January 29, 2010

Lucinda Pype
Camp Dresser & McKee
205 Granite Run Drive, Suite 350
Lancaster, PA 17601

Project: Geophysical Survey – Borit Superfund Site – Ambler, PA

Dear Lucinda;

The following is a brief letter report detailing the results of the geophysical survey performed at the above referenced site. Site maps and/or pertinent ground penetrating radar (GPR) transects are contained in the report and the Appendices. It would be helpful to review the Appendices and the site maps when reading this report. TPI's standard practice is to indicate the results of the geophysical survey by marking all identified utility lines, tanks, and GPR anomalies etc. with chalk, paint or flags. It should be noted that this report is a means of transferring data and results of data interpretation, which was performed during the time allotted for the fieldwork

Project Scope and Visual Site Inspection

TPI Environmental, Inc. (TPI) was contracted by Camp Dresser & McKee (client) to perform a geophysical survey at the above referenced location to clear proposed soil boring locations of potential utilities and investigate portions of the site for the potential of buried metal objects (drums, USTs, etc). The site currently consists of open land to the west (Park area), a heavily wooded area to the east, and a large pond in the center (see Figure 1). According to the client, off spec asbestos manufacturing waste was disposed of on-site for many years. Records provided by the client indicate that row homes were formerly located in the Park area and that a large asbestos pile is found in the heavily wooded area. The utility clearance survey was to be performed throughout the entire site and the buried metal surveys were to be performed in two areas of the site, which include the Park and the Asbestos Pile. Upon arrival to the site, TPI reviewed the site history with the client and performed a site walk to search for any evidence of utilities, the row homes, and metallic objects. During the site walk the following areas of interest were noted;

- Two metal drain pipes were observed in the bank of Tannery Run.
- An electric conduit was noted next to a shack, which is located just north of the park entrance.
- A relatively large area littered with metallic objects including ASTs was observed in the northeastern corner of the Asbestos Pile area.
- The Park area was currently under construction during the time of this survey. Consequently large areas of the park could not be surveyed due to soil piles, heavy equipment, trailers, and vehicles.

Methodology

The original specifications for the buried metal survey in the RFP included both a magnetic survey and an electromagnetic (EM) survey. The EM survey was to be performed with an EM31 or equivalent and the magnetic survey was to be accomplished with a Scintrex proton procecession magnetometer/gradiometer, or equivalent. However, based on discussions between TPI and the client it was agreed that the magnetic survey was redundant and consequently not required. Furthermore TPI was approved to use the EM61-MK2 in lieu of the EM31 unit wherever possible and practical. The time saved by eliminating the magnetic survey was utilized to tighten up the EM grids in both the Park area and the Asbestos Pile. The 100-foot by 100-foot grid in the park area was altered to approximately 5-feet by 5-feet for complete EM coverage in this area. In addition, the 25-foot by 25-foot Asbestos Pile grid was altered to 25-feet by 10-feet for more comprehensive coverage.

Geophysical surveys are typically accomplished by employing the following techniques; GPR, Fisher TW6 electromagnetic metal detection (TW6 EM), a Geonics EM61-MK2 Time – Domain Electromagnetic Detector unit (EM61), radio frequency line locating (RF), a Geonics EM31, and magnetics. The EM61 is a high power, high sensitivity metal detector capable of detecting both ferrous and non-ferrous metal. The TW6 EM unit sounds an audible alarm in the presence of a large mass of metal such as an UST. A description and discussion of these geophysical methods as well as TPI's standard procedures for performing geophysical surveys is found in Appendix B. In general, "blind surveys" are typically performed by initially scanning the site with an EM31 unit and/or an EM61 unit and noting areas of relatively high EM response. Then locations with a high EM response are further investigated with GPR. Known utilities are typically traced with the RF unit, GPR, and the TW6 EM unit depending on the size, matrix and conductive properties of the line. EM units are typically not effective and practical in areas underlain with reinforced concrete and/or the presence of ubiquitous metallic objects.

During EM61 surveys the EM response is sampled at four time positions at each survey point (every 0.62-feet). These four readings allow for the discrimination of targets based on target size, shape, material, and orientation. Furthermore the EM61 is designed in such a way that it is possible to distinguish deeper objects from shallow ones. In channel D mode the system suppresses near surface targets that may mask the response of deeper more important targets. This feature is useful when the purpose of the survey is to locate deeper targets, such as USTs, in the presence of near surface metallic objects such as monitor well covers.

The EM31-MK2 maps geologic variations, groundwater contaminants, or any subsurface feature associated with changes in ground conductivity. The instrument consists of a 4-meter "boom" containing transmitter and receiver coils at opposite ends. The primary field generated within the transmitter coil induces eddy currents within the subsurface below the coil. These eddy currents in turn create a secondary magnetic field that is detected and measured by the receiving coil. The instrument calculates the apparent conductivity of the subsurface materials by comparing the strength of the primary field to that of the secondary field. Lateral changes in conductivity can indicate the presence of buried metallic debris, linear metallic utilities, and disposal/fill areas.

A base station free of metallic objects, overhead power lines, and other man-made features was established for both the EM31 and EM61 surveys. Repeated readings, system functional tests,

and equipment calibrations were made at the base station every 2-hours of a survey day. During the base station checks the EM31 and EM 61 units were checked for calibration, phasing (EM31 only), battery strength, and sensitivity.

Utility Clearance Geophysical Survey Results

The utility clearance geophysical survey at this site was accomplished with the TW6 EM, RF and GPR units. Known utilities were traced and confirmed with the GPR, TW6 EM, and RF units then a 15-foot radius around each proposed boring was thoroughly scanned and cleared with all three units. Results of the geophysical survey were marked directly on the ground with paint and an anomaly map was prepared for each boring location where a geophysical anomaly was detected. TPI collected and saved a north/south and east west GPR transect for each of the 110 proposed boring locations. The anomaly maps are contained in Appendix A and electronic copies of the GPR transects will be maintained in TPI's computer system. Results of the geophysical survey are as follows;

- An abandoned electric line was detected, traced and marked in the park area as indicated on Figure 2.
- A drain line was detected between the pond and Tannery Run as indicated on Figure 3.
- Two short drain lines were detected between a pit with debris and Tannery Run as indicated on Figure 3.
- Over one hundred and ten soil borings locations were scanned, moved as needed, and marked with white paint and flags.

Park Buried Metal Geophysical Survey Results

The Park buried metal geophysical survey was accomplished with the EM61, TW6 EM and GPR units. An EM61 survey was performed throughout all accessible areas of the park with a grid spacing of approximately 5-feet. EM61 data along with real time Differentially Corrected GPS (DGPS) data collected in the park area was retained on a data recorder, processed in the field, and presented as Figure 2 in the report. Field processed EM61 data was further reviewed in the field and twenty of the most significant metallic anomalies were located with the DPGS unit, identified with TW6 EM unit, and marked directly on the ground with paint. Numerous GPR transects of these metallic anomalies were collected in an effort to estimate the target geometry and depth. Results of the geophysical survey are as follows;

- Twenty-two significant metallic EM anomalies were detected during the EM61 survey of this grid as indicated on Figure 2 and discussed further in the table below. Several other metallic anomalies were detected in this grid, however, they appear to be too small and insignificant to be related to an UST or drums. Images of GPR transects listed in Table 2 are found in Appendix B.

Anomaly	GPR and EM Description (See GPR Images in Appendix A)	GPR #
1	4'x3' EM anomaly, small GPR point anomalies at ~1' below grade	531
2	Metal debris at surface, no GPR scan performed	NA
3	Metal debris at surface, no GPR scan performed	NA
4	Two 10'x5' EM anomalies, no significant GPR anomalies, possible metallic debris.	533
5	4'x1' EM anomaly, "line like" linear GPR anomaly at 2' to 4' below grade	537
6	4'x4' EM anomaly, "line like" linear GPR anomaly at 0.5' to 2' below grade	33
7	4'x3' EM anomaly, couple of small GPR point anomalies at ~2.5' below grade	539
8	5'x5' EM anomaly, "debris like" GPR anomaly at ~0.5' below grade, 5 gal. Metal bucket found at 0.5' below grade	539
9	Metal debris at surface, no GPR scan performed	NA
10	Several EM anomalies, largest is 6'x3', "debris like" GPR anomalies	544
11	10'x1' EM anomaly, "line like" linear GPR anomaly at 0.5' below grade	34
12	4'x3' EM anomaly, 2'x2' GPR point anomaly at ~0.5' below grade	545
13	2'x2' strong & 8'x1' weak EM anomalies, 2'x2' GPR anomaly at ~1' below grade	541
14	6'x1' EM anomaly, no significant GPR anomalies, possible metallic debris.	37
15, 16	Buried by soil pile, no GPR scan performed	NA
17	Large air compressor	NA
18	1' diameter EM anomaly, in muddy road, no GPR scan performed	NA
19	3' diameter EM anomaly, in muddy road, no GPR scan performed	NA
20	8'x5' EM anomaly, metallic "debris like" GPR anomaly at 2' to 4' below grade	39

- Results of the Park geophysical survey indicate that no distinct metallic "UST like" or "drum like" EM or GPR anomalies were detected in the areas surveyed.

Asbestos Pile Buried Metal Geophysical Survey Results

The Asbestos Pile buried metal geophysical survey was accomplished with the EM31, EM61, TW6 EM and GPR units. The EM31 survey was performed throughout all accessible areas of the Asbestos Pile with a grid spacing of approximately 10 feet in the north/south direction and 25-feet in the east/west direction. EM31 data along with real time DGPS data collected in the asbestos area was retained on a data recorder, processed in the field, and presented as Figure 3 and 4 in the report. Field processed EM31 data was further reviewed in the field and several significant metallic anomalies were located with the DPGS unit, identified with TW6 EM unit, and marked directly on the ground with paint. TPI also performed a limited EM61 survey of the Asbestos Pile within EM61 accessible areas (roads) as indicated on Figure 5 Results of the geophysical survey are as follows;

- A low conductivity area related to the effect of the shingles was detected in the western section of the site.
- A general trend of increased conductivity with increased thickness of asbestos waste noted.
- Very high conductivity and in phase readings related to large and ubiquitous surficial metallic debris were detected in the northeastern section of the site. Since the response to these metallic objects was high, these anomalies may mask more subtle anomalies caused by buried metal objects. In effect it was not possible to confirm or deny the presence of buried metal in this area.
- TPI ground truthed an EM31 anomaly near Tannery Run and found a pit with debris and

a large pipe.

- A significant metallic anomaly most likely related to the fence and possible buried reinforced concrete was detected along the eastern boundary of the site.
- Other then the metallic anomalies discussed above no other large metallic anomalies (USTs or drums) were detected in the Asbestos Pile.

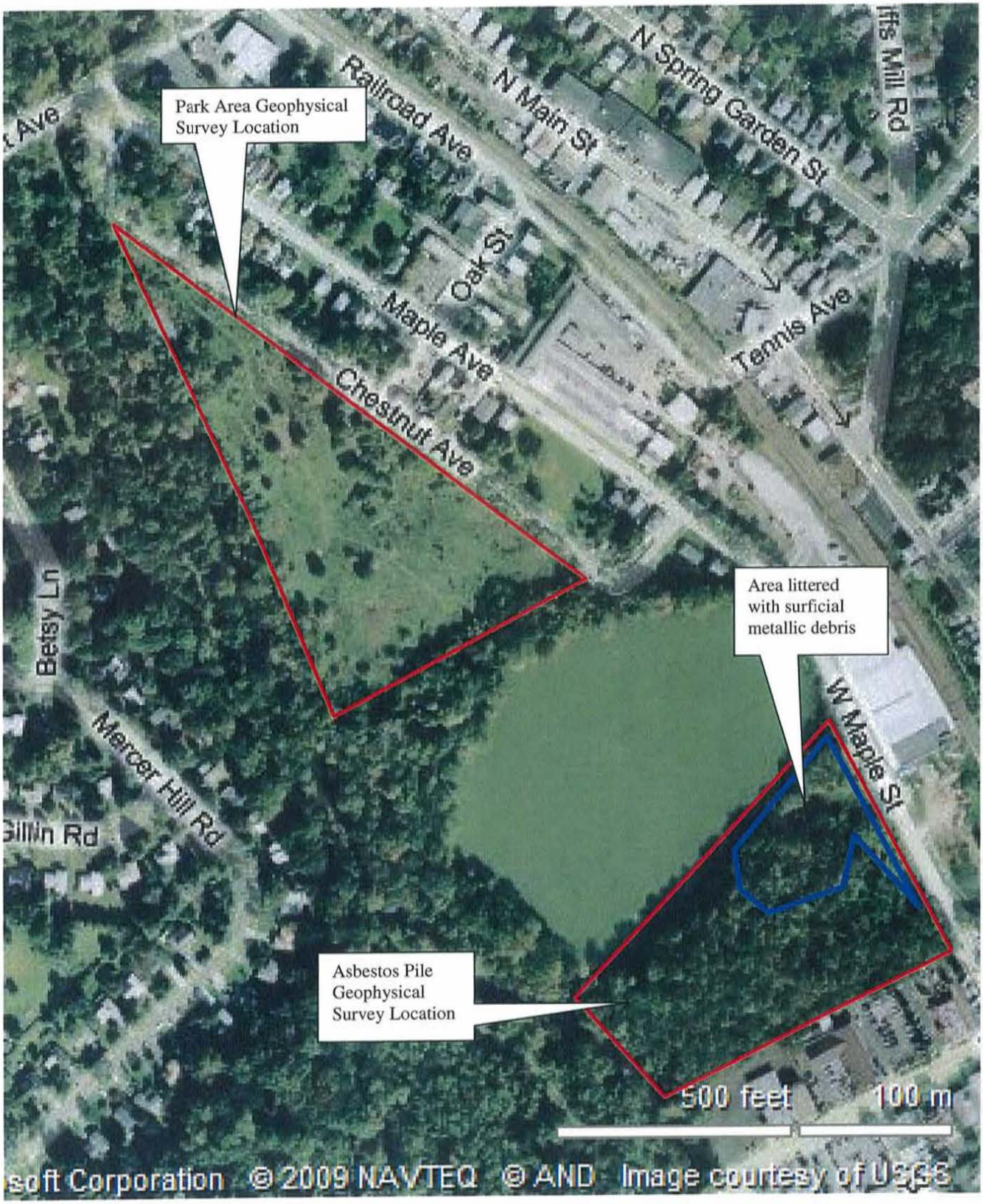
TPI completes non-intrusive geophysical surveys using equipment and techniques representing best available technology. TPI does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen and varying site-specific conditions such as metal-reinforced concrete. In practical terms, TPI serves to reduce the risk of encountering subsurface utilities during excavation operations or greatly increase the chance of locating man made subsurface objects depending on the goal of the project. The results of this investigation should only be used as a tool and should not be considered a guarantee regarding the presence or absence of USTs or piping.

If you should require additional information or have any questions, please do not hesitate to contact me at the above phone number or email me at ffendler@tpienv.com.

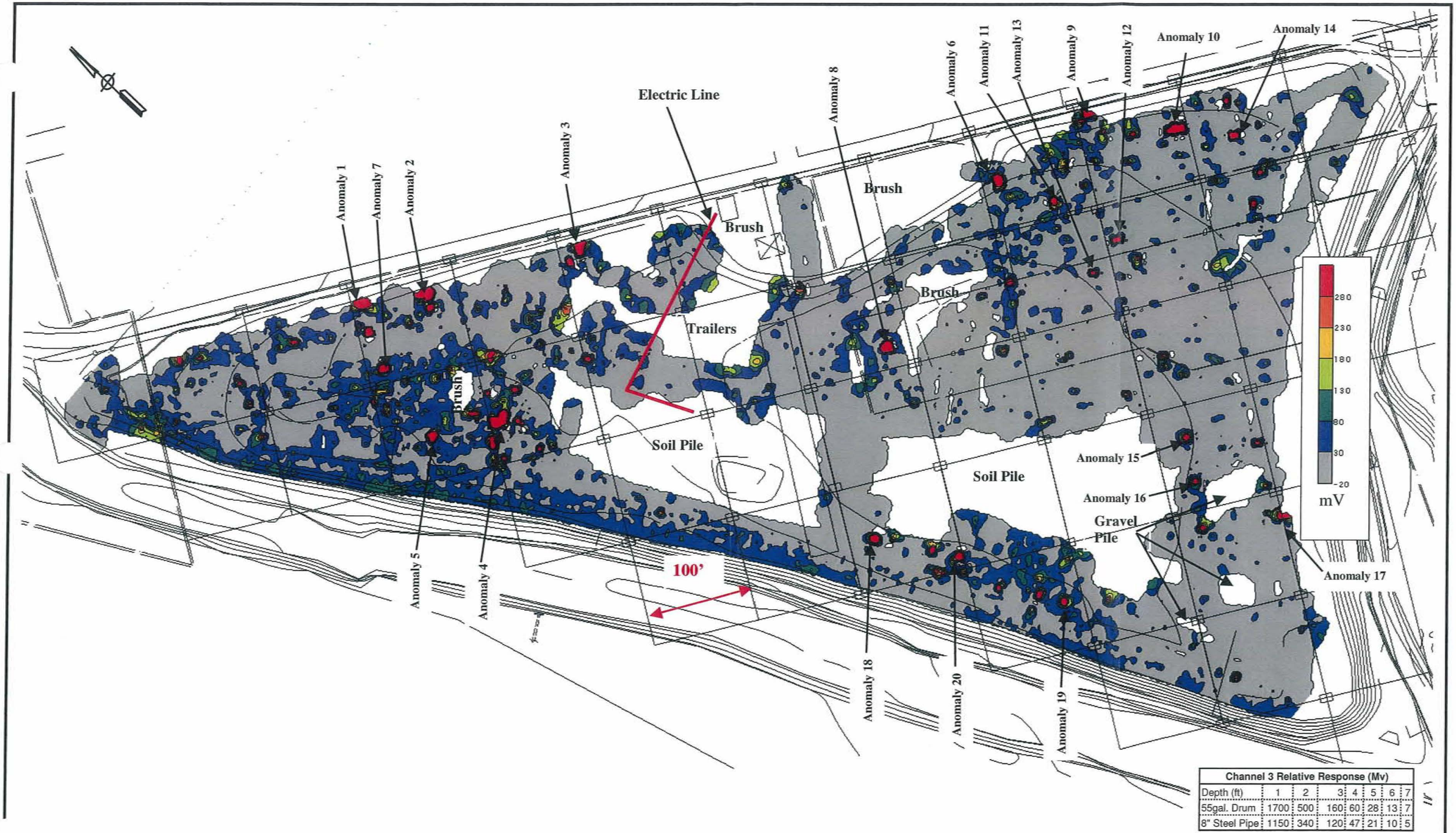
Sincerely,

Frank Fendler

Frank Fendler, M.S, P.G.
President

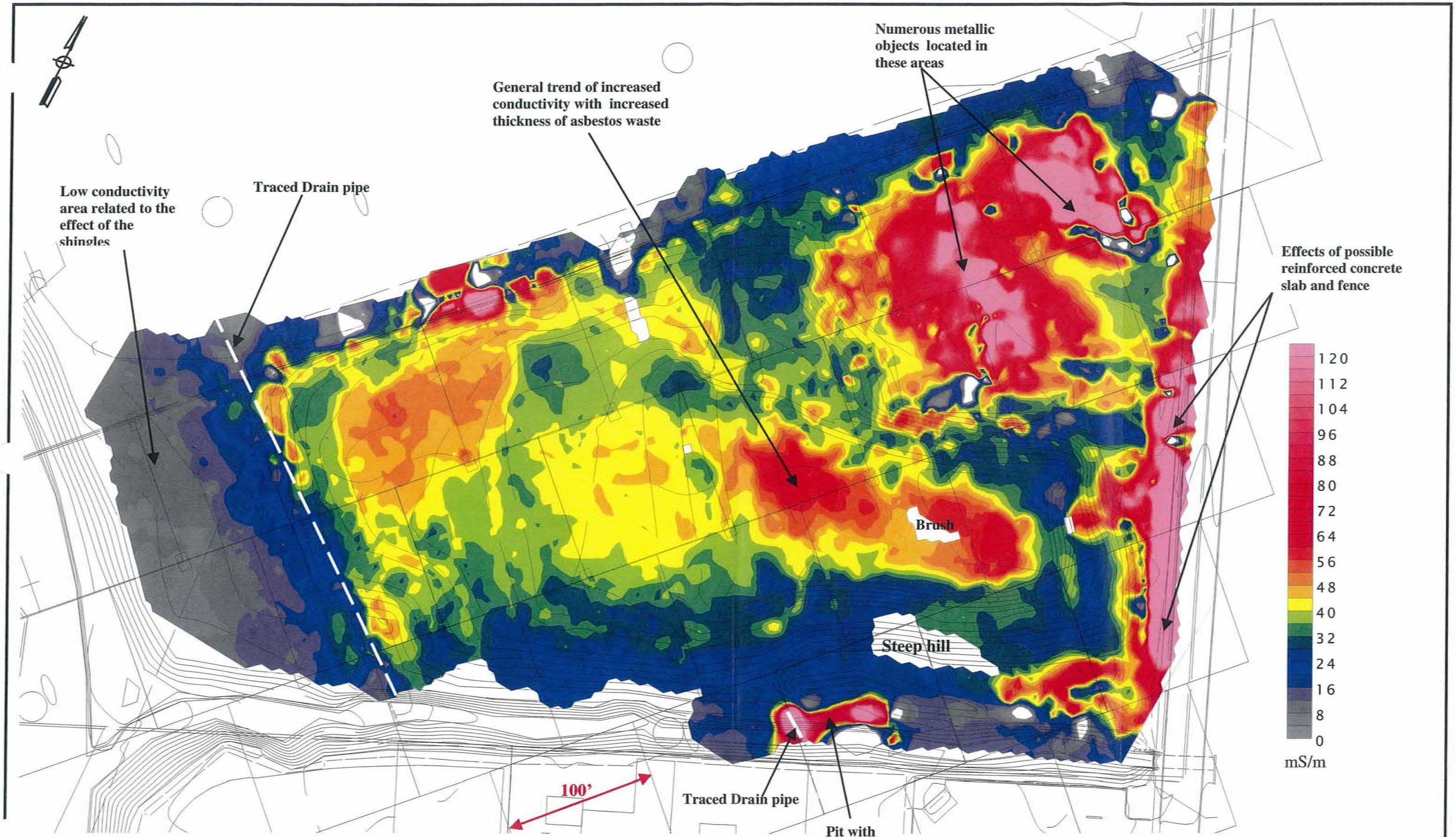


TPI environmental	Scale	Borit Superfund Site – Ambler, PA		Figure 1
	NTS	Client: CDM	Date: 1-25-10	General Site Location Map

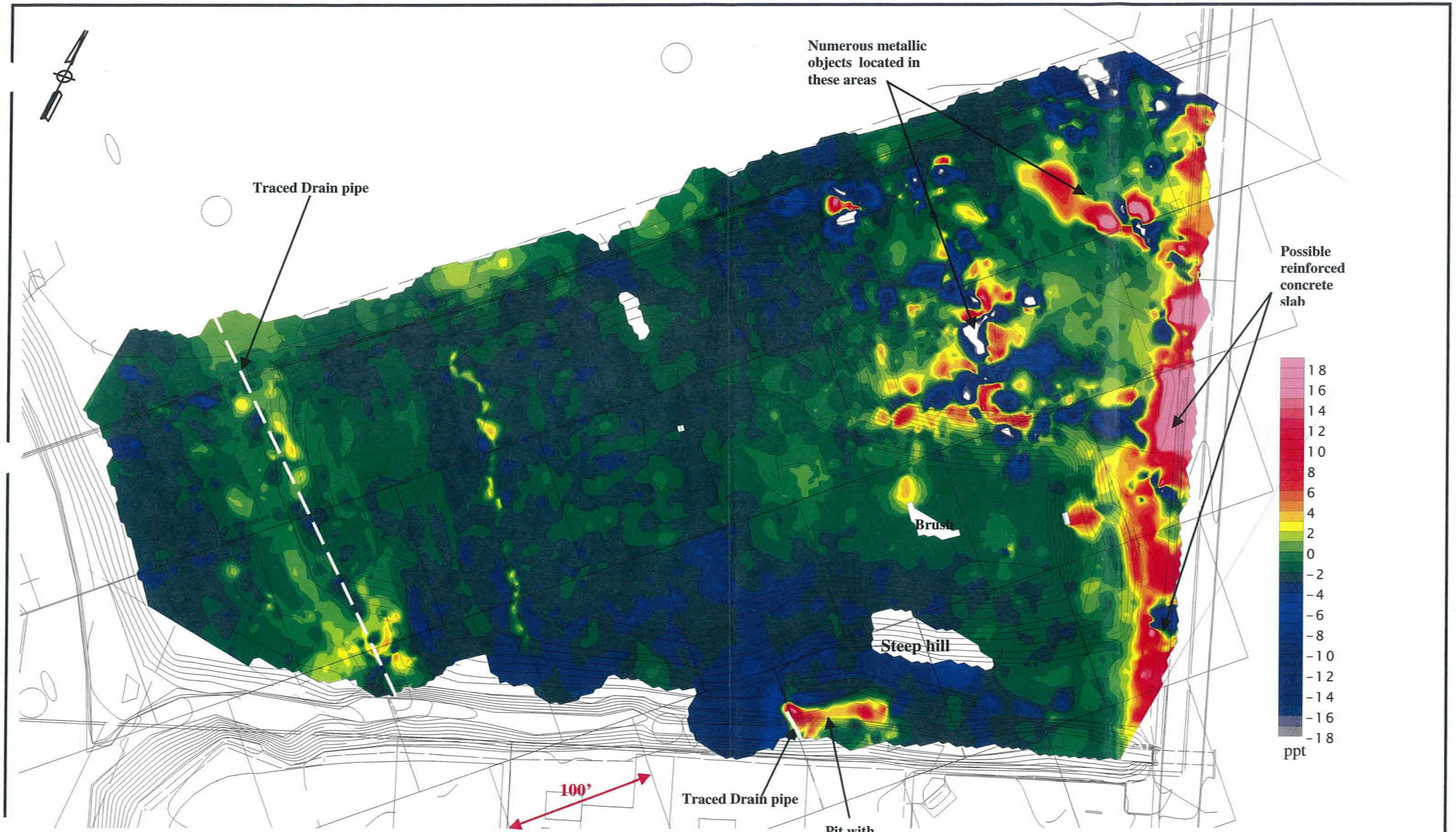


Channel 3 Relative Response (Mv)							
Depth (ft)	1	2	3	4	5	6	7
55gal. Drum	1700	500	160	60	28	13	7
8" Steel Pipe	1150	340	120	47	21	10	5

TPI environmental	Park Area - Borit Superfund Site – Ambler, PA		Figure 2
	Client: CDM	Date: 1-25-10	EM61 Relative Response – Channel



TPI environmental	Asbestos Pile - Borit Superfund Site – Ambler, PA		Figure 3
	Client: CDM	Date: 1-25-10	EM31 Terrain Conductivity Map



TPI environmental	Asbestos Pile - Borit Superfund Site – Ambler, PA		Figure 4
	Client: CDM	Date: 1-25-10	EM31 In Phase Map

Traced Drain pipe

Possible reinforced concrete slab

290
270
250
230
210
190
170
150
130
110
90
70
50
30
10
-10
-30
mV

100'

Channel 3 Relative Response (Mv)							
Depth (ft)	1	2	3	4	5	6	7
55gal. Drum	1700	500	160	60	28	13	7
8" Steel Pipe	1150	340	120	47	21	10	5

TPI environmental

Asbestos Pile - Borit Superfund Site – Ambler, PA		Figure 5
Client: CDM	Date: 1-25-10	EM61 Relative Response – Channel 3

Appendix A

Utility Clearance Anomaly Maps & Notes

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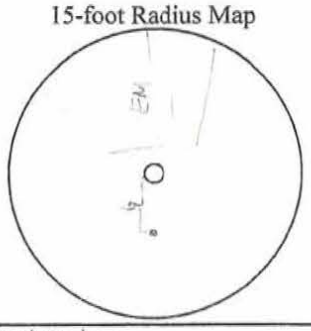
TPI Environmental
Date: 11/18/09
Time on site 7:45

Boring #	GPR Anomaly	TW6 (EM) Anomaly	RD4000 Anomaly	GPR Transect (Direction, #)	Move Boring?	Map	Description
APSB 27	N	N	N	N-256 E-257	N	N	
APSB 28	N	N	N	N-254	N	N	
APSB 26	Y	Y	N		Y	Y	258-S A26A
APSB 22	N	N	N	S-259 W-261	N	N	
" 25	N	N	N	N-262 E-263	N	N	
23	N	N	N	E-264 N 265	N	N	
21	N	N	N	N-266 E-267	N	N	
20	N	N	N	N-268 E-269	N	N	
17	N	N	N	N-270 E-271	N	N	
16	N	N	N	N-272 E-273	N	N	
13	N	Y	N	N-274 E-275	N	Y	
8	N	N	N	N-276 E-277	N	N	
RVSB 10	N	N	N	E-251	N	N	
" 11	N	N	N	E-252	N	N	
" 12	N	N	N	E-253			
TIME OFF SITE: 4:10							
DATE: 11/19/09							
TIME ON SITE: 730							
RVSB 18	N	Y	N	E-278 S-279	Y	Y	
APSB 1	N	Y	N	N-280 E-281	N	Y	
APSB 2	N	Y	N	N-282 E-283	Y	Y	
APSB 3	N	Y	N	N-284 E 285	Y	Y	
APSB 4	N	Y	N	N-286 W 287	N	Y	
APSB 5	N	Y	N	N-288 E 289	Y	Y	
APSB 7	N	N	N	N-290 E 291	N	N	
APSB 6	N	Y	N	N-292 E-293	N	Y	
APSB 14	N	N	N	N-294 E-295	N	N	
APSB 15	N	N	N	N 296 E-297	N	N	
RSVPR-17	N	Y	N	N 298 E-299	N	Y	
APSB 17	N	Y	N	N. 301 W. 302	N	Y	
" 18	N	Y	N	W.- 303 E. 304	N	Y	
APSB 18	N	N	N	S.- 305 W.- 306	N	Y	
RVSB 15	N	Y	N	N.- 307 E.- 308	N	Y	
APSB 19	N	Y	N	S.- 309 W.- 310	N	Y	
RVSB 14	N	Y	N	N.- 311 E- 312	N	Y	
APSB 21	N	Y	N	S.- 314 W- 315	N	Y	
RVSB 13	N	Y	N	N. 316 E- 317	N	Y	
APSB 10	N	Y	N	N.- 318 E- 319	N	Y	
APSB 9	N	Y	N	N.- 320 E- 321	N	Y	Em. 9.1
APSB 12	N	Y	N	N.- 322 E- 323	N	Y	Em. 9.1
TIME OFF SITE: 1545							
Time Off Site:							

Borings With Geophysical Anomalies
Borit Superfund Site

Boring: RVSB 12 Date: 11/19/09

15-foot Radius Map



Description: Boring Moved 6' west
EM Anomaly located 2' E of
initial boring mark

Boring: [illegible] Date: 11/19/09

15-foot Radius Map



Description: EM anomaly located 2' N of
of boring. Boring not moved

Boring: APSB-2 Date: 11/19/09

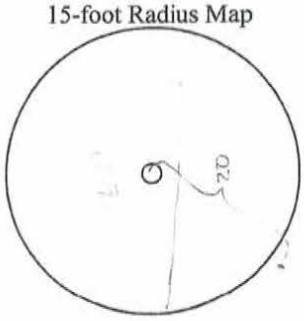
15-foot Radius Map



Description: Moved boring 3' SW of initial
mark. EM anomaly 5' E of initial mark

Boring: APSB 3 Date: 11/19/09

15-foot Radius Map



Description: [illegible]

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Appendix B

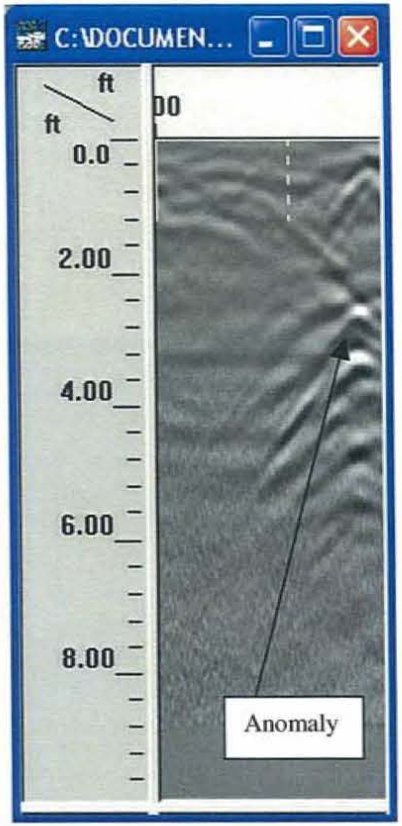
GPR Transects

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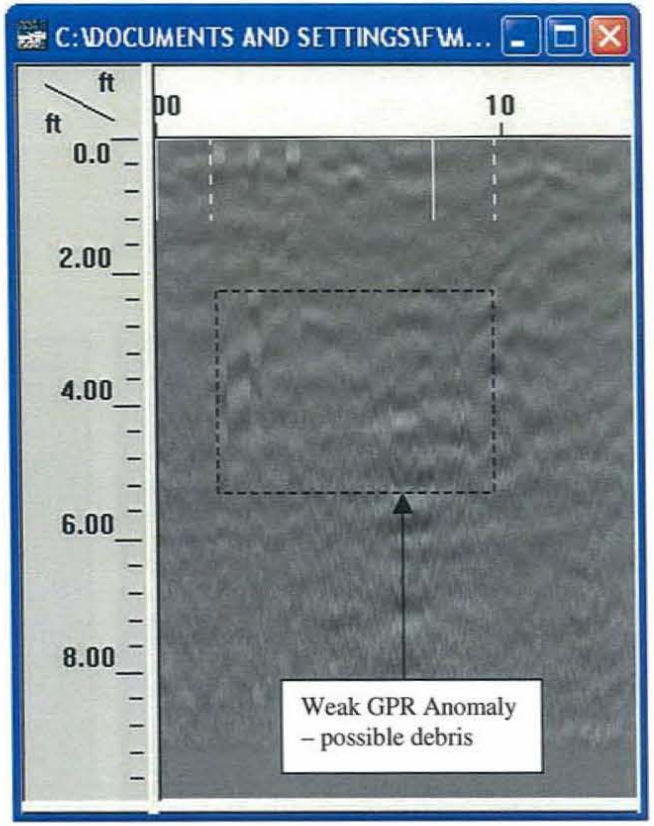
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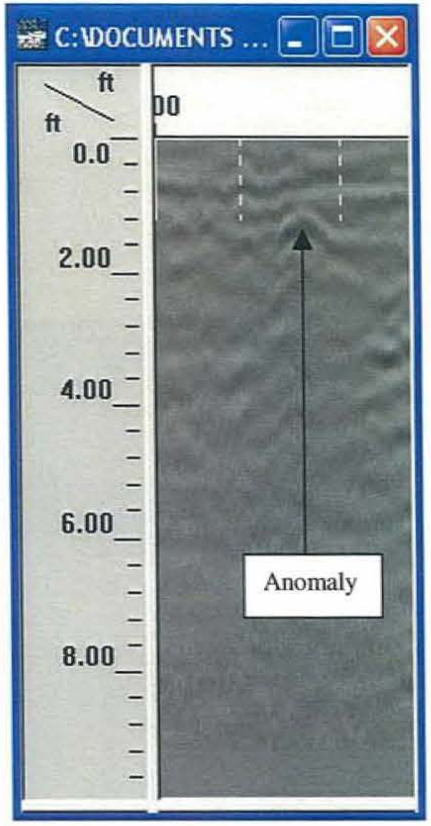
GPR Transect 531
West Across Anomaly 1



GPR Transect 533
West Across Anomaly 4



GPR Transect 537
North Across Anomaly 5

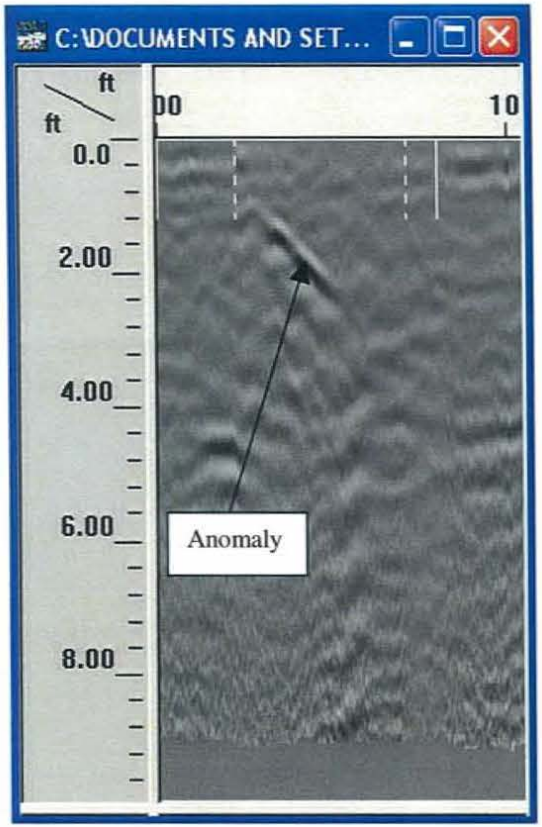


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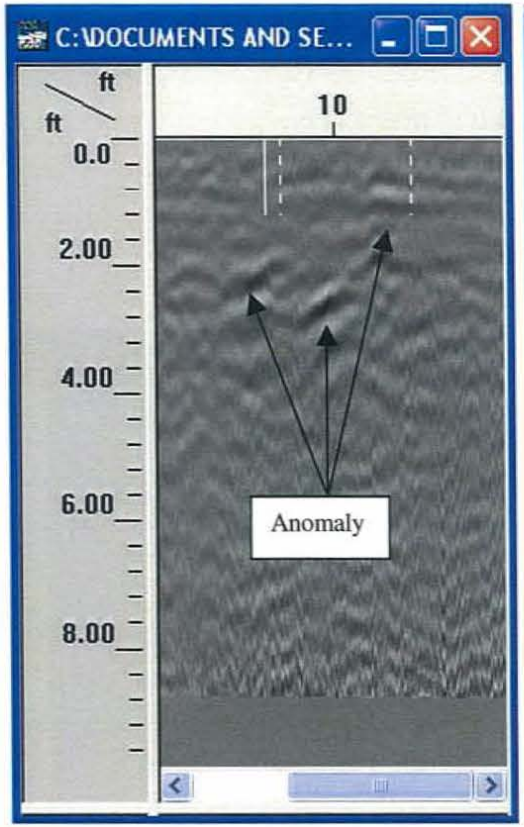
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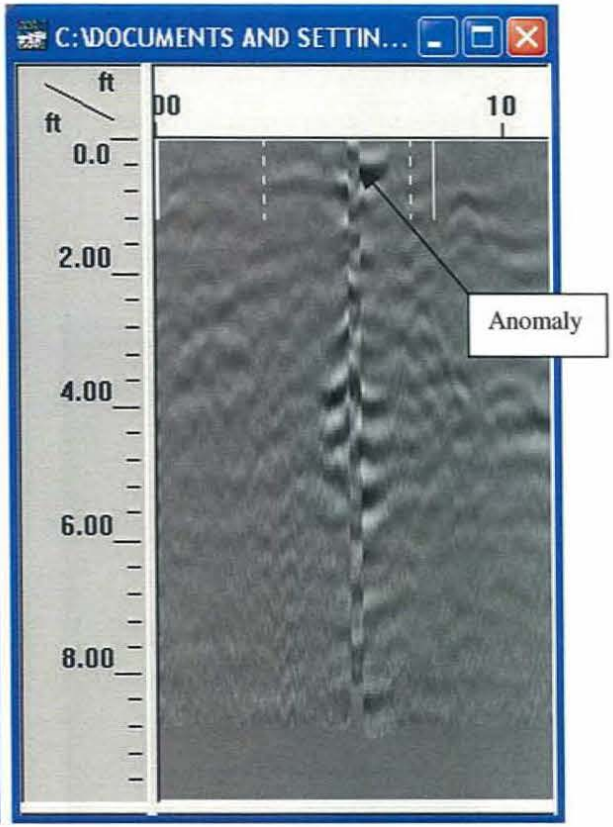
GPR Transect 33
East Across Anomaly 6



GPR Transect 30
South Across Anomaly 7



GPR Transect 539
East Across Anomaly 8

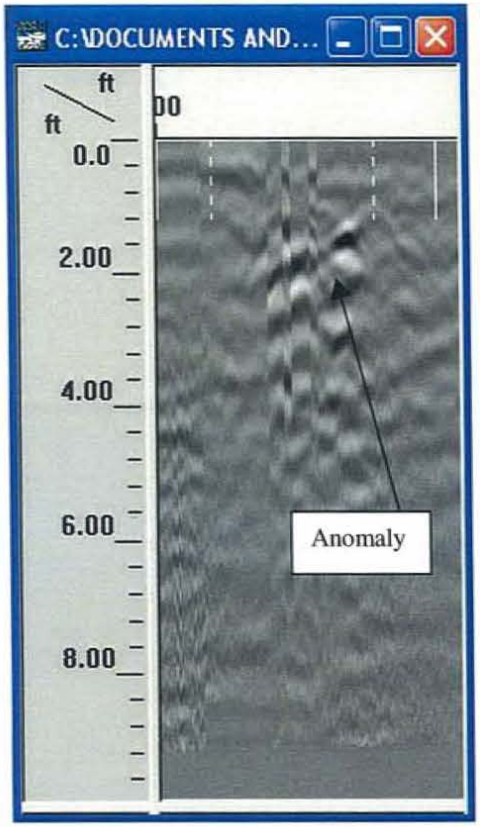


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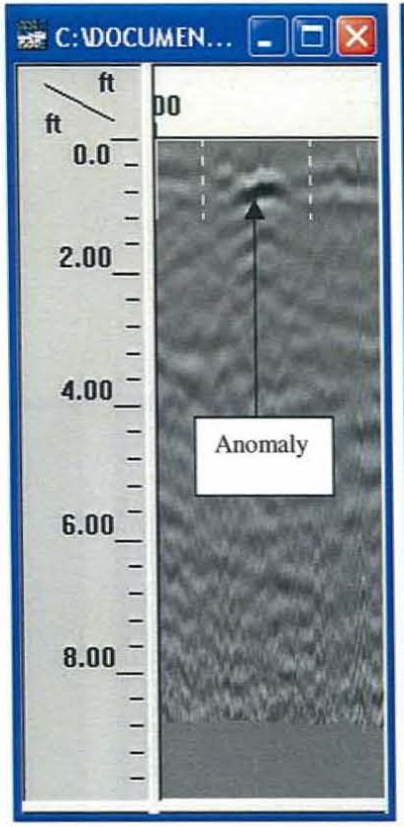
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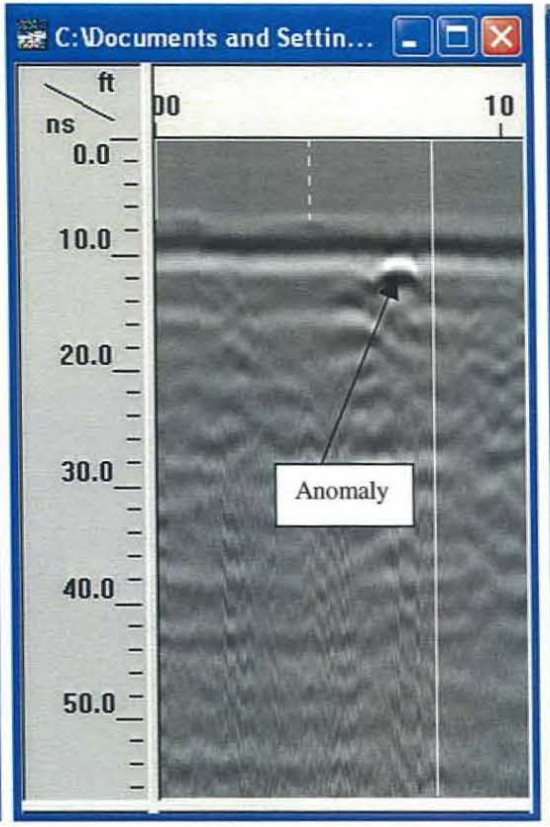
GPR Transect 544
North Across Anomaly 10



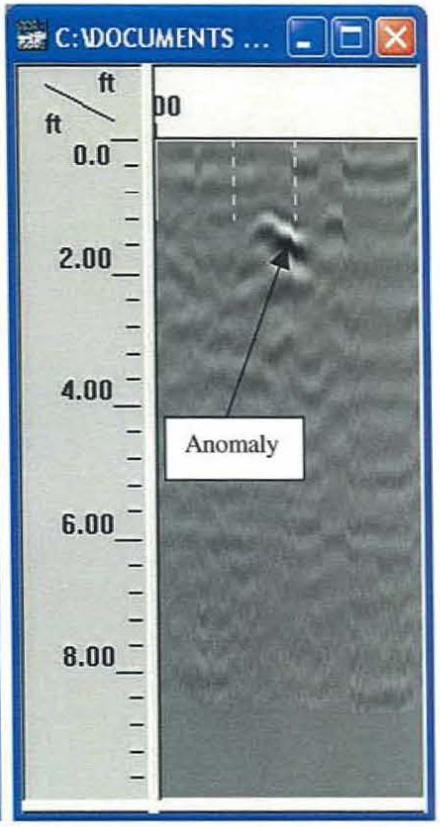
GPR Transect 34
South Across Anomaly 11



GPR Transect 545
East Across Anomaly 12

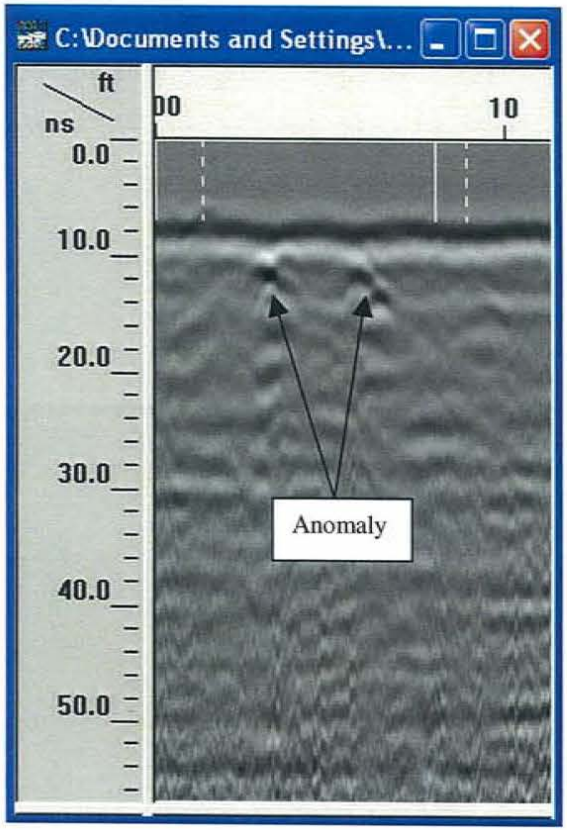


GPR Transect 541
South Across Anomaly 13

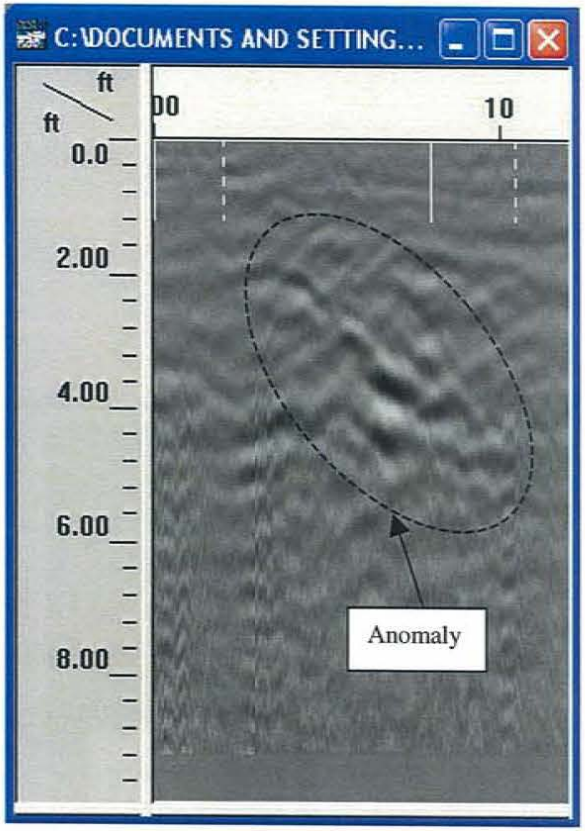


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GPR Transect 37
East Across Anomaly 14



GPR Transect 39
West Across Anomaly 20



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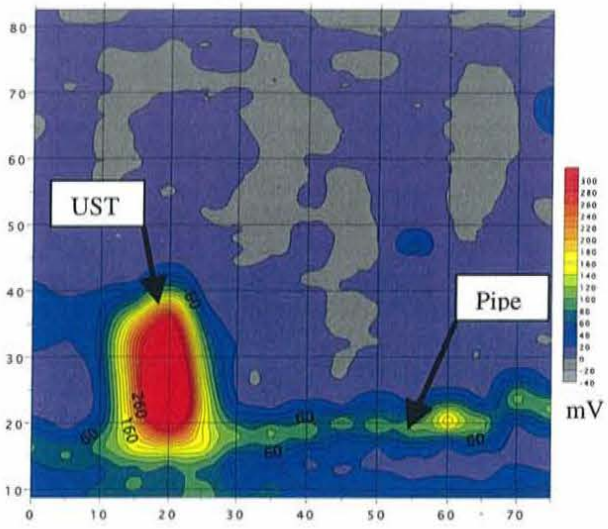
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Attachment A
TPI's Geophysical Survey Equipment & Methods

Geonics EM61-MK2

The EM61 is a high resolution time-domain metal detector which is used to detect ferrous and non-ferrous metallic objects. It consists of a powerful transmitter that generates a pulsed primary magnetic field, which induces eddy currents in nearby metallic objects. The decay of these currents is measured by two receiver coils mounted on the coil assembly. The responses are recorded and displayed by an integrated computer based digital data logger with real time numberical and graphic display. Two ports on the logger allows simultaneous collection of EM and GPS data. For further processing and interpretation data can be transferred to a laptop computer in the field and a color contoured map of the EM61 reponse is prepared (see below).

EM61 Color Contoured Map



The EM61-MK2 detects a single 55 gallon drum at a depth of over 10-feet beneath the instrument, yet it is relatively insentsitive to interference from nearby surface metal such as fences, buildings, cars, etc. By making the measurement at a relatively long time after termination of the primary pulse, the response is practically independent of the electrical conductivity fo the ground.

Due to it unique coil arrangements, the response curve is a single well defined positive peak greatly facilitating quick and accurate location of the target, the depth of which can usually be estimated from the width of the response and/or from relative response from each of the two receiver coils.

Geonics EM31-MK2

The EM31-MK2 maps geologic variations, groundwater contaminants, or any subsurface feature associated with changes in ground conductivity. The instrument consists of a 4-meter "boom" containing transmitter and receiver coils at opposite ends. The primary field generated within the transmitter coil induces eddy currents within the subsurface below the coil. These eddy currents in turn create a secondary magnetic field that is detected and measured by the receiving coil. The instrument calculates the apparent conductivity of the subsurface materials by comparing the strength of the primary field to that of the secondary field. With this inductive method, surveys can be carried out under most geologic conditions including those of high surface resistivity such as sand, gravel, and asphalt.

Ground conductivity (quadrature phase) and magnetic susceptibility (in-phase) measurements are captured within a DL600 data logger for direct read-out or post-processing. Quadrature phase and in-phase measurements differ in that while quadrature data reflect overall ground conductivity, in-phase data are more directly correlated with buried metallic structures. The EM31-MK2 also allows for the integration of a Global Positioning System (GPS) with the data logger for the purpose of collecting geographic location data and conductivity data simultaneously.

The effective depth of exploration for the EM31-MK2 is approximately six meters, with the ability to detect a single 45-gallon drum at approximately 4 meters using the in-phase component. Important advantages of the EM31-MK2 over other resistivity methods are the ease with which surveys can be performed over larger areas and the greater lateral extent of data collection per survey line.

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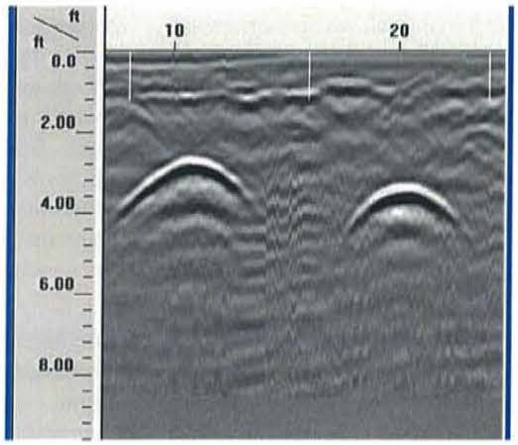
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Attachment A
TPI's Geophysical Survey Equipment & Methods

GPR

This method is one of the most powerful and cost effective methods of locating man made objects and stratigraphic layers in the subsurface. It is an active method that transmits electromagnetic pulses into the ground, the radar pulses are reflected from materials or layers of differing dielectric and electrical conductive properties. The GPR computer measures the elapsed time in billionths of a second (nanoseconds) from when the pulses are sent and when they are received back at the surface that can then be converted to depth. Results of the radar scan are displayed as a continuous cross section of the subsurface on the computer screen in real time. Metallic materials such as tanks, pipes conduits, rebar etc. have vastly different dielectric properties then soils so there reflections are striking and relatively easy to identify. Pipes and tanks constructed of PVC, concrete, and terracotta also produce distinct reflections, however, these reflections are typically not as striking as metallic materials. A typical radar image of two metallic underground storage tanks is found below.

GPR Image Of Two Metallic USTs



GPR surveys are conducted with the most advanced GPR equipment currently available including a Geophysical Survey Systems (GSSI) SIR-3000 subsurface radar unit with a 400 MHz antenna. The 400 MHz antenna has a depth range of approximately 20-feet and other antennas may be employed with the system depending on specific site conditions and objectives of the survey. The GPR transect data may be saved on the internal hard drive and transferred to a PC for storage, printing, and post processing. GSSI is the world leader in the development of GPR systems and was the first company to commercialize GPR in 1970. GPR hardware and software has improved dramatically over the last several years allowing for relatively rapid and economical GPR surveys. With 3-dimensional capabilities, the latest GPR software takes data processing a step farther then the former 2-dimensional viewing method. Three-dimensional visualization helps you to see the whole picture, giving you a powerful tool to interpret complex utility layouts and identify subtle linear features that may have otherwise been missed.

GPR surveys are typically conducted by searching for GPR hyperbolas indicative of subsurface pipes or tanks signatures in the vicinity of known entities. Theses signatures are marked on the ground and areas progressively further from the known entity are scanned and marked. This process is continued until the GPR operator performed enough scans to determine and mark the subsurface pipe, tank or anomaly. During this process the GPR data is typically not saved due to the immense size of the data files. After this phase of the GPR survey is completed, representative GPR transects or grids are performed and saved for the report and post processing. Some of the factors that may negatively affect GPR results include clay soils, rebar in concrete, high moisture content, depth of the target, and the integrity, size, and material of the target.

TW-6 EM Unit

TPI routinely employs a Fisher TW-6 electromagnetic metal detector when performing GPR surveys. The TW-6 creates an electromagnetic field with a transmitting coil and measures the strength of that field with a receiving coil. As the TW-6 passes over electrically conductive materials such as metal tanks or drums the field is distorted and the instrument produces an audible alarm based on the degree of the distortion. The TW-6 can detect conductive materials the size of drums or small tanks to depths of 10-feet. The instrument is actually a relatively poor metal detector which makes it ideal for locating large conductive materials such as metal drums, medium to large metal pipes, reinforced concrete pipes, and metal

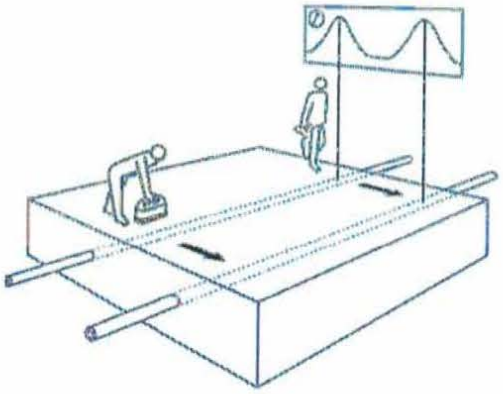
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tanks. A more sensitive metal detector would produce "false positives" on small pieces of metal that are typically found in fill and throughout developed sites. If the survey area is underlain by reinforced concrete or cars and other large surficial metallic features are within 10-feet, the TW-6 will not be useful.

Line Locating

Line locating is performed with a Radiodetection RD400 PXL-2 line locator with a 433 HCTX-2 transmitter. The transmitter emits a specific radio or electromagnetic signal which is indirectly induced or directly conducted onto the metallic line. The transmitter is capable of producing frequencies of 512 Hz, 8 kHz, or 33 kHz and the receiver is configured for the specific transmitted frequency. The induced signal is coupled with the line by either using an induction clamp which surrounds an exposed line or placing the transmitter above a buried line and transmitting the signal to it. The receiver may also be used in a passive locate mode (power) to identify the presence of current carrying lines. Nonmetallic lines may also be located by snaking a sonde down accessible lines with push rods. A sonde is a small transmitter that emits a specific electromagnetic frequency which can be detected by the receiver at depths of 12 to 16-feet.

Inductive Sweep With Transmitter/Receiver



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Appendix B
Phase 1 Boring, Hand Auger, and Piezometer Logs

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APPZ-02**
USEPA

STARTED: COMPLETED: 12/16/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308721.07 FT EASTING: 2673331.70 FT
G.S. ELEVATION: 188 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (MFL)	Other Detections -
1–5			BACM: Moist fibrous material with transite throughout.	0 to 5	1.5	0	185		APPZ02-RI-01	19952.59	VOC, SVOC, pesticides, metals
5–10			BACM: Moist fibrous material with transite throughout.	5 to 10	1.7	0	180				
10–15			BACM: Dry multi-color fill material with transite throughout.	10 to 15	2.5	0	175				
15–17			BACM: Dry multi-color fill material with transite throughout.	15 to 20	2.6	0					
17–20		CL	Moist gravelly silty clay.				170				
20–23		CL	Moist gravelly silty clay.	20 to 25	4.5	0	165				
23–25		CL	Dry dense reddish brown silty clay.								
25–29			End of boring at 25 feet bgs.				160				

CDM
14420 Albemarle Point Place Suite 210
Chantilly VA 20151

DPT Boring LOG
Draft

PROJECT NO. 3330.029

BORIT LOGS WITH WATER DATA BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APPZ-03**
USEPA

STARTED: COMPLETED: 12/17/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308778.36 FT EASTING: 2673247.58 FT
G.S. ELEVATION: 188.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:28.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (MFL)	Other Detections
1			FILL: Dry brown fine sandy clay.								
2			BACM: Dry red fibrous material.								
3			BACM: Dry gray fibrous material with transite throughout.	0 to 5	1.8	0					
4							185				
5											
6			BACM: Dry gray fibrous material with transite throughout.								
7				5 to 10	0.4	0					
8											
9							180				
10											
11			BACM: Dry gray fibrous material with transite throughout.								
12				10 to 15	0.4	0					
13											
14							175				
15											
16			BACM: Dry gray fibrous material with transite throughout.								
17				15 to 20	1.4	0					
18											
19							170				
20											
21		SP	Moist gray gravelly sand.								VOC, metals
22			Dry brown dense gravelly sand.	20 to 25	2.2	0					
23		SP									
24							165		APPZ03-RI-01	34204.44	
25											
26		SP	Wet gray gravelly sand.								
27		SP	Dry coarse red sand.	25 to 30	3	0					
28			End of Boring at 28 feet bgs.								
29							160				

BORIT LOGS WITH WATER DATA BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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DPT Boring LOG
Draft

PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APPZ-03A**
USEPA

STARTED: COMPLETED: 12/16/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308771.32 FT EASTING: 2673418.16 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet) -	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (MFL) -	Other Detections -
1			BACM: Dry multi-color fill material with transite - throughout.	0 to 5	3	0	190				
5			BACM: Dry multi-color fill material with transite throughout.								
6		ML	Moist brown sandy silt.	5 to 10	1.8	0	185				
10		ML	Moist brown sandy silt.	10 to 15	4	0	180				
14		SM	Moist grayish black silty sand.								
15		SM	Moist grayish black silty sand.	15 to 20	3.2	0	175				
18		SP	Dry red coarse sand.								
20		ML	Wet red sandy silt.	20 to 25	4	0	170				
22		SM	Dry dense gray silty sand.								
25			End of boring at 25 feet bgs.				165				

BORIT LOGS WITH WATER DATA BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APPZ-29**
USEPA

STARTED: COMPLETED: 12/16/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308691.10 FT EASTING: 2673439.00 FT
G.S. ELEVATION: 180 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (MFL) -	Other Detections -
1–5			BACM: Dry gray transite shingles. Trace sand.	0 to 5	0.5	0	175				
5–10			BACS: Moist dark gray medium sand with fibers throughout.	5 to 10	2	0	170				
10–13			BACS: Moist gray fine to medium sandy silt. Fibers throughout.	10 to 15	4	0					
13–15			BACS: Moist reddish brown medium sand with some fibers.				165				
15–16			AAPW: Moist light grayish white fine mushy clay-like material.	15 to 20	4	0					
16–17		SP	Moist dark gray medium to coarse sand.								
17–18		SP	Wet brown fine sand with silt. Loose density.								
18–20		CL	Moist brown fine silty clay. Medium density.				160				
20–29			End of boring at 20 feet bgs.				155				

BORIT LOGS WITH WATER DATA BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-01A**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 170 FT M.P. ELEV:
WATER: 1 FT TOTAL DEPTH: 1.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
		SP	Moist coarse gravelly sand. Water at 1 foot bgs.	0 to 1	1	0			CKFP01-S	U (C1)	
1			End of Boring at 1 foot bgs.						CKFP01-D	1.2 (C1)	
2											
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-01B**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 170 FT M.P. ELEV:
WATER: 1.5 FT TOTAL DEPTH: 1.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1.5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
		SP	Moist brown fine sand.	0 to 1.5	1.5	0			CKFP01-S	U (C1)	
		SP	Moist brown fine sand.								
1		SM	Moist olive fine silty sand. Water at 1.5 feet bgs.						CKFP01-D	1.2 (C1)	
			End of Boring at 1.5 feet bgs.								
2											
3											
4											

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-01C**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 170 FT M.P. ELEV:
WATER: 1.5 FT TOTAL DEPTH: 1.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1.5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
1		SP	Moist tan coarse sand.	0 to 1.5	1.5	0			CKFP01-S	U (C1)	
		SP	Moist tan coarse sand. Water at 1.5 feet bgs.						CKFP01-D	1.2 (C1)	
			End of Boring at 1.5 feet bgs.								
2											
3											
4											

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-01D**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 170 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
1		SP	Moist tan medium sand.	0 to 2	2	0			CKFP01-S	U (C1)	
2		SP	Moist tan medium sand.						CKFP01-D	1.2 (C1)	
			End of Boring at 2 feet bgs.								
3											
4											

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-01E**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 170 FT M.P. ELEV:
WATER: 1 FT TOTAL DEPTH: 1.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
		SP	Moist brown coarse sand.	0 to 1	1	0			CKFP01-S	U (C1)	
		SP	Wet brown coarse sand with silt. Water at 1 feet bgs.								
1			End of Boring at 1 foot bgs.						CKFP01-D	1.2 (C1)	
2											
3											
4											

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-02A**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT
G.S. ELEVATION: 174 FT
WATER:
LOGGED BY: S. Cleaver
EASTING: 0.00 FT
M.P. ELEV:
TOTAL DEPTH: 2.0 FT
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
0			Moist brown fine sandy silt.						CKFP02-S	0.5 (C2)	
1			BACM: Moist gray with some red fine silty material. Fibrous.	0 to 2	2	0			CKFP02-D	12 (C2)	
2			End of Boring at 2 feet bgs.								
3											
4							170				

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-02B**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT
G.S. ELEVATION: 174 FT
WATER:
LOGGED BY: S. Cleaver
EASTING: 0.00 FT
M.P. ELEV:
TOTAL DEPTH: 2.0 FT
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown fine sandy silt.						CKFP02-S	0.5 (C2)	
			FILL: Moist brown fine sandy silt.								
			BACM: Moist grayish red fine fibrous material.								
1			BACM: Moist grayish red fine fibrous material.	0 to 2	2	0			CKFP02-D	12 (C2)	
2			End of Boring at 2 feet bgs.								
3											
4							170				

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-02C**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT
G.S. ELEVATION: 174 FT
WATER:
LOGGED BY: S. Cleaver
EASTING: 0.00 FT
M.P. ELEV:
TOTAL DEPTH: 2.0 FT
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist olive fine sandy silt.						CKFP02-S	0.5 (C2)	
1			FILL: Moist olive fine sandy silt.	0 to 2	2	0			CKFP02-D	12 (C2)	
			BACM: Moist fine gray silty fibrous material.								
2			End of Boring at 2 feet bgs.								
3											
4							170				

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-02D**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT
G.S. ELEVATION: 174 FT
WATER:
LOGGED BY: S. Cleaver
EASTING: 0.00 FT
M.P. ELEV:
TOTAL DEPTH: 2.0 FT
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
0			FILL: Moist brown fine sandy silt.						CKFP02-S	0.5 (C2)	
1			BACM: Moist gray fine silty fibrous material.	0 to 2	2	0			CKFP02-D	12 (C2)	
2			End of Boring at 2 feet bgs.								
3											
4							170				

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-02E**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 174 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1			FILL: Moist brown fine sandy silt.	0 to 2	2	0			CKFP02-S	0.5 (C2)	
			BACM: Moist light gray fine sandy/gritty fibrous material.						CKFP02-D	12 (C2)	
2			End of Boring at 2 feet bgs.								
3											
4							170				

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-03A**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309037.08 FT EASTING: 2672778.70 FT
G.S. ELEVATION: 175 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
0		SP	Moist tan fine sand with silt.						CKFP03-S	0.4 (C3)	
1		SP	Moist tan fine sand with silt.	0 to 2	2	0			CKFP03-D	0.3 (C3)	
2			End of Boring at 2 feet bgs.								
3											
4											

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-03B**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308978.43 FT EASTING: 2672813.92 FT
G.S. ELEVATION: 174.5 FT M.P. ELEV:
WATER: 2 FT TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
		SP	Moist fine tan sand.						CKFP03-S	0.4 (C3)	
		SP	Moist tan fine sand with silt.								
1		SP	Moist tan fine sand with silt. Visible water at bottom of hole.	0 to 2	2	0			CKFP03-D	0.3 (C3)	
2			End of Boring at 2 feet bgs.								
3											
4							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-03C**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308920.14 FT EASTING: 2672879.90 FT
G.S. ELEVATION: 174.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		SP	Moist tan fine sand.						CKFP03-S	0.4 (C3)	
1		ML	Moist olive fine clayey sandy silt.	0 to 2	2	0			CKFP03-D	0.3 (C3)	
		ML	Moist olive fine clayey sandy silt.								
2			End of Boring at 2 feet bgs.								
3											
4							170				

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-03D**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308913.35 FT EASTING: 2672965.41 FT
G.S. ELEVATION: 175.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
0		ML	Moist tannish brown fine clayey silt.	0 to 2	2	0	175		CKFP03-S	0.4 (C3)	
1		CL	Moist brown fine clay with silt.						CKFP03-D	0.3 (C3)	
2			End of Boring at 2 feet bgs.								
3											
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-03E**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308849.11 FT EASTING: 2672940.69 FT
G.S. ELEVATION: 173 FT M.P. ELEV:
WATER: 2 FT TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		SP	Moist brown fine sand with silt.	0 to 2	2	0			CKFP03-S	0.4 (C3)	
2		ML	Moist brown fine sandy silt. Hit stream at 2 feet. Hit water. Very rocky.						CKFP03-D	0.3 (C3)	
			End of Boring at 2 feet bgs.								
3							170				
4											

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Hand Auger Boring LOG
Draft

PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-04A**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309133.19 FT EASTING: 2672694.74 FT
G.S. ELEVATION: 175 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1			FILL: Moist tan coarse sand. Very loose.	0 to 2	2	0			CKFP04-S	0.5 (C4)	
			FILL: Moist tan coarse sand. Very loose.						CKFP04-D	0.2 (C4)	
2			BACS: Moist tan coarse sand. Very loose. 1.5 feet bgs has pieces of transite in sample soil classification.								
			End of Boring at 2 feet bgs.								
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-04B**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309099.47 FT EASTING: 2672709.53 FT
G.S. ELEVATION: 174.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:1.2 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1.2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		SP	Dry tan fine sand.	0 to 1.2	1	0			CKFP04-S	0.5 (C4)	
1		SP	Dry tan medium sand with boulders.						CKFP04-D	0.2 (C4)	
			End of Boring at 1.2 feet bgs.								
2											
3											
4							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-04C**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309102.45 FT EASTING: 2672722.93 FT
G.S. ELEVATION: 175 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			BACS: Moist tan fine sand some gravel. Waste debris at 0.5 feet.						CKFP04-S	0.5 (C4)	
			BACS: Moist tan fine sand some gravel. Waste debris at 0.5 feet.								
1		SP	Moist tan medium sand with gravel. Trace cobbles.	0 to 2	2	0			CKFP04-D	0.2 (C4)	
2			End of Boring at 2 feet bgs.								
3											
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-04D**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309121.95 FT EASTING: 2672730.95 FT
G.S. ELEVATION: 175.5 FT M.P. ELEV:
WATER: 2 FT TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
0		SP	Moist brown medium sand. Some roots.	0 to 2	2	0	175		CKFP04-S	0.5 (C4)	
1		SP	Moist brown medium sand. Some roots.						CKFP04-D	0.2 (C4)	
		SP	Moist to wet brown medium sand. Water in bottom of hole.								
2			End of Boring at 2 feet bgs.								
3											
4											

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-04E**
USEPA

STARTED: COMPLETED: 1/15/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309120.91 FT EASTING: 2672741.81 FT
G.S. ELEVATION: 175.5 FT M.P. ELEV:
WATER: 2 FT TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		SP	Moist brown coarse sand.				175		CKFP04-S	0.5 (C4)	
1		ML	Moist to wet olive fine sandy silt. Water in bottom of hole.	0 to 2	2	0			CKFP04-D	0.2 (C4)	
2			End of Boring at 2 feet bgs.								
3											
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-05A**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309280.37 FT EASTING: 2672639.24 FT
G.S. ELEVATION: 178 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		ML	Moist brown fine silt with sand.	0 to 2	2	0	175		CKFP05-S	0.1 (C5)	
2		ML	Moist brown fine silt with sand.						CKFP05-D	0.1 (C5)	
3			End of Boring at 2 feet bgs.								
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-05B**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309280.37 FT EASTING: 2672639.24 FT
G.S. ELEVATION: 178 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		ML	Moist brown fine silt with sand.	0 to 2	2	0	175		CKFP05-S	0.1 (C5)	
2		ML	Moist brown fine silt with sand.						CKFP05-D	0.1 (C5)	
3			End of Boring at 2 feet bgs.								
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-05C**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309280.37 FT EASTING: 2672639.24 FT
G.S. ELEVATION: 178 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		ML	Moist brown fine silt with sand.	0 to 2	2	0	175		CKFP05-S	0.1 (C5)	
2		ML	Moist brown fine silt with sand.						CKFP05-D	0.1 (C5)	
3			End of Boring at 2 feet bgs.								
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-05D**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309280.37 FT EASTING: 2672639.24 FT
G.S. ELEVATION: 178 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		ML	Moist brown fine silt with sand.	0 to 2	2	0	175		CKFP05-S	0.1 (C5)	
2		ML	Moist brown fine silt with sand.						CKFP05-D	0.1 (C5)	
3			End of Boring at 2 feet bgs.								
4											

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-05E**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309280.37 FT EASTING: 2672639.24 FT
G.S. ELEVATION: 178 FT M.P. ELEV:
WATER: TOTAL DEPTH:1.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		CL	Moist brown fine silty clay.	0 to 1	1	0			CKFP05-S	0.1 (C5)	
1			End of Boring at 1 feet bgs.						CKFP05-D	0.1 (C5)	
2											
3							175				
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-06A**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309420.83 FT EASTING: 2672868.32 FT
G.S. ELEVATION: 180 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist red fine clay.								
1			FILL: Moist brown fine sand with silt.	0 to 2	2	0			CKFP06-D	1.3 (C6)	
2			End of Boring at 2 feet bgs.								
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-06B**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309420.83 FT EASTING: 2672868.32 FT
G.S. ELEVATION: 180 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist red fine clay.								
1			FILL: Moist brown fine sand with silt.	0 to 2	2	0			CKFP06-D	1.3 (C6)	
2			End of Boring at 2 feet bgs.								
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-06C**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309420.83 FT EASTING: 2672868.32 FT
G.S. ELEVATION: 180 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist red fine clay.								
1			FILL: Moist brown fine sand with silt.	0 to 2	2	0			CKFP06-D	1.3 (C6)	
2			End of Boring at 2 feet bgs.								
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-06D**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309420.83 FT EASTING: 2672868.32 FT
G.S. ELEVATION: 180 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist red fine clay.								
1			FILL: Moist brown fine sand with silt.	0 to 2	2	0			CKFP06-D	1.3 (C6)	
2			End of Boring at 2 feet bgs.								
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-06E**
USEPA

STARTED: COMPLETED: 1/21/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309420.83 FT EASTING: 2672868.32 FT
G.S. ELEVATION: 180 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist red clay.								
1			FILL: Moist brown fine sand with silt.	0 to 2	2	0			CKFP06-D	1.3 (C6)	
2			End of Boring at 2 feet bgs.								
3											
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-07A**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 310415.01 FT EASTING: 2672090.57 FT
G.S. ELEVATION: 183 FT M.P. ELEV:
WATER: TOTAL DEPTH:1.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1.5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		ML	Moist olive fine sandy silt.	0 to 1.5	1.5	0			CKFP07-S	0.1 (C7)	
1		ML	Moist olive fine sandy silt.						CKFP07-D	0.2 (C7)	
			End of Boring at 1.5 feet bgs.								
2											
3							180				
4											

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-07B**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 310415.01 FT EASTING: 2672090.57 FT
G.S. ELEVATION: 183 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		ML	Moist grayish brown fine sandy silt.						CKFP07-S	0.1 (C7)	
		ML	Moist brown fine silt with sand.								
1		ML	Moist brown fine silt with sand.	0 to 2	2	0			CKFP07-D	0.2 (C7)	
2			End of Boring at 2 feet bgs.								
3							180				
4											

BORIT LOGS <5' DEEP BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-07C**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 310415.01 FT EASTING: 2672090.57 FT
G.S. ELEVATION: 183 FT M.P. ELEV:
WATER: TOTAL DEPTH:2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		ML	Moist brown fine sandy clayey silt.						CKFP07-S	0.1 (C7)	
1		ML	Moist brown fine sandy clayey silt.	0 to 2	2	0			CKFP07-D	0.2 (C7)	
2			End of Boring at 2 feet bgs.								
3							180				
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-07D**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 310415.01 FT EASTING: 2672090.57 FT
G.S. ELEVATION: 183 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		ML	Moist brown fine sandy clayey silt.	0 to 2	2	0	180		CKFP07-S	0.1 (C7)	
2		ML	Moist brown fine sandy clayey silt.						CKFP07-D	0.2 (C7)	
3			End of Boring at 2 feet bgs.								
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-07E**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 310415.01 FT EASTING: 2672090.57 FT
G.S. ELEVATION: 183 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
1		ML	Moist brown fine sandy clayey silt.	0 to 2	2	0	180		CKFP07-S	0.1 (C7)	
2		ML	Moist brown fine sandy clayey silt.						CKFP07-D	0.2 (C7)	
3			End of Boring at 2 feet bgs.								
4											

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-08A**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308354.58 FT EASTING: 2673312.75 FT
G.S. ELEVATION: 174 FT M.P. ELEV:
WATER: TOTAL DEPTH:1.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		ML	Moist brown fine sandy silt.	0 to 1	1	0			CKFP08-S	0.1 (C8)	
1			End of Boring at 1 feet bgs.						CKFP08-D	0.8 (C8)	
2											
3											
4							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-08B**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308354.58 FT EASTING: 2673312.75 FT
G.S. ELEVATION: 174 FT M.P. ELEV:
WATER: TOTAL DEPTH:2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		ML	Moist brown fine sandy silt.						CKFP08-S	0.1 (C8)	
1		ML	Moist brown fine sandy silt.	0 to 2	2	0			CKFP08-D	0.8 (C8)	
2			End of Boring at 2 feet bgs.								
3											
4							170				

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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-08C**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308354.58 FT EASTING: 2673312.75 FT
G.S. ELEVATION: 174 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
1		SP	Moist brown fine sand with silt.	0 to 2	2	0			CKFP08-S	0.1 (C8)	
2		SP	Moist brown fine sand with silt.						CKFP08-D	0.8 (C8)	
			End of Boring at 2 feet bgs.								
3											
4							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-08D**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308354.58 FT EASTING: 2673312.75 FT
G.S. ELEVATION: 174 FT M.P. ELEV:
WATER: TOTAL DEPTH:1.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		SM	Moist brown fine silty sand.	0 to 1	1	0			CKFP08-S	0.1 (C8)	
1			End of Boring at 1 feet bgs.						CKFP08-D	0.8 (C8)	
2											
3											
4							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKFP-08E**
USEPA

STARTED: COMPLETED: 1/18/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308354.58 FT EASTING: 2673312.75 FT
G.S. ELEVATION: 174 FT M.P. ELEV:
WATER: TOTAL DEPTH:1.2 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 1.2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
		SM	Moist brown fine silty sand.	0 to 1.2	1.2	0			CKFP08-S	0.1 (C8)	
1		SM	Moist brown fine silty sand.						CKFP08-D	0.8 (C8)	
			End of Boring at 1.2 feet bgs.								
2											
3											
4							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **CKSB-01**
USEPA

STARTED: COMPLETED: 1/14/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 0.00 FT EASTING: 0.00 FT
G.S. ELEVATION: 180.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
0			AAPW: Moist white pasty waste debris with ash like material throughout. Very fine.				180				
1			AAPW: Moist white pasty waste debris with ash like material throughout. Very fine.						CKSB01-WA	U (G)	
2			AAPW: Moist white pasty waste debris with ash like material throughout. Very fine.	0 to 4	4	0					
3			FILL: Moist grayish brown fine sand.								
			AAPW: Moist white pasty waste debris with ash like material throughout. Very fine. More solid white than before.								
4			End of Boring at 4 feet bgs.								

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

BORIT LOGS <5' DEEP BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-01**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309311.42 FT EASTING: 2673708.03 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown coarse silty sand with gravel.						APSB01020304-CW	0.3 (C1)	SVOC, pesticides, metals
			FILL: Moist dark gray medium sand with silt.	0 to 4	2.5	0			APSB01020304-WA	12 (C1)	
5			FILL: Moist gray coarse sandy gravel, concrete chunks throughout.	4 to 8	1	0	190		APSB01020304-NS	0.1 (C1)	SVOC, pesticides, metals
10		ML	Moist wet brown fine sandy silt. Medium density.	8 to 12	0.5	0	185				SVOC, pesticides, metals
15			No recovery	12 to 16	0	0	180				
		ML	Moist to wet reddish brown fine clayey sandy silt.	16 to 20	3	0	175				
20			End of boring at 20 feet bgs.				170				
25							165				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-02**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309251.46 FT EASTING: 2673784.32 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:12.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Black moist sandy gravel.						APSB02-SS	1.1 (G)	SVOC,
									APSB01020304-CW	0.3 (C1)	pesticides, metals
			FILL: Moist brown fine sand.								
			FILL: Dry black gravelly sand.								
			FILL: Moist red and white sandy gravel.	0 to 5	3.1	0	190				
5			FILL: Wet brown sandy silt.								
			BACM: Moist white fibrous material.						APSB01020304-WA	12 (C1)	SVOC, pesticides, metals
			Dry reddish brown sandy silt.						APSB01020304-NS	0.1 (C1)	SVOC, pesticides, metals
		ML		5 to 10	3.9	0	185				
10			Dry reddish brown sandy silt.								
		ML									
			End of boring at 12 feet bgs.	10 to 15	2	0	180				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-03**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309141.57 FT EASTING: 2673814.58 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH: 12.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt.	0 to 5	1.3	0			APSB01020304-CW	0.3 (C1)	VOC, SVOC, pesticides, metals
5			BACM: Moist fine fibrous material red and white.	5 to 10	2	0	190		APSB01020304-WA	12 (C1)	VOC, SVOC, pesticides, metals
10			No recovery, refusal at 12 feet bgs.				185				
			End of boring at 12 feet bgs.	10 to 15	0	0					

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-04**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309068.10 FT EASTING: 2673887.05 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH: 8.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist brown fine silty sand.	0 to 4	2.5	0			APSB01020304-CW	0.3 (C1)	SVOC, pesticides, metals
			FILL: Moist dark gray medium sand.								
			FILL: Moist brown medium sand with silt. Some brick chunks.						APSB01020304-WA	12 (C1)	SVOC, pesticides, metals
							190				
5		SP	Moist grayish brown fine sand with silt. Medium density.	4 to 8	4	0			APSB01020304-NS	0.1 (C1)	SVOC, pesticides, metals
			End of boring at 8 feet bgs.				185				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-05**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308967.20 FT EASTING: 2673931.77 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:13.3 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Asphalt fill.								
			BACS: Red coarse sandy clay with fibrous material.								
			BACS: White coarse sandy clay with fibrous material.	0 to 5	1.8	0	190				
5			BACS: White coarse sandy clay with fibrous material.								
		ML	Moist gray clayey silt.								
		SP	Dry gray sand.	5 to 10	3.1	0	185				
10		CL	Wet gray silty clay.								
		SP	Dry red dense sand.	10 to 15	3.3	0					
			End of boring at 13.3 feet bgs.				180				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-06**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308917.35 FT EASTING: 2673831.33 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: TOTAL DEPTH: 12.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet) -	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist gray fine silt with sand. Loose density. -	0 to 4	1	0	190				
5			BACS: Moist light gray fine sandy silt. Very hard density. Fibers throughout core.	4 to 8	3	0	185				
10		SM	Moist to dry fine brown silty sand. Medium density.	8 to 12	3	0	180				
			End of boring at 12 feet bgs.								

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-07**
USEPA

STARTED: COMPLETED: 12/16/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308970.76 FT EASTING: 2673820.10 FT
G.S. ELEVATION: 206 FT M.P. ELEV:
WATER: TOTAL DEPTH:30.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Dry gray fibrous material with sections of color material less than one inch in thickness.	0 to 5	0.8	0	205				
5			BACM: Dry gray fibrous material with sections of color material less than one inch in thickness.	5 to 10	3.4	0	200				
10			BACM: Dry gray fibrous material with sections of color material less than one inch in thickness.	10 to 15	4.6	0	195				
15			BACM: Dry gray fibrous material with sections of color material less than one inch in thickness.	15 to 20	2.6	0	190				
20			BACM: Dry gray fibrous material with sections of color material less than one inch in thickness.	20 to 25	4.6	0	185				
			BACM: Dark gray moist fibrous material.								
25		SP	Dry dense gray coarse sand.								
		SP	Dry dense gray coarse sand.				180				
		CL	Wet dense reddish brown silty clay.	25 to 30	3.6	0					
30			End of boring at 30 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-08**
USEPA

STARTED: COMPLETED: 12/15/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309047.34 FT EASTING: 2673767.86 FT
G.S. ELEVATION: 220 FT M.P. ELEV:
WATER: TOTAL DEPTH: 45.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Moist grayish white fibrous material with colored lens of same material.	0 to 5	2.6	0					
5			BACM: Moist grayish white fibrous material with colored lens of same material.	5 to 10	3.8	0	215		APSB08131617-WA	1.5 (C3)	SVOC, pesticides, metals
10				10 to 15	0	0	210				
15			BACM: Moist grayish white fibrous material with colored lens of same material.	15 to 20	2.2	0	205				
20			BACM: Moist grayish white fibrous material with colored lens of same material.	20 to 25	2.3	0	200				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-08**

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Moist grayish white fibrous material with colored lens of same material.	25 to 30	3.3	0					
30			BACM: Moist grayish white fibrous material with colored lens of same material.	30 to 35	2.8	0	190				
35			BACM: Moist grayish white fibrous material with colored lens of same material.	35 to 40	0.2	0	185				
40			BACM: Moist grayish white fibrous material with colored lens of same material.	40 to 45	3.6	0	180		APSB08131617-NS	0.1 (C3)	SVOC, pesticides, metals
		GP	Wet dense gravel sandy brown.								
45			End of Boring at 45 feet bgs.				175				
50							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-09**
USEPA

STARTED: COMPLETED: 12/11/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309141.63 FT EASTING: 2673730.08 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist black coarse sandy gravel.						APSB09101112-CW	0.4 (C2)	SVOC, pesticides, metals
			BACM: Moist gray fibrous material.	0 to 5	1.5	0	190				
5			BACM: Moist gray fibrous material.	5 to 10	3	0			APSB09101112-WA	0.8 (C2)	SVOC, pesticides, metals
							185				
10		CL	Wet gray silty clay.						APSB09101112-NS	0.1 (C2)	SVOC, pesticides, metals
		SM	Wet dense reddish brown silty sand.	10 to 15	5	0	180				
15			End of boring at 15 feet bgs.								
							175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-10**
USEPA

STARTED: COMPLETED: 12/11/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309174.19 FT EASTING: 2673668.21 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:18.5 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Black gravelly sand.						APSB09101112-CW	0.4 (C2)	VOC, SVOC, pesticides, metals
			BACM: Dry gray fibrous material with transite throughout.						APSB09101112-WA	0.8 (C2)	VOC, SVOC, pesticides, metals
				0 to 5	2	0					VOC, SVOC, pesticides, metals
5			FILL: Dry brown coarse sandy gravel.				190				
				5 to 10	2.5	0					
10			BACM: Wet white fibrous material.				185				
				10 to 15	5	0					
15			BACM: Wet white fibrous material.				180				
			Dry reddish brown silty sand.						APSB09101112-NS	0.1 (C2)	VOC, SVOC, pesticides, metals
		SM		15 to 20	3.5	0					
			End of boring at 18.5 feet bgs.								

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-11**
USEPA

STARTED: COMPLETED: 12/11/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309200.37 FT EASTING: 2673621.08 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH: 15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry black silty sand.								
			FILL: Dry light brown coarse sand.								
			FILL: Dry brown dense sand.	0 to 5	2.5	0	190		APSB09101112-CW	0.4 (C2)	SVOC, pesticides, metals
5			FILL: Wet brown silty clay.						APSB09101112-WA	0.8 (C2)	SVOC, pesticides, metals
			BACM: Wet white fibrous material.	5 to 10	4	0					
			FILL: Moist gray silty sand				185				
10			BACS: Wet gray silty sand with white fibrous material.								
			Wet olive clay.						APSB09101112-NS	0.1 (C2)	SVOC, pesticides, metals
		CH		10 to 15	5	0					
		ML	Moist dense red sandy silt.				180				
15			End of boring at 15 feet bgs.								
							175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-12**
USEPA

STARTED: COMPLETED: 12/11/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309082.16 FT EASTING: 2673683.22 FT
G.S. ELEVATION: 200 FT M.P. ELEV:
WATER: TOTAL DEPTH:18.4 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Dry brown coarse sand.						APSB09101112-CW-2618	0.4 (C2)	SVOC, pesticides, metals
			BACM: Dry gray fibrous material.	0 to 5	0.7	0					
5			BACM: Dry gray fibrous material.				195				
				5 to 10	0.4	0					
10			BACM: Dry white and red fibrous material.				190		APSB09101112-WA-2620	0.8 (C2)	SVOC, pesticides, metals
				10 to 15	2	0					
15			BACM: Dry white and red fibrous material.				185				
		SM	Wet dense silty sand gray.	15 to 20	3.4	0			APSB09101112-NS-2619	0.1 (C2)	SVOC, pesticides, metals
			End of boring at 18.4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-13**
USEPA

STARTED: COMPLETED: 12/15/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308987.32 FT EASTING: 2673708.05 FT
G.S. ELEVATION: 219 FT M.P. ELEV:
WATER: TOTAL DEPTH:40.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			BACS: Moist light gray fine sandy silt material. Fibers throughout. Mushy.	0 to 5	2	0	215		APSB13-SS	1.3 (G)	VOC, SVOC, pesticides, metals
5			BACS: Moist gray, red, green layers less than one inch thick. Fine silt with sand. Very mushy fibers throughout.	5 to 10	3	0	210		APSB08131617-WA	1.5 (C3)	VOC, SVOC, pesticides, metals
10			BACS: Moist gray, red, green layers less than one inch thick. Fine silt with sand. Very mushy fibers throughout.	10 to 15	3	0	205				
15			BACS: Moist gray, red, green layers less than one inch thick. Fine silt with sand. Very mushy fibers throughout.	15 to 20	3.5	0	200				
			BACS: Moist light gray fine sandy silt. Material molded together by fibers. Medium density.								
20			BACS: Moist gray, red, black, yellow layers less than one inch thick. Fine sandy silt material with fibers throughout.	20 to 25	5	0	195				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-13**

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACS: Moist gray, red, black, yellow layers less than one inch thick. Fine sandy silt material with fibers throughout.	25 to 30	3	0	190				
30			BACS: Moist gray fine sandy silt with fibrous material throughout. Very mushy.								
			BACS: Moist reddish fine sandy silt material. Fibers throughout. Very mushy.	30 to 35	5	0	185				
			AAPW: Moist light gray fine mushy gel with fibers throughout.								
35			BACS: Moist light gray with some pink fine sandy silt material with fibers throughout.								
		ML	Moist brown fine sandy silt. Medium density.	35 to 40	5	0	180		APSB08131617-NS	0.1 (C3)	VOC, SVOC, pesticides, metals
40			End of Boring at 40 feet bgs.								
45							175				
50							170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-14**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308910.82 FT EASTING: 2673735.58 FT
G.S. ELEVATION: 200 FT M.P. ELEV:
WATER: TOTAL DEPTH:11.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist gray fine silt with sand.								
			BACS: Moist reddish gray silt with sand. Fibers throughout.	0 to 4	2.2	0					
5			AAPW: Moist light gray and red fine silt. Very mushy appears to be man-made. Fibers throughout.	4 to 8	2.5	0	195				
			AAPW: Moist light gray and red fine silt. Very mushy appears to be man-made. Fibers throughout.								
10		SM	Moist brown fine silty sand. Medium density.	8 to 12	3	0	190				
			End of boring at 11 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-15**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308834.83 FT EASTING: 2673658.87 FT
G.S. ELEVATION: 199 FT M.P. ELEV:
WATER: TOTAL DEPTH: 25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Dry gray fibrous material.	0 to 5	2.8	0	195		APSB15212325-WA	1.2 (C4)	SVOC, pesticides, metals
5			BACM: Dry gray fibrous material.	5 to 10	4.4	0	190				
10			BACM: Dry gray fibrous material.	10 to 15	3.6	0	185				
15			BACM: Dry gray fibrous material.	15 to 20	4.2	0	180				
20			BACM: Dry gray fibrous material.	20 to 25	5	0			APSB15212325-NS	ND (C4)	SVOC, pesticides, metals
		SP	Dry dense coarse brown sand.				175				
		SM	Wet dense brown silty sand.								
25			End of boring at 25 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-16**
USEPA

STARTED: COMPLETED: 12/15/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308934.28 FT EASTING: 2673653.34 FT
G.S. ELEVATION: 216 FT M.P. ELEV:
WATER: TOTAL DEPTH:33.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			No recovery	0 to 5	0	0	215				
5			FILL: Moist gray fine sand. -								
			BACS: Moist gray, tan, brown, black layers less than one inch thick fine sandy silt material with fibers throughout. Very mushy material.	5 to 10	3.5	0	210				
10			BACS: Moist to wet tan coarse sandy silt material. Very mushy.								
			BACS: Moist light gray fine silty material with fibers throughout. Very mushy.	10 to 15	3	0	205		APSB08131617-WA	1.5 (C3)	SVOC, pesticides, metals
15			BACS: Moist light gray fine silty material with fibers throughout. Very mushy.	15 to 20	1	0	200				
20			No recovery	20 to 25	0	0	195				
25			BACS: Wet gray fine sandy silt like. Very mushy. Fibers throughout.								
			BACS: Moist red, green, gray layers less than one inch thick fine sandy silt like. Fibers throughout. Medium density.	25 to 30	2.5	0	190				
30			BACS: Moist to wet gray fine sandy silt with fibers throughout.	30 to 33	3	0	185		APSB08131617-NS	0.1 (C3)	SVOC, pesticides, metals
		SP	Moist brown sand with silt. Hard density.								
			End of Boring at 33 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-17**
USEPA

STARTED: COMPLETED: 12/16/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309013.96 FT EASTING: 2673605.89 FT
G.S. ELEVATION: 216.5 FT M.P. ELEV:
WATER: 15 FT TOTAL DEPTH: 41.6 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Moist gray fibrous material.	0 to 5	1.8	0	215				
5			BACM: Moist gray fibrous material.	5 to 10	2	0	210				
10			BACM: Wet gray fibrous material.								
			BACM: Moist gray fibrous material with colored sections less than one inch.	10 to 15	3.6	0	205		APSB08131617-WA	1.5 (C3)	SVOC, pesticides, metals
15			BACM: Moist gray fibrous material with colored sections less than one inch with water present.	15 to 20	4	0	200				
20			BACM: Moist gray fibrous material with colored sections less than one inch with water present.	20 to 25	4	0	195				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-17**

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID	Asbestos (%)	Other Detections -
			BACM: Moist gray fibrous material with colored sections less than one inch with water present.	25 to 30	4.8	0	190				
30			BACM: Moist gray fibrous material with colored sections less than one inch with water present.	30 to 35	2.3	0	185				
35			BACM: Moist gray fibrous material with colored sections less than one inch with water present.								
		SM	Moist dense brown coarse silty sand.	35 to 40	2.7	0	180		APSB08131617-NS	0.1 (C3)	SVOC, pesticides, metals
40				40 to 45	0	0	175				
			End of boring at 41.6 feet bgs.								
45							170				
50							165				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-18**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309098.38 FT EASTING: 2673524.19 FT
G.S. ELEVATION: 197 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: No recovery	0 to 5	0	0	195				
5			BACM: Wet light gray fibrous material.								
		SP	Moist fine gravelly sand.								
		CL	Moist dense light brown silty clay.	5 to 10	2.4	0	190				
10			Wet olive silty clay.								
		CL		10 to 15	2	0	185				
15			End of boring at 15 feet bgs.				180				

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BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-19**
USEPA

STARTED: COMPLETED: 12/9/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309014.55 FT EASTING: 2673450.01 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH: 16.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			No recovery. Void, free push.	0 to 4	0	0					
5				4 to 8	0	0	190				
10				8 to 12	0	0	185				
		CL	Moist brown fine silty clay with sand. Medium density.	12 to 16	3.5	0					
15							180				
			End of boring at 16 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-20**
USEPA

STARTED: COMPLETED: 12/11/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308977.12 FT EASTING: 2673557.49 FT
G.S. ELEVATION: 213 FT M.P. ELEV:
WATER: TOTAL DEPTH:34.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
0			No recovery. Void, free push.	0 to 5	0	0	210				
5				5 to 10	0	0	205				
10				10 to 15	0	0	200				
15			BACS: Moist light gray fine silt with sand. Fibers throughout almost looks like a bentonite material.	15 to 20	5	0	195				
20			BACS: Moist red, green, gray, brown layers (less than one inch thick) fine silt with sand.	20 to 25	5	0	190		APSB20-21	12 (G)	
25			BACS: Moist light gray fine silty material with fibers throughout.								
			BACS: Moist to wet light gray fine sandy silty material. Spots of red. Layered dense material in spots.	25 to 30	5	0	185				
		SP	Wet reddish gray coarse sand with silt.								
30		SP	Wet reddish gray coarse sand with silt.	30 to 35	4.5	0	180				
		SP	Moist brown coarse sand. Hard density.								
35			End of boring at 34.5 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-21**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308894.33 FT EASTING: 2673572.23 FT
G.S. ELEVATION: 211 FT M.P. ELEV:
WATER: TOTAL DEPTH:28.8 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Moist gray fibrous material.	0 to 5	1.5	0	210		APSB21-SS APSB15212325-WA	1.2 (G) 1.2 (C4)	VOC, SVOC, pesticides, metals
5			BACM: Moist gray fibrous material.	5 to 10	3.3	0	205				
10			BACM: Moist gray fibrous material.	10 to 15	4.7	0	200				
15			BACM: Wet gray fibrous material.	15 to 20	5	0	195				
20			BACM: Wet gray fibrous material.	20 to 25	2.5	0	190				
			BACM: Wet red fibrous material.								
25			BACM: Wet red fibrous material.	25 to 30	3.8	0	185		APSB15212325-NS	ND (C4)	VOC, SVOC, pesticides, metals
		SP	Dry dense light brown coarse sand.								
			End of boring at 28.8 feet bgs.								

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PROJECT NO. 3330.029

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-22**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308794.58 FT EASTING: 2673498.88 FT
G.S. ELEVATION: 199 FT M.P. ELEV:
WATER: TOTAL DEPTH:18.8 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			BACM: Dry white fibrous material.	0 to 5	2	0	195				
5			BACM: Dry gray fibrous material.	5 to 10	5	0	190				
10			BACM: Dry gray fibrous material.	10 to 15	0.8	0	185				
15			BACM: Wet gray fibrous material.								
		SP	Moist dense gray coarse sand.	15 to 20	3.8	0					
			End of Boring at 18.8 feet bgs.				180				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-23**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308895.03 FT EASTING: 2673475.78 FT
G.S. ELEVATION: 206.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:24.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: No recovery. Void, free push.	0 to 5	0	0	205				
5				5 to 10	0	0	200				
10			FILL: Moist tan fine clayey sands silt. Very mushy.	10 to 15	5	0	195				
			FILL: Moist light gray with red, green, and black layers less than one inch fine sandy silt. Medium density.								
15			BACS: Moist light gray with brown in the middle. Fine sandy silt with fibers throughout.	15 to 20	5	0	190		APSB15212325-WA	1.2 (C4)	SVOC, pesticides, metals
			FILL: Moist light gray with green and red lenses less than one inch fine sandy silt.								
20			BACS: Moist light gray fine silt with sand. Fibers throughout.	20 to 25	4	0	185				
			BACS: Moist light gray fine silt with sand with red layers throughout. Fibers throughout.								
		SP	Moist brown fine sand with silt. Very hard density.						APSB15212325-NS	ND (C4)	SVOC, pesticides, metals
25			End of boring at 24 feet bgs.				180				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-24**
USEPA

STARTED: COMPLETED: 12/15/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308928.84 FT EASTING: 2673364.51 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: No recovery. Free push.	0 to 5	0	0	190		APSB24-SS	1.1 (G)	VOC, SVOC, pesticides, metals
5				5 to 10	0	0	185				
10			BACM: Dry gray fibrous material.	10 to 15	2.6	0			APSB24262728-WA	1.8 (C5)	VOC, SVOC, pesticides, metals
			FILL: Dry gray dense silty sand.				180		APSB24262728-NS	1.1 (C5)	VOC, SVOC, metals
15		SP	Wet gray gravelly sand.	15 to 20	5	0					
		SM	Moist dense brown silty sand.				175				
20			End of Boring at 20 feet bgs.				170				

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-25**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308820.48 FT EASTING: 2673402.51 FT
G.S. ELEVATION: 200 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: No recovery. Void, free push.	0 to 5	0	0					
5				5 to 10	0	0	195				
10				10 to 15	0	0	190				
15			BACS: Moist tan fine sandy silt with fibers throughout.	15 to 20	5	0	185		APSB15212325-WA	1.2 (C4)	SVOC, pesticides, metals
20		ML	Moist dark brown silt with sand. Hard density.				180		APSB15212325-NS	U (C4)	SVOC, pesticides, metals
		ML	Moist dark brown fine sandy silt. Medium density.								
		ML	Moist reddish brown fine silt with sand. Hard density.	20 to 25	3	0					
25			End of boring at 25 feet bgs.				175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-26**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308726.92 FT EASTING: 2673445.57 FT
G.S. ELEVATION: 189 FT M.P. ELEV:
WATER: TOTAL DEPTH:10.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACM: Wet reddish white fibrous material with transite throughout.	0 to 5	0.6	0	185		APSB24262728-WA	1.8 (C5)	SVOC, pesticides, metals
5			BACM: Wet reddish white fibrous material with transite throughout.								SVOC, metals
		SM	Moist brown silty sand.	5 to 10	5	0	180		APSB24262728-NS	1.1 (C5)	
10			End of Boring at 10 feet bgs.				175				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-27**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308731.48 FT EASTING: 2673353.77 FT
G.S. ELEVATION: 189 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACS: Moist reddish gray medium sand with transite tile layers throughout.						APSB24262728-WA	1.8 (C5)	SVOC, pesticides, metals
			BACS: Moist brownish reddish gray medium sand with big fibrous chunks.	0 to 5	3	0	185				
5			BACS: Moist brownish reddish gray medium sand with big fibrous chunks.	5 to 10	2.5	0	180				
10			BACS: Moist brownish reddish gray medium sand with big fibrous chunks.	10 to 15	2.5	0	175				
15			BACS: Moist brownish reddish gray medium sand with big fibrous chunks.								
		CL	Moist dark gray fine silty clay with sand. Hard density.	15 to 20	5	0	170		APSB24262728-NS	1.1 (C5)	SVOC, metals
20			End of boring at 20 feet bgs.				165				

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **APSB-28**
USEPA

STARTED: COMPLETED: 12/14/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308795.31 FT EASTING: 2673269.81 FT
G.S. ELEVATION: 189.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist reddish gray fine sand. Hard density.								
			BACS: Moist gray fine fibrous material with trace sand. Loose density.	0 to 5	3.5	0					
			BACS: Moist reddish gray fine silty sand mended together by fibers.								
			BACM: Moist gray fibrous paper material.								
5			BACM: Dry black transite shingles.				185				
			BACM: Dry gray transite siding.	5 to 10	2.5	0			APSB24262728-WA	1.8 (C5)	SVOC, pesticides, metals
10			No recovery. Void, free push.				180				
				10 to 15	0	0					
15							175				
				15 to 20	0	0					
20			BACM: Moist gray layers of transite shingle, siding and tiles.				170				
			Moist brown fine silty clay.	20 to 25	5	0			APSB24262728-NS	1.1 (C5)	SVOC, metals
		CL									
		CL	Moist brown fine silty sandy clay. Medium density.				165				
25			End of boring at 25 feet bgs.								
							160				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **APSB-30**
USEPA

STARTED: COMPLETED: 1/14/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308821.97 FT EASTING: 2673631.16 FT
G.S. ELEVATION: 199 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist gray fine sand with roots.						APSB303132-CW -	15 (C6)	SVOC, pesticides, metals
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).								
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).						APSB303132-WA -	20 (C6)	pesticides, metals
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).	0 to 4	4	0					
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).								
			End of Boring at 4 feet bgs.				195				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **APSB-31**
USEPA

STARTED: COMPLETED: 1/14/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308784.87 FT EASTING: 2673568.45 FT
G.S. ELEVATION: 197 FT M.P. ELEV:
WATER: TOTAL DEPTH:4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections
			FILL: Moist gray fine sand with roots.						APSB303132-CW	15 (C6)	SVOC, pesticides, metals
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).								
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).						APSB303132-WA	20 (C6)	pesticides, metals
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).	0 to 4	4	0	195				
			BACS: Moist light gray, red, green fine sandy silt. (Fibrous fill material).								pesticides, metals
		ML	Moist brown fine sandy silt.						APSB303132-NS	12 (C6)	
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **APSB-32**
USEPA

STARTED: COMPLETED: 1/14/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308753.66 FT EASTING: 2673531.41 FT
G.S. ELEVATION: 193 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist gray fine sand with silt.	0 to 4	4	0			APSB32-SS	15 (G)	VOC, SVOC, pesticides, metals
									APSB303132-CW	15 (C6)	
			BACS: Moist light gray, red sandy silt. (Fibrous fill).								VOC, pesticides, metals
									APSB303132-WA	20 (C6)	
			BACS: Moist light gray, red sandy silt. (Fibrous fill).								
							190				
		SP	Moist tannish brown fine sand with silt.								VOC, pesticides, metals
									APSB303132-NS	12 (C6)	
			End of Boring at 4 feet bgs.								

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKPZ-01**
USEPA

STARTED: COMPLETED: 12/18/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309615.04 FT EASTING: 2672524.61 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:28.5 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sand.								
			FILL: Dry black sandy gravel.								
			FILL: Moist dense brown silty clay.	0 to 5	3.5	0					
			BACM: Dry fibrous material.								
5			BACM: Dry fibrous material.	5 to 10	1.6	0	190				
10			BACM: Dry fibrous material.	10 to 15	0.4	0	185				
15			No recovery	15 to 20	0	0	180				
20		CL	Wet brown gravelly silty clay.	20 to 25	2.2	0	175				VOC, pesticides, metals
25		CL	Dense dry red clay.	25 to 30	2.8	0	170				
			End of Boring at 28.5 feet bgs.								

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DPT Boring LOG
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PROJECT NO. 3330.029

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKPZ-02**
USEPA

STARTED: COMPLETED: 12/18/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309426.72 FT EASTING: 2672601.89 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:27.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry brown silty sand.								
			BACM: Dry gray fibrous material.	0 to 5	3.5	0					
5			BACM: Dry gray fibrous material.				190				
				5 to 10	2.6	0					
10			BACM: Dry gray fibrous material.				185				
				10 to 15	1.5	0					
15			BACM: Dry gray fibrous material.				180				
				15 to 20	1.5	0					
20			BACM: Dry gray fibrous material.				175				
		CL	Moist brown silty clay.	20 to 25	1.2	0					VOC, metals
25		CL	Moist brown silty clay.				170				
		SP	Dry red coarse sand.	25 to 30	2	0					
			End of Boring at 27 feet bgs.								

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PROJECT NO. 3330.029

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKPZ-03**
USEPA

STARTED: COMPLETED: 12/18/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309373.11 FT EASTING: 2672687.29 FT
G.S. ELEVATION: 194.5 FT M.P. ELEV:
WATER: 22 FT TOTAL DEPTH: 25.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt. Topsoil.								
			BACS: Dry light gray fine sandy fibrous material.	0 to 5	4	0					
5							190				
			BACS: Dry light gray fine sandy fibrous material with some transite shingles in shoe.	5 to 10	3	0					
10							185				
			BACS: Moist grayish red fine sand with silt. Has fibrous material and transite shingles throughout.	10 to 15	3	0					
15							180				
			BACM: Dry orangish gray layers of transite siding/shingles. Trace fine sand.	15 to 20	2	0					
20							175				VOC, SVOC, pesticides, metals
		ML	Moist brown fine clayey silt. Loose density.								
		SP	Wet brown fine to medium sand with silt. Very loose density.	20 to 25	4	0					
25							170				
			End of Boring at 25 feet bgs.								
							165				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-01**
USEPA

STARTED: COMPLETED: 12/1/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310341.05 FT EASTING: 2672229.72 FT
G.S. ELEVATION: 188 FT M.P. ELEV:
WATER: TOTAL DEPTH: 10.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry brown fill with sand.								
			BACS: Dry gray fill with asbestos fibers throughout. Some black material.	0 to 5	4.3	0	185				
5			BACS: Dry gray fill with asbestos fibers and transite chunks throughout.	5 to 10	4.8	0	180				
		SP	Moist brown fine silt some sand. Loose density. Native soil.								
10			End of boring at 10 feet bgs.				175				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-02**
USEPA

STARTED: COMPLETED: 12/1/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310276.02 FT EASTING: 2672301.23 FT
G.S. ELEVATION: 191 FT M.P. ELEV:
WATER: TOTAL DEPTH:12.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brownish red fine sandy silt. Loose density.								
			BACS: Moist gray silty sand with asbestos fibers throughout.				190				
			BACM: Dry asbestos rock.	0 to 5	3.4	0					
			FILL: Dark grayish black medium sandy debris. Loose density.								
5			BACS: Moist gray fill with asbestos fibers throughout. Trace sand.				185				
		SP	Moist grayish brown medium sand with gravel.	5 to 10	4.5	0					
10		CL	Medium moist brown fine silty clay trace sand.				180				
			End of boring at 12 feet bgs.	10 to 15	2	0					

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-03**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310220.11 FT EASTING: 2672388.77 FT
G.S. ELEVATION: 192.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Brown fine sand with gravel. Moist.						PKSB03042226-CW	0 (C1)	
			BACM: Dry gray fill material with transite throughout.						PKSB03-SS	ND (G)	
				0 to 5	3.5	0	190		PKSB03042226-WA	15 (C1)	VOC, SVOC, pesticides, metals
5			BACM: Dry gray fill material with transite throughout.								
			FILL: Moist black gravelly sand. Dense.	5 to 10	3.5	0	185				
10			BACM: Grayish fill material transite throughout. Dry.						PKSB03042226-NS	0.4 (C1)	SVOC, pesticides, metals
			FILL: Blackish gray moist silty clay.								
			FILL: Moist gray clay sand.	10 to 15	4.8	0.7	180				
			FILL: Brown gray moist clayey sand.								
15		CL	Moist brown gray silty clay. Loose density.	15 to 20	4.8	0	175				
20			End of boring at 20 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-04**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310164.88 FT EASTING: 2672464.88 FT
G.S. ELEVATION: 192.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine clayey silt.						PKSB03042226-CW	0 (C1)	SVOC, pesticides, metals
			BACS: Gray brown moist sand with transite throughout.								
			BACM: Black gray fibrous material. Dry.								
			BACM: Gray fibrous material with transite throughout.	0 to 5	3.5	0	190				
5			BACM: Gray fibrous material with transite throughout.						PKSB03042226-WA	15 (C1)	SVOC, pesticides, metals
			FILL: Brown moist fine sand with gravel.								
			BACM: Gray fibrous material.	5 to 10	3.5	0	185				
			FILL: Red brown moist clayey silt.								
			BACM: Gray fine fibrous material. Moist.								
10		ML	Brown red fine moist clayey silt.	10 to 15	4.9	0	180		PKSB03042226-NS	0.4 (C1)	SVOC, pesticides, metals
15			End of boring at 15 feet bgs.				175				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-05**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310101.95 FT EASTING: 2672558.70 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist fine brown sandy clay.								
			BACM: Dry gray fibrous material transite throughout.	0 to 5	4.5	0					
5			BACM: Dry gray fibrous material transite throughout.				190				
			FILL: Moist dense brown fine sandy clay.								
			BACM: Gray fibrous material transite present.	5 to 10	4	0					
			FILL: Gray green moist silty sand.								
10		SM	Wet reddish brown dense silty sand.				185				
		ML	Gray moist clayey silt.								
		SM	Wet dense silty sand brownish red.	10 to 15	5	0					
15			End of boring at 15 feet bgs.				180				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-06**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310047.51 FT EASTING: 2672636.91 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: 5 FT TOTAL DEPTH: 10.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACS: Moist dark gray coarse gravelly sand. Transite material throughout.						PKSB06192940-CW	12 (C2)	SVOC, pesticides, metals
		ML	Moist brown fine sandy silt. Medium density.	0 to 5	3	0			PKSB06192940-NS	0.1 (C2)	pesticides, metals
5		SM	Wet brown coarse silty sand. Very loose density.				185				
		SP	Moist reddish brown medium to fine sand with silt. Medium density.	5 to 10	5	0					
10			End of boring at 10 feet bgs.				180				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-07**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309968.13 FT EASTING: 2672744.39 FT
G.S. ELEVATION: 189 FT M.P. ELEV:
WATER: TOTAL DEPTH: 10.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry dark brown sandy silt.								
			BACM: Dry gray fibrous material transite throughout.								
			FILL: Red dry coarse sand (red brick).								
			FILL: Black sandy gravel with glass fragment.								
		SP	Dry orangish yellow sand.	0 to 5	3.8	0	185				
5		SP	Dry orangish yellow sand.	5 to 10	4	0					
		CL	Moist dense orange clay				180				
10			End of boring at 10 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-08**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309916.29 FT EASTING: 2672809.51 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH:10.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sand.						PKSB08101215-CW	12 (C3)	SVOC, pesticides, metals
			FILL: Dry red sandy gravel (red brick).						PKSB08101215-WA	15 (C3)	SVOC, pesticides, metals
			FILL: Dry brown silty clay.								
			FILL: Dry black gravelly sand.						PKSB08101215-NS	0.1 (C3)	SVOC, pesticides, metals
			Moist light brown clay.	0 to 5	3.8	0					
		CL									
5							185				
			Moist light brown clay.								
		CL		5 to 10	4.4	0					
			Dry orange sandy silt.								
		ML									
10							180				
			End of boring at 10 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-09**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309868.71 FT EASTING: 2672880.31 FT
G.S. ELEVATION: 193 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry light brown sand with gravel.								
			BACM: Gray fibrous material with transite throughout.	0 to 5	2.5	0	190				
5			BACM: Gray fibrous material with transite throughout.								
			FILL: Dry red sandy gravel (red brick).	5 to 10	3	0					
		CL	Moist brownish silty clay.				185				
10		CL	Moist brownish silty clay.								
			Dry yellow coarse sand.	10 to 15	3	0					
		SP					180				
15			End of boring at 15 feet bgs.								
							175				

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PROJECT NO. 3330.029

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-10**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309804.58 FT EASTING: 2672968.68 FT
G.S. ELEVATION: 192.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:16.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt.						PKSB08101215-CW	12 (C3)	SVOC, pesticides, metals
			BACS: Moist gray fine silty sand with fibrous material throughout. Transite layers.	0 to 4	3	0	190				
5			BACS: Moist gray fine silty sand with fibrous material throughout. Transite layers.	4 to 8	2.7	0			PKSB08101215-WA	15 (C3)	SVOC, pesticides, metals
			FILL: Moist red medium brick decay.				185				
10		ML	Moist dark brownish gray fine sandy silt.	8 to 12	1	0					
		ML	Moist dark brownish gray fine sandy silt.				180		PKSB08101215-NS	0.1 (C3)	SVOC, pesticides, metals
		SP	Moist to dry reddish orangish brown fine sand with silt. Hard density.	12 to 16	4	0					
15		SP	Moist brown fine sand with silt. Loose density.								
			End of boring at 16 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-11**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309755.26 FT EASTING: 2673061.36 FT
G.S. ELEVATION: 190.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 12.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet) -	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist red fine sandy silt. Medium density. -				190				
			BACM: Moist gray fibrous material with transite tiles throughout.	0 to 4	2	0					
5			BACM: Moist gray fibrous material with transite tiles throughout.				185				
			FILL: Moist reddish brown fine sand and broken down bricks.	4 to 8	2.5	0					
		SM	Moist brown fine silty sand. Loose density.								
10		SP	Moist to dry reddish orange fine sand. Hard density.	8 to 12	3	0	180				
			End of boring at 12 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-12**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309702.93 FT EASTING: 2673124.35 FT
G.S. ELEVATION: 188 FT M.P. ELEV:
WATER: TOTAL DEPTH:12.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt.						PKSB08101215-CW	12 (C3)	SVOC, pesticides, metals
			BACS: Moist gray fine sandy silt with fibrous material throughout.	0 to 4	2.5	0	185				
5			BACS: Moist gray fine sandy silt with fibrous material throughout.						PKSB08101215-WA	15 (C3)	SVOC, pesticides, metals
		SP	Moist to dry reddish brown fine sand with gravel.	4 to 8	3.5	0					
							180				
10		ML	Moist light brown fine clayey sandy silt.	8 to 12	3.5	0			PKSB08101215-NS	0.1 (C3)	SVOC, pesticides, metals
		SM	Moist tan fine silty sand.								
			End of boring at 12 feet bgs.				175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-13**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309763.51 FT EASTING: 2672626.88 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy clay.								
			BACM: Dry gray fibrous material.	0 to 5	2.8	0	195		PKSB13303335-CW	ND (C4)	SVOC, pesticides, metals
5			BACM: Dry gray fibrous material.	5 to 10	2.7	0	190		PKSB13303335-WA	17 (C4)	SVOC, pesticides, metals
10			BACM: Dry gray fibrous material.				185				
			FILL: Moist brown fine sandy gravel.	10 to 15	2.2	0					
15			BACM: Moist gray fibrous material with transite throughout.				180				
		CL	Wet gray silty clay.	15 to 20	2.4	0			PKSB13303335-NS	0.2 (C4)	SVOC, pesticides, metals
20		CL	Wet gray silty clay.				175				
		SP	Dry coarse sand orangish yellow.	20 to 25	3	0					
25			End of boring at 25 feet bgs.				170				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-14**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309689.81 FT EASTING: 2673018.62 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: TOTAL DEPTH:12.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist reddish brown fine sandy silt.								
			BACS: Moist gray fibrous material with trace silty sand.	0 to 4	3	0	190				
			BACS: Moist light gray fine sandy silt fibers throughout.								
5			BACS: Moist light gray fine sandy silt fibers throughout.								
			BACS: Moist gray fine silt with sand. Some fibers present.	4 to 8	4	0	185				
			BACS: Moist gray fibrous material with transite throughout. Trace fine silty sand.								
			FILL: Moist to dry red fine sand.								
10			BACM: Dry gray fine fibrous material with transite layers.	8 to 12	2	0	180				
			End of boring at 12 feet bgs.								

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PROJECT NO. 3330.029

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-15**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309740.58 FT EASTING: 2672929.02 FT
G.S. ELEVATION: 193.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:16.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt.						PKSB15-SS	0.1 (G)	VOC,
			BACS: Moist light gray fine fibrous material with fine silty sand.						PKSB08101215-CW	12 (C3)	SVOC, pesticides, metals
				0 to 4	2	0					VOC, SVOC, pesticides, metals
							190				
5			BACS: Moist light gray fine fibrous material with fine silty sand.								
				4 to 8	3	0			PKSB08101215-WA	15 (C3)	VOC, SVOC, pesticides, metals
							185				
10			BACS: Moist light gray fine fibrous material with fine silty sand.								
				8 to 12	3.5	0					
			FILL: Moist black medium sand with gravel.								
		ML	Moist brown fine clayey sandy silt. Loose density.								VOC, SVOC, pesticides, metals
			Moist reddish brown fine sand with silt. Hard density						PKSB08101215-NS	0.1 (C3)	
		SP		12 to 16	2.5	0	180				
15											
			End of boring at 16 feet bgs.								
							175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-16**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309788.54 FT EASTING: 2672846.67 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy clay.								
			BACM: Dry gray fibrous material with transite throughout.	0 to 5	3.5	0					
5							190				
			BACM: Dry gray fibrous material with transite throughout.	5 to 10	3.2	0					
10							185				
			BACM: Dry gray fibrous material with transite throughout.								
			FILL: Moist black gravelly sand.								
		SM	Wet grayish black silty sand.	10 to 15	3	0					
		CL	Moist dense gray clay.								
15		CL	Moist dense gray clay.				180				
		ML	Moist orangish brown sandy silt.								
		SP	Dry orangish yellow sand.	15 to 20	4	0					
20							175				
			End of boring at 20 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-17**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309842.26 FT EASTING: 2672774.73 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown fine sandy clay				195				
			BACM: Moist gray fibrous material with transite throughout.	0 to 5	4.3	0					
5			BACM: Moist gray fibrous material with transite throughout.	5 to 10	2.8	0	190				
10			BACM: Moist gray fibrous material with transite throughout.								
			FILL: Black gravel and sand.				185				
		SM	Blackish gray silty sand.	10 to 15	3.5	0					
		CL	Moist light gray silty clay.								
15		CL	Moist light gray silty clay.				180				
			Dry orange sandy silt.								
		ML		15 to 20	5	0					
		SP	Dry fine yellowish orange sand.								
20			End of boring at 20 feet bgs.				175				

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-18**
USEPA

STARTED: COMPLETED: 12/8/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309898.31 FT EASTING: 2672698.38 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:17.5 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy clay.				195				
			BACM: Dry gray fibrous material with transite throughout.	0 to 5	3.9	0					
5			BACM: Dry gray fibrous material with transite throughout.	5 to 10	2.5	0	190				
10			BACM: Dry gray fibrous material with transite throughout.								
			FILL: Dry black sandy gravel.				185				
			FILL: Moist gray silty clay.	10 to 15	3.7	0					
		CL	Orangish brown moist clay.								
15		SP	Dry orange fine sand.				180				
			End of boring at 17.5 feet bgs.	15 to 20	2.5	0					

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BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-19**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309972.43 FT EASTING: 2672593.09 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine silty sand.						PKSB19-SS	0.1 (G)	VOC,
									PKSB06192940-CW	12 (C2)	SVOC, pesticides, metals
			BACS: Moist gray fine sand with fibrous material throughout.	0 to 5	3.5	0					SVOC, pesticides, metals
			BACM: Dry light gray layered transite material. Trace sand.								
5			BACM: Dry light gray layered transite material. Trace sand.				190				
			BACS: Moist dark gray medium sand with fibrous materials throughout.	5 to 10	3.2	0			PKSB06192940-WA	15 (C2)	SVOC, pesticides, metals
10			No recovery. Open void.				185				
				10 to 15	1	0					pesticides, metals
		ML	Moist brown fine sandy silt						PKSB06192940-NS	0.1 (C2)	
15			End of boring at 15 feet bgs.				180				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-20**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310058.56 FT EASTING: 2672526.07 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sand with gravel.								
			BACS: Gray fill with transite fragments throughout.	0 to 5	3.5	0					
5			BACS: Gray fill with transite fragments throughout.				190				
				5 to 10	3	0					
10		SM	Moist dense silty sand.	10 to 15	5	0	185				
15		SM	Moist dense silty sand.	15 to 20	5	0	180				
20			End of boring at 20 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-21**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310095.58 FT EASTING: 2672442.62 FT
G.S. ELEVATION: 194.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 18.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
0			FILL: Moist brown fine silt. Medium density.								
			BACS: Moist gray medium sand with silt. Fibrous materials throughout.	0 to 5	3.3	0	190				
5			BACS: Moist gray medium sand with silt. Fibrous materials throughout.	5 to 10	0.3	0	185				
10			BACS: Moist gray medium sand with silt. Fibrous materials throughout.	10 to 15	1	0	180				
15		ML	Moist brown fine silt.								
		SP	Moist brown fine sand with silt.	15 to 20	3	0					
			End of boring at 18 feet bgs.				175				

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-22**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310142.23 FT EASTING: 2672363.57 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:19.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine silt with sand.								
			BACM: Dry gray fibrous material in layers. Appears to be cloth like. Trace sand.	0 to 5	2.2	0			PKSB03042226-CW	0 (C1)	VOC, SVOC, pesticides, metals
5			BACM: Dry gray fibrous material with fibrous pellets. Trace sand.	5 to 10	2.3	0	190				
10			BACM: Dry gray fibrous materials. Transite shingles throughout core. Trace medium sand.	10 to 15	2	0	185		PKSB03042226-WA	15 (C1)	VOC, SVOC, pesticides, metals
15			BACM: Dry gray fibrous materials. Transite shingles throughout core. Trace medium sand.				180				
		ML	Moist brown fine sandy silt.	15 to 20	4	0			PKSB03042226-NS	0.4 (C1)	VOC, SVOC, pesticides, metals
		GP	Moist brown medium sandy gravel.								
		SP	Moist brown fine sand. Loose density.				175				
			End of boring at 19 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-23**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310216.48 FT EASTING: 2672275.53 FT
G.S. ELEVATION: 192.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:16.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Asphalt								
			FILL: Dry black. Gravelly.	0 to 5	3.5	0	190				
			BACM: Dry grayish moist fill fibrous material. Transite fibers throughout.								
5			BACM: Dry grayish moist fill fibrous material. Transite fibers throughout.	5 to 10	3	0	185				
10			BACM: Dry grayish moist fill fibrous material. Transite fibers throughout.	10 to 15	2	0	180				
		ML	Moist wet brown gray clayey silt								
15		SP	Brownish red. Dry gravelly sand.	15 to 20	1	0	175				
			End of boring at 16 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-24**
USEPA

STARTED: COMPLETED: 12/1/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310262.59 FT EASTING: 2672189.11 FT
G.S. ELEVATION: 191 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			BACS: Dry brown fine sandy gravel. Asbestos material throughout.				190				
			FILL: Dry brownish gray fine to medium sand with gravel. Loose density.	0 to 5	4.5	0					
			BACS: Dry dark gray fill with asbestos material throughout.								
5			BACS: Dry dark gray fine sandy silt. Asbestos fibers throughout.				185				
			BACS: Dry gray with reddish layers medium fill. Asbestos fibers throughout. Transite shingles throughout.	5 to 10	4	0					
10			BACS: Dry gray fine gravelly sand with asbestos materials throughout.				180				
		SC	Dark brown very fine clayey sand. Medium density.	10 to 15	3.5	0					
15			End of boring at 15 feet bgs.				175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-25**
USEPA

STARTED: COMPLETED: 12/1/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310154.99 FT EASTING: 2672244.47 FT
G.S. ELEVATION: 191 FT M.P. ELEV:
WATER: 17 FT TOTAL DEPTH: 20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Asphalt				190				
			BACS: Dry light gray asbestos fibers with trace sand throughout. Loose density.								
			BACM: Dry light gray asbestos fiber chunks.	0 to 5	3	0					
5			BACS: Dry light gray medium to fine asbestos fibers trace sand. There are nuggets of asbestos fibers throughout.				185				
				5 to 10	1	0					
10			BACS: Dry light gray medium to fine asbestos fibers trace sand. There are nuggets of asbestos fibers throughout.				180				
		ML	Wet black fine sandy silt. Loose density.	10 to 15	2.5	0					
15		SP	Dry grayish red fine sand with gravel.				175				
		CL	Wet dark gray clay. Loose density.	15 to 20	3	0					
20			End of boring at 20 feet bgs.				170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-26**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310069.63 FT EASTING: 2672296.55 FT
G.S. ELEVATION: 192.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:18.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist reddish brown fine silt with sand. Medium density. Trace gravel.	0 to 5	2.3	0	190		PKSB03042226-CW	ND (C1)	SVOC, pesticides, metals
5			BACS: Dry light gray fibrous transite material. Layered. Trace sand.	5 to 10	1.5	0	185				
10			BACM: Dry light gray fibrous material. Transite material. Tiles.	10 to 15	3	0	180		PKSB03042226-WA	15 (C1)	SVOC, pesticides, metals
15			BACM: Dry light gray fibrous material. Transite material. Tiles.	15 to 20	2.8	0	175		PKSB03042226-NS	0.4 (C1)	SVOC, pesticides, metals
		SM	Moist brown medium gravelly silty sand.								
		ML	Moist reddish brown medium to fine sand with silt.								
			End of boring at 18 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-27**
USEPA

STARTED: COMPLETED: 12/2/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309990.75 FT EASTING: 2672361.43 FT
G.S. ELEVATION: 193 FT M.P. ELEV:
WATER: TOTAL DEPTH:17.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt. Trace gravel.								
			BACM: Dry light gray. Fibrous layers of material.	0 to 5	3	0	190				
5			BACM: Dry light gray. Fibrous layers of material.	5 to 10	1.5	0	185				
10			BACS: Dry light gray. Fibrous layers of material with trace fine sand.	10 to 15	2.5	0	180				
15			BACS: Dry light gray. Fibrous layers of material with trace fine sand.								
		ML	Brown moist fine silt.								
			End of boring at 17 feet bgs.	15 to 20	2	0	175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-28**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309965.30 FT EASTING: 2672462.94 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine clayey sand.								
			FILL: Black gravel with fine sand.								
			BACM: Gray dry fibrous material with transite throughout.	0 to 5	3	0					
5							190				
			BACM: Gray dry fibrous material with transite throughout.	5 to 10	1.8	0					
10							185				
			BACM: Gray dry fibrous material with transite throughout.	10 to 15	3	0					
15							180				
			BACM: Gray dry fibrous material with transite throughout.	15 to 20	4	0					
		CL	Wet grayish brown silty clay.								
			Rock								
20							175				
			End of boring at 20 feet bgs.								

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PROJECT NO. 3330.029

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-29**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309903.25 FT EASTING: 2672515.22 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown medium silty sand.								
			BACS: Dry light gray fibrous material. Trace sand.	0 to 5	3	0	195		PKSB06192940-CW	12 (C2)	SVOC, pesticides, metals
5			BACS: Dry light gray fibrous material. Trace sand.	5 to 10	1.5	0	190				
10			BACS: Moist brown medium sand with gravel. Has fibrous material throughout. Tiles throughout.	10 to 15	2.5	0	185		PKSB06192940-WA	15 (C2)	SVOC, pesticides, metals
15			BACS: Moist brown medium sand with gravel. Has fibrous material throughout. Tiles throughout.								
		CL	Moist brown very fine silty clay. Medium density.	15 to 20	2.5	0	180		PKSB06192940-NS	0.1 (C2)	pesticides, metals
20			End of boring at 20 feet bgs.				175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-30**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309830.95 FT EASTING: 2672648.02 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown sandy clay.						PKSB30-SS	ND	VOC,
			BACM: Gray fibrous material with transite throughout.	0 to 5	3.5	0	195		PKSB13303335-CW	(G) ND (C4)	SVOC, pesticides, metals
5			BACM: Gray fibrous material with transite throughout.	5 to 10	3.2	0	190		PKSB13303335-NS	0.2 (C4)	SVOC, pesticides, metals
10			BACM: Gray fibrous material with transite throughout.								
			FILL: Red moist sandy gravel.				185				
		SP	FILL: Dry gray sandy gravel.	10 to 15	2.7	0			PKSB13303335-WA	17 (C4)	SVOC, pesticides, metals
			Dry yellowish orange sand.								
		CL	Moist grayish brown silty clay.								
15			Moist brownish orange silty sand.				180				
		SM		15 to 20	3.9	0					
20			End of boring at 20 feet bgs.				175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-31**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309769.99 FT EASTING: 2672718.99 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:17.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt.				195				
			BACM: Moist green fibrous material.								
			BACM: Moist gray fibrous material.	0 to 5	4.5	0					
5			BACM: Moist gray fibrous material.	5 to 10	3	0	190				
10			BACM: Moist gray fibrous material.								
		SP	Dry red gravelly sand.				185				
		SP	Dry black gravelly sand.								
		CL	Moist brownish orange silty clay.	10 to 15	1.5	0					
15		CL	Moist brownish orange silty clay.				180				
		SP	Dry orange sand.								
			End of boring at 17 feet bgs.	15 to 20	2	0					

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-32**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309714.73 FT EASTING: 2672805.79 FT
G.S. ELEVATION: 195.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy clay.				195				
			BACM: Dry gray fibrous material with transite throughout.	0 to 5	3.7	0					
5			BACM: Dry gray fibrous material with transite throughout.	5 to 10	2	0	190				
10		GP	BACM: Dry gray fibrous material with transite throughout.				185				
		GP	Dry red sandy gravel and broken down brick.								
		GP	Dry sandy gravel light gray.	10 to 15	2.2	0					
			Moist black sandy gravel								
		SP	Moist yellowish sand.								
15		ML	Wet brownish red sandy silt.				180				
		SP	Yellowish orange sand.								
			Dry dense reddish brown sandy silt.	15 to 20	3	0					
		ML									
20			End of boring at 20 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

NO: **PKSB-33**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309655.99 FT EASTING: 2672881.77 FT
G.S. ELEVATION: 194.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt. Medium density.	0 to 4	4	0			PKSB13303335-CW	ND (C4)	VOC, SVOC, pesticides, metals
			BACS: Moist light gray fibrous material with transite layers throughout. Trace fine sand.								
5			FILL: Moist light gray fine silty sand with fibrous material throughout.	4 to 8	3.5	0	190				
			BACS: Moist light gray fine sandy silt. Medium density.								
			BACM: Moist light gray fibrous material with transite layers throughout.								
			BACM: Moist light gray fibrous material with transite layers throughout.	8 to 12	4	0	185				
10			FILL: Moist to dry reddish black coarse sand. Some brick chips. Loose density.						PKSB13303335-WA	17 (C4)	VOC, SVOC, pesticides, metals
		SP	Moist brown coarse sand with gravel. Trace silt.								
		SM	Moist olive fine silty sand.	12 to 16	3.5	0	180		PKSB13303335-NS	0.2 (C4)	VOC, SVOC, pesticides, metals
15											
		SP	Moist reddish brown medium to coarse sand very dense.	16 to 20	3.5	0	175				
20			End of boring at 20 feet bgs.				170				

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PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

NO: **PKSB-34**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309642.55 FT EASTING: 2672954.58 FT
G.S. ELEVATION: 192.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown medium silty sand. Medium density.								
			BACS: Moist tannish gray fine silty sand with fibrous material throughout.	0 to 4	4	0	190				
5			BACS: Moist tannish gray fine silty sand with fibrous material throughout.	4 to 8	3.5	0	185				
			BACS: Moist light gray fibrous material with trace fine sand and silt.								
10			FILL: Moist red brick remnants with a medium black sandy material embedded throughout.	8 to 12	3.2	0					
		ML	FILL: Moist red brick remnants with a medium black sandy material embedded throughout.				180				
			Moist grayish tan fine sandy silt. Medium density.	12 to 16	2.5	0					
15		SP	Moist to dry tannish brown medium sand with silt. Native? Very dense hard material.								
		SP	Moist to dry tannish brown medium sand with silt. Native? Very dense hard material.				175				
		SP	At 18 feet, there is a chunk of quartz about one inch thick. Moist to dry tannish red medium fine sands with silt. Hard dense sands.	16 to 20	3	0					
20			End of boring at 20 feet bgs.				170				

LOG

PROJECT NO. 3330.029

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BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

NO: **PKSB-35**
USEPA

STARTED: COMPLETED: 12/7/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309574.55 FT EASTING: 2672824.84 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown fine sandy silt.						PKSB13303335-CW	ND (C4)	SVOC, pesticides, metals
			BACS: Dry light gray fibrous material with transite layers and trace fine sand.	0 to 4	2.5	0					
5			BACS: Dry light gray fibrous material with transite layers and trace fine sand.	4 to 8	2	0	190				
10			BACS: Dry light gray fibrous material with transite layers and trace fine sand.	8 to 12	2	0	185		PKSB13303335-WA	17 (C4)	SVOC, pesticides, metals
15			BACS: Moist gray fine sand with silt. Fibers throughout core.	12 to 16	1	0	180		PKSB13303335-NS	0.2 (C4)	SVOC, pesticides, metals
		ML	Moist black fine sandy silt. Organic native soil.	16 to 20	3	0					
20			End of boring at 20 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-36**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309630.36 FT EASTING: 2672742.67 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH: 25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown fine sandy silt.				195				
			BACM: Gray dry fibrous material transite throughout.	0 to 5	0.6	0					
5			BACM: Gray dry fibrous material transite throughout.	5 to 10	2	0	190				
10			BACM: Gray dry fibrous material transite throughout.	10 to 15	1.8	0	185				
15			BACM: Gray dry fibrous material transite throughout.				180				
			FILL: Black moist sandy gravel.								
		CL	FILL: Brown moist sandy gravel.	15 to 20	3	0					
			BACM: Gray moist fibrous material.								
		ML	Moist gray clay.								
			Moist light gray clayey silt								
20		ML	Moist light gray clayey silt				175				
		ML	Orangish red clayey silt moist dense	20 to 25	4.4	0					
25			End of boring at 25 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-37**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309695.12 FT EASTING: 2672673.97 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH: 25.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown silt. Topsoil fill brought in.				195				
			BACS: Moist light gray fine fibrous material. Trace sand.	0 to 5	3.5	0					
5			BACS: Moist light gray fine fibrous material. Trace sand.	5 to 10	3	0	190				
10			BACS: Moist light gray fine fibrous material. Trace sand.	10 to 15	3.5	0	185				
			BACS: Moist reddish gray medium sand with gravel. Fibrous material throughout.								
15			BACS: Moist reddish gray medium sand with gravel. Fibrous material throughout with tile chunks.	15 to 20	2	0	180				
20		ML	Moist to wet brownish red clayey silt. Medium density.	20 to 25	4	0	175				
25			End of boring at 25 feet bgs.				170				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-38**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309722.01 FT EASTING: 2672561.96 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:24.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist reddish brown fine silt (Fill brought in).						PKSB38-SS	ND	VOC,
			BACM: Moist gray transite layers with tiles throughout.	0 to 5	3	0	195		PKSB38444851-CW	(G) 0.1 (C5)	pesticides, metals SVOC, pesticides, metals
5			BACM: Moist gray transite layers with tiles throughout.	5 to 10	2	0	190				
10			BACM: Moist gray transite layers with tiles throughout.	10 to 15	2.5	0	185		PKSB38444851-WA	15 (C5)	SVOC, pesticides, metals
			BACM: Dry reddish gray fibrous material.								
15			BACS: Moist light gray fine silt with sand, some fibers embedded in entire core. Looks as if its bonded together by them. Medium density.	15 to 20	5	0	180				
20			BACS: Moist light gray fine silt with sand, some fibers embedded in entire core. Looks as if its bonded together by them. Medium density.	20 to 25	4.5	0	175				
			BACS: Moist to wet light gray coarse sand with silt and gravel. Transite material throughout.								
25			End of boring at 24.5 feet bgs.				170				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-39**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309823.47 FT EASTING: 2672516.44 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:24.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet) -	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist brown fine sand with silt. Medium density. -				195				
			BACM: Dry light gray transite material. Fibers throughout.								
			BACS: Moist dark gray fine sand with fibrous gray materials throughout.	0 to 5	3	0					
5			BACS: Moist dark gray fine sand with fibrous gray materials throughout.				190				
			BACM: Moist red fine broken down transite siding.	5 to 10	2	0					
10			BACS: Moist black gravel with sand. Some fibrous material embedded.				185				
			BACS: Moist tan coarse sand with transite siding and tiles throughout.								
			BACS: Moist tan fine silt with transite pieces.	10 to 15	2.5	0					
15			BACS: Moist dark gray coarse sand with tile chunks throughout.				180				
			BACS: Moist gray medium gravelly sand. Trace transite materials.	15 to 20	3.5	0					
20		SP	Moist brownish gray fine sand. Mica throughout. Very hard density. Appears to be an old streambed				175				
				20 to 25	2	0					
			End of boring at 24 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-40**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309885.40 FT EASTING: 2672413.02 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
0			FILL: Brownish red. Fine sand with gravel.	0 to 5	2.6	0	190		PKSB06192940-CW	12 (C2)	VOC, SVOC, pesticides, metals
			BACM: Gray dry fibrous material with transite present.						PKSB06192940-WA	15 (C2)	VOC, SVOC, pesticides, metals
5			BACM: Gray dry fibrous material with transite present.	5 to 10	2	0	185				
10			BACM: Gray dry fibrous material with transite present.	10 to 15	0.8	0	180				
15			BACS: Wet gravelly sand grayish material with transite present.	15 to 20	2	0	175		PKSB06192940-NS	0.1 (C2)	VOCs, pesticides, metals
		SM	Wet black silty sand.								
20		SM	Wet black silty sand.	20 to 25	1	0	170				
25			End of boring at 25 feet bgs.				165				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-41**
USEPA

STARTED: COMPLETED: 12/1/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310372.53 FT EASTING: 2672142.17 FT
G.S. ELEVATION: 187 FT M.P. ELEV:
WATER: TOTAL DEPTH: 10.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown fine sand with gravel.								
			BACS: Dry gray fill. Sandy with transite fragments throughout.	0 to 5	4.2	0	185				
5			BACS: Dry light gray fill with asbestos fibers throughout. Some gravel.	5 to 10	4.8	0	180				
		ML	Moist brown fine silt some sand. Loose density								
10			End of boring at 10 feet bgs.				175				

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-42**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309761.00 FT EASTING: 2672467.24 FT
G.S. ELEVATION: 194.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown medium gravelly silty sand.								
			BACS: Moist light gray fibrous material. Trace sand.	0 to 5	2.5	0					
5			No recovery. Void.	5 to 10	1	0	190				
			FILL: Wet brown fine sand with silt and gravel.								
10			BACS: Wet brown coarse sand with transite tile chunks throughout.	10 to 15	1.5	0	185				
15		ML	Moist brown very fine clayey silt. Medium density.	15 to 20	3.5	0	180				
							175				
20			End of boring at 20 feet bgs.				170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-43**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309660.79 FT EASTING: 2672511.66 FT
G.S. ELEVATION: 194.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 23.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			BACS: Gray course sand with gravel and transite chunks throughout.	0 to 5	2	0					
5			BACS: Gray course sand with less gravel and transite chunks throughout.	5 to 10	1.5	0	190				
10			BACM: Moist light gray fibrous material bounded together by light gray sands or broken down fibrous material.	10 to 15	3	0	185				
15			No recovery. Void.	15 to 20	0.5	0	180				
20			BACS: Moist brown sandy silt with fibers throughout.				175				
		SM	Moist brown medium silty sand. Medium density.	20 to 25	2	0					
			End of boring at 23 feet bgs.				170				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-44**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309603.24 FT EASTING: 2672604.59 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown silty clay.				195		PKSB38444851-CW	0.1 (C5)	SVOC, pesticides, metals
			BACM: Dry gray fibrous material with transite throughout.	0 to 5	2	0					
5			BACM: Dry gray fibrous material with transite throughout.	5 to 10	2.4	0	190		PKSB38444851-WA	15 (C5)	SVOC, pesticides, metals
10			BACM: Dry gray fibrous material with transite throughout.	10 to 15	3.2	0	185				
15			BACM: Dry gray fibrous material with transite throughout.	15 to 20	2.6	0	180		PKSB38444851-NS	0.2 (C5)	SVOC, pesticides, metals
		CL	Wet silty clay grayish brown.								
20		CL	Wet silty clay grayish brown.	20 to 25	4.3	0	175				
25			End of boring at 25 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-45**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309534.73 FT EASTING: 2672699.90 FT
G.S. ELEVATION: 195.5 FT M.P. ELEV:
WATER: TOTAL DEPTH:30.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dense dry red clay.				195				
			FILL: Moist brownish gray clay.	0 to 5	3.1	0					
			BACM: Dry gray fibrous material								
5			BACM: Dry gray fibrous material				190				
			FILL: Moist gray silty sand.								
			BACM: Dry gray fibrous material with transite throughout.	5 to 10	2	0					
10			BACM: Dry gray fibrous material with transite throughout.	10 to 15	2	0	185				
15			BACM: Dry gray fibrous material with transite throughout.	15 to 20	2.5	0	180		PKSB45-17.3	ND (G)	SVOC, metals
			FILL: Black tar-like material with metal debris.								
20		SP	Wet grayish black gravelly sand.	20 to 25	1	0	175				
25		SP	Wet grayish black gravelly sand.				170				
		SP	Moist yellow orange coarse sand.								
		CL	Red moist clay.	25 to 30	3.6	0					
30			End of boring at 30 feet bgs.				165				

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-46**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309496.44 FT EASTING: 2672782.00 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown coarse gravelly silty sand.								
			BACS: Moist grayish brown medium silty sand with transite layers throughout.	0 to 5	2.5	0	190				
5			No recovery	5 to 10	0	0	185				
10			BACS: Moist light gray fine silty sand bound together by fibers.	10 to 15	2	0	180				
15			BACS: Moist grayish brown medium silty sand bound by fibers. With transite and tiles throughout.								
		ML	Moist brown sandy silt. Medium density.	15 to 20	2.2	0	175				
20			End of boring at 20 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-47**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309406.87 FT EASTING: 2672709.81 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:24.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist brown coarse gravelly sand. Loose density.								
			BACS: Moist gray coarse sand with fibrous material and transite layers throughout.	0 to 5	2.5	0	190				
5			BACS: Moist gray fibrous material with trace sand.	5 to 10	2	0	185				
10			BACS: Moist gray fine silty sand bound together by fibers. Layered between transite material.	10 to 15	2	0	180				
15			BACS: Moist grayish brown coarse sand with transite pieces throughout.	15 to 20	2.5	0	175				
20		ML	Moist brown fine silt with sand. Loose density								
		SM	Moist reddish brown fine silty sand. Loose density.	20 to 25	3.5	0					
		SP	Dry brownish red sandstone or very hard dense sand.				170				
			End of boring at 24 feet bgs.								

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-48**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309457.60 FT EASTING: 2672644.51 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH:30.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Gravel road base								
			FILL: Red dry dense clayey sand with gravel						PKSB38444851-CW	0.1 (C5)	SVOC, pesticides, metals
			BACM: Dry gray fibrous material with transite throughout.	0 to 5	3.2	0					
5							190				
			BACM: Dry gray fibrous material with transite throughout.	5 to 10	1.8	0			PKSB38444851-WA	15 (C5)	SVOC, pesticides, metals
10							185				
			FILL: Moist brown sandy clay.								
			BACM: Moist gray fibrous material.	10 to 15	2.8	0					
15							180				
			BACM: Moist gray fibrous material.	15 to 20	3	0					
			FILL: Dry brown fine sandy silt.								
20							175				
			FILL: Dry brown fine sandy silt.								
			BACM: Wet gray fine fibrous material.	20 to 25	3.5	0			PKSB38444851-NS	0.2 (C5)	SVOC, pesticides, metals
		CL	Wet gray silty clay.								
25							170				
		GC	Wet silty clayey gravel brownish gray.	25 to 30	3	0					
30							165				
			End of boring at 30 feet bgs.								

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-49**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309557.20 FT EASTING: 2672559.50 FT
G.S. ELEVATION: 196 FT M.P. ELEV:
WATER: TOTAL DEPTH:25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brownish black sandy silt with gravel.				195				
			BACM: Moist gray fibrous material with red and green sand (asphalt singles).	0 to 5	2.5	0					
5			BACM: Moist gray fibrous material with red and green sand (asphalt singles).	5 to 10	0.8	0	190				
10			BACM: Dry light gray fiber material.	10 to 15	3.5	0	185				
15			BACM: Dry light gray fiber material.				180				
		CL	Moist grayish black silty clay.	15 to 20	3.8	0					
20		CL	Moist grayish black silty clay.	20 to 25	2.5	0	175				
25			End of boring at 25 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-50**
USEPA

STARTED: COMPLETED: 12/3/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309457.73 FT EASTING: 2672590.18 FT
G.S. ELEVATION: 195 FT M.P. ELEV:
WATER: TOTAL DEPTH: 25.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Gravel black wet.								
			FILL: Brownish orange dense dry clayey silt.								
			BACM: Gray dry fibrous material transite throughout.	0 to 5	2.4	0					
5							190				
			BACM: Gray dry fibrous material transite throughout.	5 to 10	2.6	0					
10							185				
			BACM: Gray dry fibrous material transite throughout.	10 to 15	2.4	0					
15							180				
			BACM: Gray dry fibrous material transite throughout.	15 to 20	2.8	0					
		SC	Moist clayey sand brown.								
20		SC					175				
			Moist clayey sand brown.								
			Wet grayish brown silty sand.	20 to 25	3.6	0					
		SM									
25			End of boring at 25 feet bgs.				170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-51**
USEPA

STARTED: COMPLETED: 12/4/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309357.74 FT EASTING: 2672648.58 FT
G.S. ELEVATION: 194.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 25.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist red fine silt (fill brought in).						PKSB38444851-CW	0.1 (C5)	VOC, SVOC, pesticides, metals
			FILL: Dry brownish gray coarse sand with gravel. Loose density.	0 to 5	2.5	0					
5			BACS: Moist light gray fibrous bound fine sand.	5 to 10	2.5	0	190				
10			BACS: Moist light gray fibrous bound fine sand.	10 to 15	2.7	0	185				
15			BACS: Moist light medium gray fibrous material with sand.	15 to 20	2	0	180		PKSB38444851-WA	15 (C5)	VOC, SVOC, pesticides, metals
20			BACS: Moist light medium gray fibrous material with sand.	20 to 25	2.5	0	175		PKSB38444851-NS	0.2 (C5)	VOC, SVOC, pesticides, metals
		ML	Moist brown fine clayey silt. Loose density.								
		SP SM	Moist to wet coarse sand with silt. Fractured sandstone chunks. Loose density.				170				
25			End of boring at 25 feet bgs.				165				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **PKSB-52**
USEPA

STARTED: COMPLETED: 12/19/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 310396.97 FT EASTING: 2672117.92 FT
G.S. ELEVATION: 185.5 FT M.P. ELEV:
WATER: TOTAL DEPTH: 10.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry sandy gravel.				185		PKSB52-CW	1.2 (G)	VOC, SVOC, pesticides, metals
			BACM: Dry gray fibrous material with transite throughout.								
				0 to 5	4.2	0			PKSB52-WA	12 (G)	VOC, SVOC, pesticides, metals
5			BACM: Dry gray fibrous material with transite throughout.				180				
		SM	Wet brown silty sand.						PKSB52-NS	0.2 (G)	VOCs, metals
				5 to 10	3.2	0					
		SP	Dry red sand								
10			End of boring at 10 feet bgs.				175				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-01**
USEPA

STARTED: COMPLETED: 1/7/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309653.62 FT EASTING: 2673529.14 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brownish black fine sand with roots throughout.						RVSB011920-CW	0.1 (C1)	SVOC, metals, pesticides
		ML	Moist brown clayey silt with sand.								metals, pesticides
		ML	Moist brown clayey silt with sand.						RVSB011920-NS	0.1 (C1)	
		ML	Moist brown clayey silt.	0 to 4	4	0	190				
		ML	Moist brown fine to medium sandy silt. Medium density.								
		ML	Moist brown fine to medium sandy silt. Medium density.								
			End of Boring at 4 feet bgs.								

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-02**
USEPA

STARTED: COMPLETED: 1/11/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309660.43 FT EASTING: 2673392.18 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist (frozen) brown medium sand with roots.						RVSB020304-CW	12 (C2)	SVOC, metals, pesticides
			FILL: Moist (frozen) brown medium sand with roots.								
			FILL: Moist (frozen) brown medium sand with roots.								SVOC, metals, pesticides
			BACS: Moist (frozen) brown medium sand with roots and fibrous materials.						RVSB020304-WA	15 (C2)	
			BACS: Moist gray medium sand with shingles and tiles throughout.								
			FILL: Moist reddish brown fine sandy silt.	0 to 4	4	0					metals, pesticides
			BACS: Moist to dry dark gray fine to medium sand with fibrous materials throughout (sluff).						RVSB020304-NS	ND (C2)	
		SM	Moist reddish brown fine silty sand.								
		SM	Moist reddish brown fine silty sand.								
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-03**
USEPA

STARTED: COMPLETED: 1/11/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309649.44 FT EASTING: 2673255.70 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Dry brown medium sand.	0 to 4	4	0			RVSB020304-CW -	12 (C2)	SVOC, metals, pesticides
			BACS: Dry grayish brown medium sand with transite shingles and tiles throughout.								
			BACS: Dry grayish brown some red transite shingles and fine sand.								SVOC, metals, pesticides
			BACS: Moist dark gray fine sand with some fibrous materials.						RVSB020304-WA -	15 (C2)	
		SM	Moist brown fine silty sand.								metals, pesticides
		ML	Moist brown fine sandy silt. Medium density.						RVSB020304-NS -	ND (C2)	
		ML	Moist brown fine sandy silt. Medium density.								
		ML	Moist brown fine sandy silt. Medium density.								
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-04**
USEPA

STARTED: COMPLETED: 1/11/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309584.43 FT EASTING: 2673112.13 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist (frozen) brown medium sand with roots.						RVSB020304-CW	12 (C2)	VOC, SVOC, metals, pesticides
			FILL: Moist (frozen) brown medium sand.						RVSB04-SS	0.4 (G)	
			BACS: Dry gray medium to fine sand with transite material.								VOC, SVOC, metals, pesticides
		SM	Moist brownish gray fine silty sand.						RVSB020304-WA	15 (C2)	
		SP	Moist dark gray medium sand.	0 to 4	4	0					VOC, metals, pesticides
		SP	Moist dark gray medium sand with some brown.						RVSB020304-NS	ND (C2)	
		SM	Moist reddish brown fine silty sand.								
		SM	Moist reddish brown fine silty sand.								
			End of Boring at 4 feet bgs.								

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-05**
USEPA

STARTED: COMPLETED: 1/12/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309539.10 FT EASTING: 2672988.19 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Dry gray fine to medium silty sand.	0 to 4	4	0			RVSB050607-CW	0.7 (C3)	SVOC, metals, pesticides
			FILL: Dry reddish gray medium silty sand. Fill brought in.								
			BACS: Dry reddish gray fine fibrous material with fine sand.						RVSB05060708-WA	12 (C3)	metals, pesticides
			BACS: Dry reddish gray fine fibrous material with fine sand.								
		SP	Moist dark gray medium sand.						RVSB05060708-NS	0.4 (C3)	metals, pesticides
		SM	Moist brown fine silty sand.								
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-06**
USEPA

STARTED: COMPLETED: 1/12/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309421.86 FT EASTING: 2672933.43 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH:3.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 3.5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist brownish red sandy silt . Fill brought in on berm.	0 to 3.5	3.5	0			RVSB050607-CW	0.7 (C3)	SVOC, metals, pesticides
			FILL: Moist brownish red sandy silt . Fill brought in on berm.								
			BACS: Dry brownish gray medium to fine sand with roots throughout. Trace transite at bottom.						RVSB05060708-WA	12 (C3)	metals, pesticides
		SP	Dry gray medium to fine sand.								
		SM	Moist brown fine silty sand.						RVSB05060708-NS	0.4 (C3)	metals, pesticides
			End of Boring at 3.5 feet bgs.								

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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-07**
USEPA

STARTED: COMPLETED: 1/12/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309311.64 FT EASTING: 2672878.36 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist gray medium sand with some roots.	0 to 4	4	0			RVSB050607-CW	0.7 (C3)	SVOC, metals, pesticides
			BACS: Dry gray medium sand with fibrous materials and transite shingles.								
		SP	Dry dark gray medium sand. Very gritty and hard density.						RVSB05060708-WA	12 (C3)	metals, pesticides
		SM	Moist brown fine silty sand.								
		SM	Moist brown fine silty sand.						RVSB05060708-NS	0.4 (C3)	metals, pesticides
		SM	Moist brown fine silty sand.								
			End of Boring at 4 feet bgs.								

BORIT LOGS BORIT_ASBESTOS.GPJ STANDARD_ENVIRONMENTAL_PROJECT.GDT 6/18/10 REV.

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Hand Auger Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-08**
USEPA

STARTED: COMPLETED: 1/12/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309205.04 FT EASTING: 2672838.18 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH:4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			BACS: Moist gray medium sand. Transite in bottom of sample at 0 feet bgs right at surface.	0 to 4	4	0			RVSB08-SS -	1.2 (G)	VOC, SVOC, metals, pesticides
			BACS: Dry gray medium sand with transite shingles throughout.						RVSB05060708-WA -	12 (C3)	VOC, metals, pesticides
			BACS: Dry gray medium sand with transite shingles throughout.								
		ML	Moist brown fine sandy silt.								VOC, metals, pesticides
		CL	Moist brown fine silty clay.						RVSB05060708-NS -	0.4 (C3)	
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-09**
USEPA

STARTED: COMPLETED: 1/8/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309083.66 FT EASTING: 2672851.42 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 2.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 2 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist brown fine silty sand. Some roots.	0 to 2	2	0			RVSB09101112-CW	0.2 (C4)	SVOC, metals, pesticides
			FILL: Moist brown fine silty sand. Some roots.								metals, pesticides
			BACS: Moist gray fine sand with silt. Fibrous material throughout.						RVSB091011-WA	12 (C4)	
			End of Boring at 2 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-10**
USEPA

STARTED: COMPLETED: 1/8/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309001.41 FT EASTING: 2672953.36 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist brown medium sandy silt.	0 to 4	4	0			RVSB09101112-CW	0.2 (C4)	SVOC, metals, pesticides
			BACS: Moist tan medium sand with silt. Some fibrous material.								metals, pesticides
			BACS: Moist gray medium to fine sand with silt. More fibrous material waste at 1.5 feet bgs.						RVSB091011-WA	12 (C4)	
			BACS: Moist gray fine fibrous material. Trace sand.								
		SP	Moist dark gray medium to fine sand.								
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-11**
USEPA

STARTED: COMPLETED: 1/8/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308902.91 FT EASTING: 2673075.73 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist brown medium sand with roots.						RVSB09101112-CW	0.2 (C4)	SVOC, metals, pesticides
			BACS: Moist brownish gray fine sand with fibrous material. 4-inch waste layer.								metals, pesticides
		SP	Moist brown fine to medium sand.								
		SM	Moist fine reddish tan silty sand.						RVSB091011-WA	12 (C4)	
		SM	Moist fine reddish tan silty sand.	0 to 4	4	0					
		SP	Moist to dry black medium sand. Very gritty.								
		SP	Moist grayish brown medium sand with gravel.								metals, pesticides
		SP	Moist grayish brown medium sand with gravel and some tan sand stone chunks.						RVSB1112-NS	ND (C4)	
			End of Boring at 4 feet bgs.								

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Hand Auger Boring LOG
Draft

PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-12**
USEPA

STARTED: COMPLETED: 1/8/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 308831.37 FT EASTING: 2673176.43 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist grayish brown medium sand. Loose density.	0 to 4	4	0			RVSB12-SS -	0.5 (G)	VOC, SVOC, metals, pesticides
									RVSB09101112-CW -	0.2 (C4)	
			FILL: Moist brownish red medium to fine silty sand.								
			FILL: Moist to dry brown sand with silt trace gravel.								
			FILL: Moist tan fine silty sand.								
			FILL: Moist reddish brown fine sandy clayey silt. Medium density.								
			FILL: Moist tan fine clayey silt. Very plastic.						RVSB1112-NS -	ND (C4)	VOC, metals, pesticides
			End of Boring at 4 feet bgs.								

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Hand Auger Boring LOG
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PROJECT NO. 3330.029 -

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **RVSB-13**
USEPA

STARTED: COMPLETED: 12/10/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308873.30 FT EASTING: 2673309.66 FT
G.S. ELEVATION: 193 FT M.P. ELEV:
WATER: TOTAL DEPTH:10.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet) -	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
			FILL: Moist black fine sand. Mostly cover with leaves and organics.								
			BACS: Moist gray medium sand with brick pieces and fibers throughout. Hard density.	0 to 5	4	0	190				
		SM	Moist reddish brown silty sand. Medium density.								
5											
			Moist reddish brown silty sand. Medium density.								
		SM		5 to 10	4	0	185				
10			End of boring at 10 feet bgs.								
							180				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **RVSB-14**
USEPA

STARTED: COMPLETED: 12/10/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 308958.12 FT EASTING: 2673386.53 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH: 20.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Asphalt.								
			FILL: Moist fine brown sand.	0 to 5	1.8	0	190				
5			FILL: Dry black gravelly sand.								
			BACM: Dry gray fibrous material.								
			FILL: Dry black gravelly sand.	5 to 10	3.5	0					
			FILL: Dry dense brown silty sand.				185				
10			No recovery	10 to 15	0	0					
							180				
15			FILL: Dry black gravelly sand.								
		CL	Wet brown silty clay.	15 to 20	4	0					
		SP	Dry olive dense sand.				175				
20			End of boring at 20 feet bgs.								
							170				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **RVSB-15**
USEPA

STARTED: COMPLETED: 12/10/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309062.61 FT EASTING: 2673475.92 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist brown medium sand. Mostly cover (leaves, wood chips).						RVSB15161718-CW	1.1 (C5)	SVOC, metals, pesticides
			BACS: Moist blackish brown coarse sand. Brick pieces throughout. Some white fibers.								
			FILL: Moist reddish brown medium to fine silty sand. Brick fragments.	0 to 5	4	0					
							190		RVSB15161718-WA	12 (C5)	SVOC, metals, pesticides
5									RVSB15161718-NS	ND (C5)	SVOC, metals, pesticides
		ML	Moist reddish brown sandy clayey silt. Medium density.	5 to 10	4	0					
							185				
10											
		ML	Moist olive sandy clayey silt. Medium density.	10 to 15	3	0					
							180				
15			End of boring at 15 feet bgs.								
							175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **RVSB-16**
USEPA

STARTED: COMPLETED: 12/10/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309162.54 FT EASTING: 2673551.11 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Dry orange sandy gravel. -						RVSB15161718-CW	1.1 (C5)	SVOC, metals, pesticides
			FILL: Dry blackish gray sandy gravel. -								
		SP	Dry dense orange sand. -	0 to 5	2.6	0	190				
5			No recovery	5 to 10	0	0					
							185				
10		ML	Moist gray sandy silt.						RVSB15161718-NS	ND (C5)	SVOC, metals, pesticides
		CL	Moist dense brown silty clay.	10 to 15	4	0					
		SP	Dry orange coarse sand.				180				
15			End of boring at 15 feet bgs.								
							175				

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **RVSB-17**
USEPA

STARTED: COMPLETED: 12/10/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309254.82 FT EASTING: 2673624.00 FT
G.S. ELEVATION: 194 FT M.P. ELEV:
WATER: TOTAL DEPTH:15.0 FT
LOGGED BY: D. Repine
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: No recovery. Free push.	0 to 5	0	0	190		RVSB17-SS	ND (G)	VOC, SVOC, metals, pesticides
5			FILL: Moist brown fine sand.	5 to 10	3.8	0			RVSB15161718-CW	1.1 (C5)	VOC, SVOC, metals, pesticides
			BACS: Dry sandy silt with transite throughout.						RVSB15161718-WA -	12 (C5)	VOC, SVOC, metals, pesticides
		CL	Dry dense oranges brown silty clay.						RVSB15161718-NS -	ND (C5)	VOC, SVOC, metals, pesticides
		CL	Moist gray clay				185				
10			Moist dense orangish red sand.	10 to 15	5	0					
		SP					180				
15			End of boring at 15 feet bgs.								
							175				

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DPT Boring LOG
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PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

DPT BORING NO: **RVSB-18**
USEPA

STARTED: COMPLETED: 12/10/09
DRILLING COMPANY: MIG
DRILLING EQUIPMENT: Geoprobe
DRILLING METHOD: DPT, 2 In. Dia. Borehole
SAMPLING METHOD: Macrocore
SURFACE COMPLETION: Abandoned

NORTHING: 309348.72 FT EASTING: 2673722.15 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: TOTAL DEPTH:12.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE ID	Asbestos (%)	Other Detections
			FILL: Moist gray fine silty sand.	0 to 5	0.3	0	190		RVSB15161718-CW	1.1 (C5)	SVOC, metals, pesticides
5		CL	Moist reddish brown fine sandy silty clay.	5 to 10	5	0	185				
10		SM	Moist reddish brown fine silty sand. Hard density.						RVSB15161718-NS	ND (C5)	SVOC, metals, pesticides
			End of boring at 12 feet bgs.	10 to 15	2	0	180				
15							175				

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DPT Boring LOG
Draft

PROJECT NO. 3330.029

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-19**
USEPA

STARTED: COMPLETED: 1/7/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309398.82 FT EASTING: 2673699.76 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: 3 FT TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
		SM	Moist brown fine silty sand.	0 to 4	4	0	190		RVSB19-SS RVSB011920-CW	0.1 (G) 0.1 (C1)	VOC, SVOC, metals, pesticides
		ML	Moist reddish brown fine clayey silt with sand.								VOC, metals, pesticides
		ML	Moist reddish brown fine clayey silt with sand.						RVSB011920-NS	0.1 (C1)	
		ML	Moist red fine silt with sand. Medium density.								
		SM	Moist reddish tan fine silty sand. Medium density.								
		SM	Wet to moist tannish red fine silty sand. Loose density.								
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-20**
USEPA

STARTED: COMPLETED: 1/7/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309586.12 FT EASTING: 2673599.04 FT
G.S. ELEVATION: 192 FT M.P. ELEV:
WATER: TOTAL DEPTH: 4.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS -	DESCRIPTION (Sampler Length: 4 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE -	SAMPLE ID	Asbestos (%)	Other Detections -
		CL	Moist brownish gray silty clay with sand. Medium density.						RVSB011920-CW	0.1 (C1)	metals, pesticides
		CL	Moist brownish gray silty clay with sand. Medium density.								metals, pesticides
		SM	Moist to dry tan fine silty sand.						RVSB011920-NS	0.1 (C1)	
		SM	Moist to dry tan fine silty sand.								
		SM	Moist to dry tan fine silty sand.	0 to 4	4	0	190				
		SM	Moist to dry reddish brown fine silty sand.								
		SM	Moist to dry reddish brown fine silty sand.								
		SM	Moist to dry reddish brown fine silty sand.								
			End of Boring at 4 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-21**
USEPA

STARTED: 12/30/99 COMPLETED: 1/13/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309458.00 FT EASTING: 2672911.94 FT
G.S. ELEVATION: 188 FT M.P. ELEV:
WATER: TOTAL DEPTH:3.5 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 3.5 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Dry brown fine silty sand.	0 to 3.5	3.5	0	185		RVSB21222324-CW -	ND (C6)	SVOC, metals, pesticides
			FILL: Moist red fine silty clay with limestone chunks throughout.								
			FILL: Moist red fine silty clay with limestone chunks throughout.								SVOC, metals, pesticides
			FILL: Moist red fine silty clay with limestone chunks throughout.						RVSB21222324-WA -	15 (C6)	
			FILL: Moist red fine silty clay with limestone chunks throughout with trace waste starting at 3 feet bgs.								
			BACS: Moist light grayish red fine sandy silt. Fibrous material throughout with transite shingles.								
			End of Boring at 3.5 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-22**
USEPA

STARTED: COMPLETED: 1/13/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309364.90 FT EASTING: 2672880.33 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH:3.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 3 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Dry reddish brown fine silty sand.	0 to 3	3	0			RVSB21222324-CW -	ND (C6)	SVOC, metals, pesticides
			BACS: Dry red fine sandy silt. Hit orange layer (barrier between fill and waste) at 1 feet bgs.								
			BACS: Moist reddish gray fine sandy silt with fibrous material throughout. Transite.								SVOC, metals, pesticides
			BACS: Moist reddish gray fine sandy silt with fibrous material throughout. Transite.						RVSB21222324-WA -	15 (C6)	
			End of Boring at 3 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-23**
USEPA

STARTED: COMPLETED: 1/13/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309257.67 FT EASTING: 2672839.02 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH:3.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 3 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Dry red fine silty sand.	0 to 3	3	0			RVSB21222324-CW -	ND (C6)	SVOC, metals, pesticides
			FILL: Dry red fine silty sand.								SVOC, metals, pesticides
			FILL: Dry red fine silty sand.						RVSB21222324-WA -	15 (C6)	
			BACS: Dry reddish gray fine silty sand with fibrous material.								
			End of Boring at 3 feet bgs.								

PROJECT: Borit Asbestos
LOCATION: Ambler, Pennsylvania

HAND AUGER BORING NO: **RVSB-24**
USEPA

STARTED: COMPLETED: 1/13/10
DRILLING COMPANY:
DRILLING EQUIPMENT: Hand Auger
DRILLING METHOD: Hand Auger, 3 In. Dia. Borehole
SAMPLING METHOD: Encore
SURFACE COMPLETION: Abandoned

NORTHING: 309199.76 FT EASTING: 2672800.64 FT
G.S. ELEVATION: 190 FT M.P. ELEV:
WATER: TOTAL DEPTH:3.0 FT
LOGGED BY: S. Cleaver
HORIZONTAL DATUM: NAD83, COORD. SYS.: State Plane PA South

DEPTH (feet)	GRAPHIC LOG	USCS	DESCRIPTION (Sampler Length: 3 Feet)	SAMPLE INTERVAL (feet)	RECOV. (feet)	PID (ppm)	ELEV. (ft)	ANALYTICAL SAMPLE	SAMPLE - ID -	Asbestos (%)	Other Detections -
			FILL: Moist gray medium sand.	0 to 3	3	0			RVSB21222324-CW -	ND (C6)	VOC, SVOC, metals, pesticides
			FILL: Red fine sandy clayey silt.								
			FILL: Dry gray fine sand with silt.								VOC, SVOC, metals, pesticides
			FILL: Dry gray fine sand with silt.								
			BACS: Moist gray fine sand with silt. Fibrous material throughout. Transite shingles.						RVSB21222324-WA -	15 (C6)	
			BACS: Moist gray fine sand with silt. Fibrous material throughout. Transite shingles.								
			End of Boring at 3 feet bgs.								

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Well Name: APPZ-02

North: 308721.0743 **East**: 2673331.7029

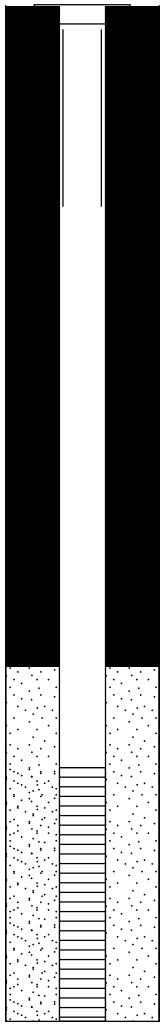
Client: USEPA
Drilling Company: MIG

Project Location: Ambler, Pennsylvania
Project Name: Borit Asbestos
Project Number: 3330-029

Date Started: 12/18/2009
Date Completed: 12/17/2009
Logged By: D. Repine
Drilling Method: DPT

Hole Depth: 25 ft. bgs
Elevation (ft. above msl): 188

WELL DIAGRAM -



DEPTH (ft.)	INTERVAL
0.0	TGR
	TRC
13.0	FP
15.0	TSC
20.0	BSC/TD

WELL CONSTRUCTION DETAILS

(in feet bgs, unless otherwise indicated)

RISER CASING:
Diameter: 2
Type: PVC
Interval: 0-15

GROUT
Type: Bentonite
Interval: 0-13

SANDPACK
Type: #2 Sand
Interval: 13-20

SCREEN
Diameter: 2
Type: PVC
Interval: 15-20

LEGEND

FILTER PACK

GROUT

SCREEN

TRC TOP OF RISER CASING
TGR TOP OF GROUT
FP FILTER PACK
TSC TOP OF SCREEN
BSC BOTTOM OF SCREEN
TD TOTAL DEPTH

BORIT PIEZOMETERS BORIT_ASBESTOS.GPJ FEDERAL.GDT 6/18/10

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Well Name: APPZ-03

North: 308778.3587 **East**: 2673247.5835

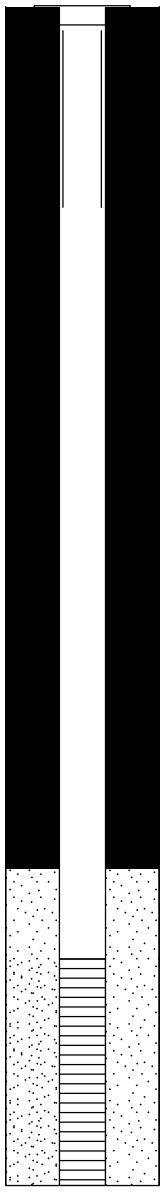
Client: USEPA
Drilling Company: MIG

Project Location: Ambler, Pennsylvania
Project Name: Borit Asbestos
Project Number: 3330-029

Date Started: 12/17/2009
Date Completed: 12/17/2009
Logged By: D. Repine
Drilling Method: DPT

Hole Depth: 28 ft. bgs
Elevation (ft. above msl): 188.5

WELL DIAGRAM -



DEPTH (ft.)	INTERVAL
0.0	TGR
	TRC
19.0	FP
21.0	TCS
26.0	BSC/TD

WELL CONSTRUCTION DETAILS

(in feet bgs, unless otherwise indicated)

RISER CASING:
Diameter: 2
Type: PVC
Interval: 0-21

GROUT -
Type: Bentonite -
Interval: 0-19 -

SANDPACK
Type: #2 Sand
Interval: 19-26

SCREEN
Diameter: 2
Type: PVC
Interval: 21-26

LEGEND

FILTER PACK

GROUT

SCREEN

TRC TOP OF RISER CASING
TGR TOP OF GROUT
FP FILTER PACK
TSC TOP OF SCREEN
BSC BOTTOM OF SCREEN
TD TOTAL DEPTH

BORIT PIEZOMETERS BORIT_ASBESTOS.GPJ FEDERAL.GDT 6/18/10

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Well Name: APPZ-29

North: 308691.1 **East**: 2673439

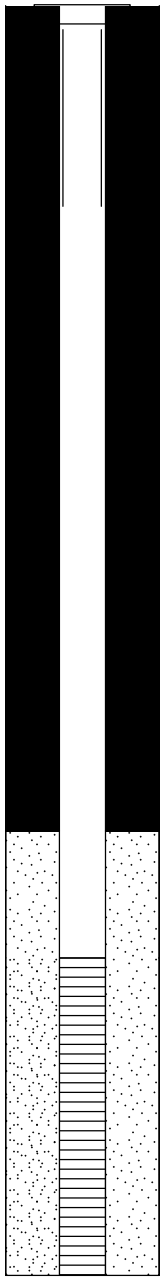
Client: USEPA
Drilling Company: MIG

Project Location: Ambler, Pennsylvania
Project Name: Borit Asbestos
Project Number: 3330-029

Date Started: 12/16/2009
Date Completed: 12/16/2009
Logged By: S. Cleaver
Drilling Method: DPT

Hole Depth: 20 ft. bgs
Elevation (ft. above msl): 180

WELL DIAGRAM -



DEPTH (ft.)	INTERVAL
0.0	TGR
	TRC
5	
10	
13.0	FP
15	15.0 TCS
20	20.0 BSC/TD

WELL CONSTRUCTION DETAILS

(in feet bgs, unless otherwise indicated)

RISER CASING:
Diameter: 2
Type: PVC
Interval: 0-15

GROUT
Type: Bentonite
Interval: 0-13

SANDPACK
Type: #2 Sand
Interval: 13-20

SCREEN
Diameter: 2
Type: PVC
Interval: 15-20

LEGEND

FILTER PACK

GROUT

SCREEN

TRC TOP OF RISER CASING
TGR TOP OF GROUT
FP FILTER PACK
TSC TOP OF SCREEN
BSC BOTTOM OF SCREEN
TD TOTAL DEPTH

BORIT PIEZOMETERS BORIT_ASBESTOS.GPJ FEDERAL.GDT 6/18/10

CDM

14420 Albemarle Point Place Suite 210
Chantilly, VA 20151

Well Name: PKPZ-01

North: 309615.0374 **East**: 2672524.6103

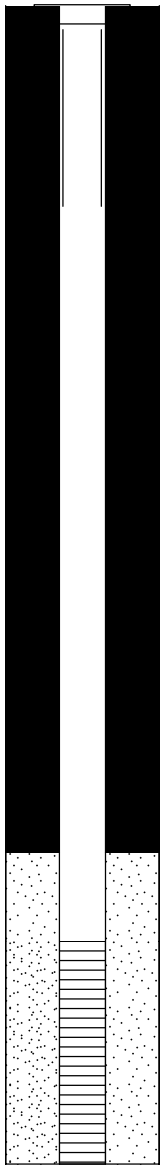
Client: USEPA
Drilling Company: MIG

Project Location: Ambler, Pennsylvania
Project Name: Borit Asbestos
Project Number: 3330-029

Date Started: 12/18/2009
Date Completed: 12/18/2009
Logged By: D. Repine
Drilling Method: DPT

Hole Depth: 28.5 ft. bgs
Elevation (ft. above msl): 195

WELL DIAGRAM -



DEPTH (ft.)	INTERVAL
0.0	TGR
	TRC
19.0	FP
21.0	TCS
26.0	BSC/TD

WELL CONSTRUCTION DETAILS

(in feet bgs, unless otherwise indicated)

RISER CASING:
Diameter: 2
Type: PVC
Interval: 0-21

GROUT -
Type: Bentonite -
Interval: 0-19 -

SANDPACK
Type: #2 Sand
Interval: 19-26

SCREEN
Diameter: 2
Type: PVC
Interval: 21-26

LEGEND

FILTER PACK

GROUT

SCREEN

TRC TOP OF RISER CASING
TGR TOP OF GROUT
FP FILTER PACK
TSC TOP OF SCREEN
BSC BOTTOM OF SCREEN
TD TOTAL DEPTH

BORIT PIEZOMETERS BORIT_ASBESTOS.GPJ FEDERAL.GDT 6/18/10

CDM

14420 Albemarle Point Place Suite 210
Chantilly, VA 20151

Well Name: PKPZ-02

North: 309426.7237 **East**: 2672601.894

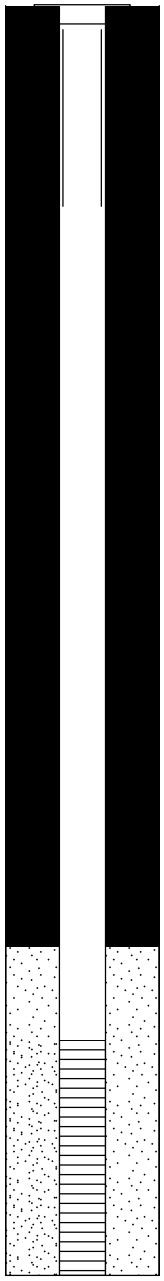
Client: USEPA
Drilling Company: MIG

Project Location: Ambler, Pennsylvania
Project Name: Borit Asbestos
Project Number: 3330-029

Date Started: 12/18/2009
Date Completed: 12/18/2009
Logged By: D. Repine
Drilling Method: DPT

Hole Depth: 27 ft. bgs
Elevation (ft. above msl): 195

WELL DIAGRAM -



DEPTH (ft.)	INTERVAL
0.0	TGR
	TRC
20.0	FP
22.0	TCS
27.0	BSC/TD

WELL CONSTRUCTION DETAILS

(in feet bgs, unless otherwise indicated)

RISER CASING:
Diameter: 2
Type: PVC
Interval: 0-22

GROUT -
Type: Bentonite -
Interval: 0-20 -

SANDPACK
Type: #2 Sand
Interval: 20-27

SCREEN
Diameter: 2
Type: PVC
Interval: 22-27

LEGEND

FILTER PACK

GROUT

SCREEN

TRC TOP OF RISER CASING
TGR TOP OF GROUT
FP FILTER PACK
TSC TOP OF SCREEN
BSC BOTTOM OF SCREEN
TD TOTAL DEPTH

BORIT PIEZOMETERS BORIT_ASBESTOS.GPJ FEDERAL.GDT 6/18/10

CDM

14420 Albemarle Point Place Suite 210
Chantilly, VA 20151

Well Name: PKPZ-03

North: 309373.1106 **East**: 2672687.2863

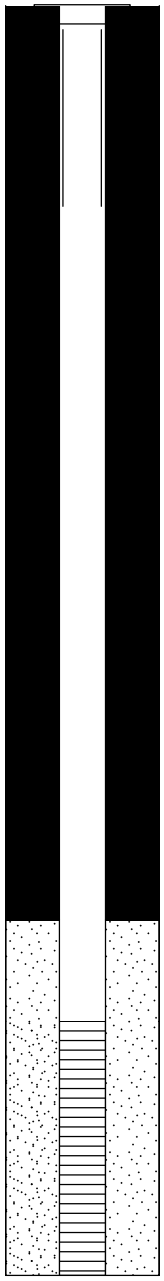
Client: USEPA
Drilling Company: MIG

Project Location: Ambler, Pennsylvania
Project Name: Borit Asbestos
Project Number: 3330-029

Date Started: 12/18/2009
Date Completed: 12/18/2009
Logged By: S. Cleaver
Drilling Method: DPT

Hole Depth: 25 ft. bgs
Elevation (ft. above msl): 194.5

WELL DIAGRAM -



DEPTH (ft.)	INTERVAL
0.0	TGR
	TRC
18.0	FP
20.0	TCS
25.0	BSC/TD

WELL CONSTRUCTION DETAILS

(in feet bgs, unless otherwise indicated)

RISER CASING:
Diameter: 2
Type: PVC
Interval: 0-18

GROUT -
Type: Bentonite
Interval: 0-18

SANDPACK
Type: #2 Sand
Interval: 18-25

SCREEN
Diameter: 2
Type: PVC
Interval: 20-25

LEGEND

FILTER PACK

GROUT

SCREEN

TRC TOP OF RISER CASING
TGR TOP OF GROUT
FP FILTER PACK
TSC TOP OF SCREEN
BSC BOTTOM OF SCREEN
TD TOTAL DEPTH

BORIT PIEZOMETERS BORIT_ASBESTOS.GPJ FEDERAL.GDT 6/18/10

Appendix C
Phase 1 Analytical Results

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01
1,1,1-Trichloroethane	UG/L	910	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	UG/L	0.067	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5900	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.13 J	0.5 U
1,1,2-Trichloroethane	UG/L	0.24	0.5 UL	0.5 UL	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	UG/L	2.4	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	UG/L	34	0.5 U	0.5 U	0.5 U	0.74 B	5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	UG/L	2.9	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	UG/L	2.3	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	UG/L	0.00032	R	R	R	5 U	5 U	R	R	R
1,2-Dibromoethane	UG/L	0.0065	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	UG/L	37	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	UG/L	0.15	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	UG/L	0.39	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	UG/L		0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	UG/L	0.43	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	UG/L	6.1				R	100 R			
2-Butanone	UG/L	710	14 L	78 L	1400 L	10 U	10 U	R	R	R
2-Hexanone	UG/L	4.7	5 U	5 U	5 U	10 U	10	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	200	5 U	5 U	5 U	10 U	10 U	5 U	5 U	5 U
Acetone	UG/L	2200	5.6 B	5.7 B	3.3 B	5.5 B	10 U	3 B	R	1.9 B
Benzene	UG/L	0.41	0.5 U	0.5 U	0.5 U	5 U	0.54 J	0.5 U	0.5 U	0.5 U
Bromochloromethane	UG/L		0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	UG/L	0.12	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.082 J	0.5 U
Bromoform	UG/L	8.5	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Bromomethane	UG/L	0.87	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
CarbonDisulfide	UG/L	100	0.43 B	0.73	1.1	5 U	5 U	0.5 U	0.5 U	0.5 U
Carbontetrachloride	UG/L	0.2	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	UG/L	9.1	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chloroethane	UG/L	2100	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Chloroform	UG/L	0.19	0.5 U	0.5 U	0.5 U	5 U	5 U	0.28 B	0.19 B	0.087 B
Chloromethane	UG/L	19	0.15 B	0.5 U	0.098 B	5 U	5 U	0.21 B	0.15 B	0.2 B
cis-1,2-Dichloroethene	UG/L	37	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	UG/L		0.5 UL	0.5 UL	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	UG/L	1300	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	UG/L	0.15	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	UG/L	39	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	UG/L	1.5	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	UG/L	68	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	UG/L		0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Methylacetate	UG/L	3700	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	UG/L		0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Methylenechloride	UG/L	4.8	0.086 B	0.5 U	0.5 U	5 U	5 U	0.081 B	0.091 B	0.064 B

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01
Methyltert-butylether	UG/L	12	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
o-Xylene	UG/L	120	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Styrene	UG/L	160	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	UG/L	0.11	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.052 J	0.16 J
Toluene	UG/L	230	0.056 J	0.054 J	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	11	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	UG/L		0.5 UL	0.5 UL	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	UG/L	2	0.5 U	0.5 U	0.5 U	5 U	5 U	0.076 J	0.5 U	0.5 U
Trichlorofluoromethane	UG/L	130	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.08 J	0.5 U
Vinylchloride	UG/L	0.016	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U

Notes:
ug/L - microgram per liter
Blank cells indicate analyte not analyzed for
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).
AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
OW – Other side of the Wissahickon
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment
SW – Surface Water
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
R - Rejected result. Analyte may or may not be present in sample.
U - Analyte not detected

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW04-RI-01	CKSW05-RI-01	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01	FB-091119	FB-100120
1,1,1-Trichloroethane	UG/L	910	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,1,2,2-Tetrachloroethane	UG/L	0.067	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5900	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,1,2-Trichloroethane	UG/L	0.24	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,1-Dichloroethane	UG/L	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,1-Dichloroethene	UG/L	34	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.97 B	0.5 U
1,2,3-Trichlorobenzene	UG/L	2.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.76 B	0.5 U
1,2,4-Trichlorobenzene	UG/L	2.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.62 B	0.5 U
1,2-Dibromo-3-chloropropane	UG/L	0.00032	R	R	R	R	R	R	5 U	R
1,2-Dibromoethane	UG/L	0.0065	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,2-Dichlorobenzene	UG/L	37	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,2-Dichloroethane	UG/L	0.15	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,2-Dichloropropane	UG/L	0.39	0.5 UL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,3-Dichlorobenzene	UG/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,4-Dichlorobenzene	UG/L	0.43	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
1,4-Dioxane	UG/L	6.1							R	
2-Butanone	UG/L	710	R	R	R	R	R	R	10 U	R
2-Hexanone	UG/L	4.7	5 U	5 U	5 U	5 U	5 U	5 U	10 U	5 U
4-Methyl-2-pentanone	UG/L	200	5 U	5 U	5 U	5 U	5 U	5 U	10 U	5 U
Acetone	UG/L	2200	2.2 B	0.29 B	2.7 B	2.2 B	2.6 B	2.5 B	R	2.1 B
Benzene	UG/L	0.41	0.5 U	0.5 U	0.068 J	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Bromochloromethane	UG/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Bromodichloromethane	UG/L	0.12	0.5 UL	0.5 U	0.5 U	0.084 J	0.074 J	0.5 U	5 U	0.5 U
Bromoform	UG/L	8.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Bromomethane	UG/L	0.87	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
CarbonDisulfide	UG/L	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.062 B	5 U	0.5 U
Carbontetrachloride	UG/L	0.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Chlorobenzene	UG/L	9.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Chloroethane	UG/L	2100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Chloroform	UG/L	0.19	0.17 B	0.19 B	0.14 B	0.17 B	0.17 B	0.2 B	5 U	0.5 U
Chloromethane	UG/L	19	0.5 U	0.5 U	0.24 B	0.25 B	0.5 U	0.5 U	5 U	0.5 U
cis-1,2-Dichloroethene	UG/L	37	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
cis-1,3-Dichloropropene	UG/L		0.5 UL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Cyclohexane	UG/L	1300	0.5 UL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Dibromochloromethane	UG/L	0.15	0.5 U	0.054 J	0.5 U	0.058 J	0.5 U	0.5 U	5 U	0.5 U
Dichlorodifluoromethane	UG/L	39	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Ethylbenzene	UG/L	1.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Isopropylbenzene	UG/L	68	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
m,p-Xylene	UG/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Methylacetate	UG/L	3700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Methylcyclohexane	UG/L		0.5 UL	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Methylenechloride	UG/L	4.8	0.096 B	0.088 B	0.084 B	0.08 B	0.12 B	0.5 U	5 U	0.14 B

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	CKSW04-RI-01	CKSW05-RI-01	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01	FB-091119	FB-100120
Methyltert-butylether	UG/L	12	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
o-Xylene	UG/L	120	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Styrene	UG/L	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.056 J
Tetrachloroethene	UG/L	0.11	0.5 U	0.072 J	0.5 U	0.072 J	0.053 J	0.055 J	5 U	0.5 U
Toluene	UG/L	230	0.5 U	0.078 B	0.09 B	0.067 B	0.059 B	0.059 B	5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	11	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
trans-1,3-Dichloropropene	UG/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Trichloroethene	UG/L	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Trichlorofluoromethane	UG/L	130	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Vinylchloride	UG/L	0.016	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U

Notes:
ug/L - microgram per liter
Blank cells indicate analyte not analyzed for
RSLs = EPA Region 3 Risk Based Concentration Values for Residential
Tapwater, provided by ORNL (Updated December 2009).
AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
OW – Other side of the Wissahickon
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment
SW – Surface Water
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
R - Rejected result. Analyte may or may not be present in sample.
U - Analyte not detected

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ02-RI-01	PKPZ03-RI-01	RB-091123	RB-091207	RB-100115	RB1-100120
1,1,1-Trichloroethane	UG/L	910	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	UG/L	0.067	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5900	0.5 U	0.5 U	0.12 J	0.5 U	5 U	5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	UG/L	0.24	0.5 U	0.5 U	0.5 UL	0.5 UL	5 U	5 U	0.5 U	0.5 U
1,1-Dichloroethane	UG/L	2.4	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,1-Dichloroethene	UG/L	34	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	UG/L	2.9	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	UG/L	2.3	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	UG/L	0.00032	R	R	R	R	5 U	5 U	R	R
1,2-Dibromoethane	UG/L	0.0065	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	UG/L	37	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,2-Dichloroethane	UG/L	0.15	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,2-Dichloropropane	UG/L	0.39	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	UG/L		0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	UG/L	0.43	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
1,4-Dioxane	UG/L	6.1					R	R		
2-Butanone	UG/L	710	350 L	21 L	46 L	52 L	10 U	10 U	R	R
2-Hexanone	UG/L	4.7	5 U	5 U	5 U	5 U	10 U	10 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	200	5 U	5 U	5 U	5 U	10 U	10 U	5 U	5 U
Acetone	UG/L	2200	3.7 B	6.8 B	5.4 B	7.1 B	R	8.8 J	2.9 B	2.9 B
Benzene	UG/L	0.41	0.5 U	5.1	6	2.6	5 U	0.57 J	0.5 U	0.5 U
Bromochloromethane	UG/L		0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Bromodichloromethane	UG/L	0.12	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Bromoform	UG/L	8.5	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Bromomethane	UG/L	0.87	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
CarbonDisulfide	UG/L	100	0.089 B	0.71	0.57 B	0.49 B	5 U	5 U	0.18 B	0.5 U
Carbontetrachloride	UG/L	0.2	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.051 J	0.5 U
Chlorobenzene	UG/L	9.1	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Chloroethane	UG/L	2100	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Chloroform	UG/L	0.19	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.12 B
Chloromethane	UG/L	19	0.14 B	0.5 U	0.079 B	0.5 U	5 U	5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	UG/L	37	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	UG/L		0.5 U	0.5 U	0.5 UL	0.5 UL	5 U	5 U	0.5 U	0.5 U
Cyclohexane	UG/L	1300	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Dibromochloromethane	UG/L	0.15	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Dichlorodifluoromethane	UG/L	39	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Ethylbenzene	UG/L	1.5	0.5 U	0.11 J	0.11 J	0.28 J	5 U	5 U	0.5 U	0.5 U
Isopropylbenzene	UG/L	68	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
m,p-Xylene	UG/L		0.5 U	0.4 J	0.43 J	2.6	5 U	5 U	0.5 U	0.5 U
Methylacetate	UG/L	3700	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Methylcyclohexane	UG/L		0.5 U	0.5 U	0.5 U	1.2	5 U	5 U	0.5 U	0.5 U
Methylenechloride	UG/L	4.8	0.075 B	0.5 U	0.5 U	0.5 U	5 U	5 U	0.11 B	0.13 B

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ02-RI-01	PKPZ03-RI-01	RB-091123	RB-091207	RB-100115	RB1-100120
Methyltert-butylether	UG/L	12	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
o-Xylene	UG/L	120	0.5 U	0.21 J	0.23 J	0.63	5 U	5 U	0.5 U	0.5 U
Styrene	UG/L	160	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Tetrachloroethene	UG/L	0.11	0.075 J	0.084 J	0.074 J	0.5 U	5 U	5 U	0.5 U	0.5 U
Toluene	UG/L	230	0.056 J	1.2	1.4	0.77	5 U	5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	11	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	UG/L		0.5 U	0.5 U	0.5 UL	0.5 UL	5 U	5 U	0.5 U	0.5 U
Trichloroethene	UG/L	2	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Trichlorofluoromethane	UG/L	130	0.067 J	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U
Vinylchloride	UG/L	0.016	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	RB2-100120	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01	TB-091119
1,1,1-Trichloroethane	UG/L	910	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	UG/L	0.067	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5900	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	UG/L	0.24	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	UG/L	2.4	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	UG/L	34	0.5 U	0.96 B	0.89 B	0.99 B	1 B	5 U	5 U	0.99 B
1,2,3-Trichlorobenzene	UG/L	2.9	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	UG/L	2.3	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane	UG/L	0.00032	R	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane	UG/L	0.0065	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	UG/L	37	0.5 U	5 U	5 U R	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	UG/L	0.15	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	UG/L	0.39	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	UG/L		0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	UG/L	0.43	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	UG/L	6.1		R	R		R	R	R	R
2-Butanone	UG/L	710	R	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	UG/L	4.7	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	UG/L	200	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	UG/L	2200	2.6 B	R	R	R	R	R	R	R
Benzene	UG/L	0.41	0.062 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromochloromethane	UG/L		0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	UG/L	0.12	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	UG/L	8.5	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	UG/L	0.87	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CarbonDisulfide	UG/L	100	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbontetrachloride	UG/L	0.2	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	UG/L	9.1	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	UG/L	2100	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	UG/L	0.19	0.11 B	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	UG/L	19	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	UG/L	37	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	UG/L		0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Cyclohexane	UG/L	1300	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	UG/L	0.15	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	UG/L	39	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	UG/L	1.5	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	UG/L	68	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
m,p-Xylene	UG/L		0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylacetate	UG/L	3700	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane	UG/L		0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylenechloride	UG/L	4.8	0.13 B	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	RB2-100120	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01	TB-091119
Methyltert-butylether	UG/L	12	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
o-Xylene	UG/L	120	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	UG/L	160	0.062 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	UG/L	0.11	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	UG/L	230	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	UG/L	11	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	UG/L		0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	UG/L	2	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane	UG/L	130	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinylchloride	UG/L	0.016	0.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Notes:
ug/L - microgram per liter
Blank cells indicate analyte not analyzed for
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).
AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
OW – Other side of the Wissahickon
RV – Reservoir
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PZ – Piezometer
SD – Sediment
SW – Surface Water
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
R - Rejected result. Analyte may or may not be present in sample.
U - Analyte not detected

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	TB-091120	TB-091123	TB-091124	TB-091207	TB-091209	TB-091211	TB-100115	TB-100119	TB-100120	TB-100601
1,1,1-Trichloroethane	UG/L	910	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	UG/L	0.067	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	5900	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	UG/L	0.24	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UL
1,1-Dichloroethane	UG/L	2.4	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	UG/L	34	5 U	5 U	5 U	5 U	5 U	0.78 B	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	UG/L	2.9	5 U	5 UL	5 U	5 U	5 U	0.52 B	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	UG/L	2.3	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	UG/L	0.00032	5 U	5 UL	5 U	5 U	5 U	5 U	R	R	R	R
1,2-Dibromoethane	UG/L	0.0065	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	UG/L	37	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	UG/L	0.15	5 U	5 UL	5 U	5 U R	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	UG/L	0.39	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	UG/L		5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	UG/L	0.43	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dioxane	UG/L	6.1	R	R	R	R		R				
2-Butanone	UG/L	710	10 U	10 U	10 U	10 U	10 U	10 U	1.2 J	R	R	R
2-Hexanone	UG/L	4.7	10 U	10 U	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone	UG/L	200	10 U	10 U	10 U	10 U	10 U	10 U	5 U	5 U	5 U	5 U
Acetone	UG/L	2200	10 U	R	R	10 U	10 U	3.2 B	33 L	2.8 B	1.9 B	R
Benzene	UG/L	0.41	5 U	5 U	5 U	5 U	5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	UG/L	0.12	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	UG/L	8.5	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	UG/L	0.87	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
CarbonDisulfide	UG/L	100	5 U	5 U	5 U	5 U	5 U	5 U	0.069 B	0.5 U	0.5 U	0.14 J
Carbontetrachloride	UG/L	0.2	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	UG/L	9.1	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	UG/L	2100	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	UG/L	0.19	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.14 B	0.12 B	0.5 U
Chloromethane	UG/L	19	5 U	5 U	5 U	5 U	5 U	5 U	0.051 B	0.24 B	0.5 U	0.084 B
cis-1,2-Dichloroethene	UG/L	37	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UL
Cyclohexane	UG/L	1300	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	UG/L	0.15	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	UG/L	39	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	UG/L	1.5	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	UG/L	68	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylacetate	UG/L	3700	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylenechloride	UG/L	4.8	5 U	5 UL	5 U	5 U	5 U	5 U	0.077 B	0.12 B	0.12 B	0.096 B

Table C-1
Volatiles Results in Groundwater and Surface Water

Analyte	Result Unit	RSL (ug/L)	TB-091120	TB-091123	TB-091124	TB-091207	TB-091209	TB-091211	TB-100115	TB-100119	TB-100120	TB-100601
Methyltert-butylether	UG/L	12	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	UG/L	120	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	UG/L	160	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.067 J	0.051 J	0.5 U
Tetrachloroethene	UG/L	0.11	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	UG/L	230	5 U	5 U	5 U	5 U	5 U	5 U	0.051 J	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	11	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UL
Trichloroethene	UG/L	2	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	UG/L	130	5 U	5 UL	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinylchloride	UG/L	0.016	5 U	5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB02-SS	APSB03-CW	APSB03-NS	APSB03-WA	APSB10-CW	APSB10-NS	APSB10-SS
1,1,1-Trichloroethane	ug/kg	870000	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
1,1,2,2-Tetrachloroethane	ug/kg	560	5.1 U	4.8 U	9.3 U	34 UL	5.7 U	10 U	5.9 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
1,1,2-Trichloroethane	ug/kg	1100	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
1,1-Dichloroethane	ug/kg	3300	5.1 U	4.8 U	9.3 U	34 UL	5.7 U	10 U	5.9 U
1,1-Dichloroethene	ug/kg	24000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	1.6 B	0.79 B
1,2,3-Trichlorobenzene	ug/kg	4900	5.1 U	1.7 B	9.3 U	34 U	5.7 UJ	10 UL	5.9 U
1,2,4-Trichlorobenzene	ug/kg	22000	5.1 U	4.8 U	9.3 U	34 U	5.7 UJ	10 UL	5.9 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	5.1 U	4.8 U	9.3 U	34 UL	5.7 UJ	10 UL	5.9 U
1,2-Dibromoethane	ug/kg	34	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
1,2-Dichlorobenzene	ug/kg	190000	5.1 U	4.8 U	9.3 U	34 U	5.7 UJ	10 UL	5.9 U
1,2-Dichloroethane	ug/kg	430	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
1,2-Dichloropropane	ug/kg	890	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
1,3-Dichlorobenzene	ug/kg		5.1 U	4.8 U	9.3 U	34 U	5.7 UJ	10 UL	5.9 U
1,4-Dichlorobenzene	ug/kg	2400	5.1 U	4.8 U	9.3 U	34 U	5.7 UJ	10 UL	5.9 U
1,4-Dioxane	ug/kg	44000	R	R	R	680 R	R	R	R
2-Butanone	ug/kg	2800000	10 U	9.7 U	19 U	68 U	11 U	20 U	12 U
2-Hexanone	ug/kg	21000	10 U	3.4 B	19 U	68 U	11 U	20 U	12 U
4-Methyl-2-pentanone	ug/kg	530000	10 U	9.7 U	5.8 J	68 U	11 U	20 U	12 U
Acetone	ug/kg	6100000	10 U	9.7 U	10 B	68 U	4.3 B	45 B	3.3 B
Benzene	ug/kg	1100	5.1 U	4.8 U	9.3 U	34 U	1.1 J	10 U	5.9 U
Bromochloromethane	ug/kg		5.1 U	4.8 U	9.3 U	34 UL	5.7 U	10 U	5.9 U
Bromodichloromethane	ug/kg	270	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Bromoform	ug/kg	61000	5.1 U	4.8 U	9.3 U	34 UL	5.7 UJ	10 U	5.9 U
Bromomethane	ug/kg	730	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
CarbonDisulfide	ug/kg	82000	5.1 U	4.8 U	9.3 U	34 U	1.6 J	10 U	5.9 U
Carbontetrachloride	ug/kg	250	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
Chlorobenzene	ug/kg	29000	5.1 U	4.8 U	9.3 U	34 U	5.7 UL	10 UL	5.9 U
Chloroethane	ug/kg	1500000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Chloroform	ug/kg	290	5.1 U	4.8 U	9.3 U	120 L	5.7 U	32	5.9 U
Chloromethane	ug/kg	12000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
cis-1,2-Dichloroethene	ug/kg	78000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
cis-1,3-Dichloropropene	ug/kg		5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Cyclohexane	ug/kg	700000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Dibromochloromethane	ug/kg	680	5.1 U	4.8 U	9.3 U	34 UL	5.7 U	10 U	5.9 U
Dichlorodifluoromethane	ug/kg	18000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Ethylbenzene	ug/kg	5400	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Isopropylbenzene	ug/kg	210000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
m,p-Xylene	ug/kg		5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Methylacetate	ug/kg	7800000	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
Methylcyclohexane	ug/kg		5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Methylenechloride	ug/kg	11000	5.1 UL	4.8 U	1.5 B	34 U	5.7 U	10 U	5.9 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB02-SS	APSB03-CW	APSB03-NS	APSB03-WA	APSB10-CW	APSB10-NS	APSB10-SS
Methyltert-butylether	ug/kg	43000	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
o-Xylene	ug/kg	380000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Styrene	ug/kg	630000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Tetrachloroethene	ug/kg	550	5.1 U	4.8 U	9.3 U	34 U	0.8 J	10 U	5.9 U
Toluene	ug/kg	500000	5.1 U	4.8 U	9.3 U	34 U	1.4 B	2.7 B	0.84 B
trans-1,2-Dichloroethene	ug/kg	15000	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
trans-1,3-Dichloropropene	ug/kg		5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U
Trichloroethene	ug/kg	2800	5.1 U	4.8 U	9.3 U	7.1 J	5.7 U	1.7 J	5.9 U
Trichlorofluoromethane	ug/kg	79000	5.1 UL	4.8 U	9.3 UL	34 U	5.7 U	10 U	5.9 U
Vinylchloride	ug/kg	60	5.1 U	4.8 U	9.3 U	34 U	5.7 U	10 U	5.9 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB10-WA	APSB13-NS	APSB13-SS	APSB13-WA	APSB20-21	APSB21D-NS	APSB21-NS
1,1,1-Trichloroethane	ug/kg	870000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,1,2,2-Tetrachloroethane	ug/kg	560	R	R	20 U	R	R	R	R
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,1,2-Trichloroethane	ug/kg	1100	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,1-Dichloroethane	ug/kg	3300	14 UL	7.6 UL	20 U	57 UL	33 UL	7.3 UL	7.6 UL
1,1-Dichloroethene	ug/kg	24000	1.9 B	7.6 U	2.6 B	57 U	5.1 B	0.84 B	1.2 B
1,2,3-Trichlorobenzene	ug/kg	4900	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,2,4-Trichlorobenzene	ug/kg	22000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	R	R	20 U	R	R	R	R
1,2-Dibromoethane	ug/kg	34	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,2-Dichlorobenzene	ug/kg	190000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,2-Dichloroethane	ug/kg	430	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,2-Dichloropropane	ug/kg	890	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
1,3-Dichlorobenzene	ug/kg		14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,4-Dichlorobenzene	ug/kg	2400	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
1,4-Dioxane	ug/kg	44000	R	150 R	R	1100 R	R	R	R
2-Butanone	ug/kg	2800000	29 U	8.9 B	40 U	340 B	20 J	15 U	15 U
2-Hexanone	ug/kg	21000	29 U	15 U	40 U	110 U	72 B	15 U	15 U
4-Methyl-2-pentanone	ug/kg	530000	13 J	15 U	40 U	110 U	19 J	15 U	1.5 J
Acetone	ug/kg	6100000	120 B	99 B	21 B	1300 B	230 B	14 B	14 B
Benzene	ug/kg	1100	14 U	7.6 U	20 U	57 U	4.5 J	7.3 U	7.6 U
Bromochloromethane	ug/kg		14 UL	7.6 UL	20 U	57 UL	33 UL	7.3 UL	7.6 UL
Bromodichloromethane	ug/kg	270	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Bromoform	ug/kg	61000	14 UL	7.6 UL	20 U	57 UL	33 UL	7.3 UL	7.6 UL
Bromomethane	ug/kg	730	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
CarbonDisulfide	ug/kg	82000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Carbontetrachloride	ug/kg	250	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
Chlorobenzene	ug/kg	29000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
Chloroethane	ug/kg	1500000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Chloroform	ug/kg	290	130 L	72 L	20 U	630 L	300 J	44 L	55 J
Chloromethane	ug/kg	12000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
cis-1,2-Dichloroethene	ug/kg	78000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
cis-1,3-Dichloropropene	ug/kg		14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
Cyclohexane	ug/kg	700000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Dibromochloromethane	ug/kg	680	14 UL	7.6 UL	20 U	57 UL	33 UL	7.3 UL	7.6 UL
Dichlorodifluoromethane	ug/kg	18000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Ethylbenzene	ug/kg	5400	14 U	7.6 U	20 U	42 J	33 U	7.3 U	7.6 U
Isopropylbenzene	ug/kg	210000	14 U	1.8 J	20 U	57 U	33 U	7.3 U	7.6 U
m,p-Xylene	ug/kg		14 U	7.6 U	20 U	170	3.3 J	7.3 U	7.6 U
Methylacetate	ug/kg	7800000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
Methylcyclohexane	ug/kg		14 U	7.6 U	20 U	57 U	4.5 J	7.3 U	7.6 U
Methylenechloride	ug/kg	11000	14 U	1.7 B	20 UL	11 B	33 U	7.3 U	7.6 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB10-WA	APSB13-NS	APSB13-SS	APSB13-WA	APSB20-21	APSB21D-NS	APSB21-NS
Methyltert-butylether	ug/kg	43000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
o-Xylene	ug/kg	380000	14 U	7.6 U	20 U	130	3.7 J	7.3 U	7.6 U
Styrene	ug/kg	630000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Tetrachloroethene	ug/kg	550	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
Toluene	ug/kg	500000	3 B	0.86 B	20 U	29 B	6.6 B	7.3 U	7.6 U
trans-1,2-Dichloroethene	ug/kg	15000	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U
trans-1,3-Dichloropropene	ug/kg		14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
Trichloroethene	ug/kg	2800	36	22	20 U	250	69 J	4 J	7.2 J
Trichlorofluoromethane	ug/kg	79000	14 U	7.6 U	20 UL	57 U	33 U	7.3 U	7.6 U
Vinylchloride	ug/kg	60	14 U	7.6 U	20 U	57 U	33 U	7.3 U	7.6 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB21-SS	APSB21-WA	APSB24-NS	APSB24-SS	APSB24-WA	APSB32-CW	APSB32D-SS
1,1,1-Trichloroethane	ug/kg	870000	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
1,1,2,2-Tetrachloroethane	ug/kg	560	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
1,1,2-Trichloroethane	ug/kg	1100	18 UL	33 U	5.3 U	14 U	9 U	19 UL	28 U
1,1-Dichloroethane	ug/kg	3300	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
1,1-Dichloroethene	ug/kg	24000	2.8 B	5 B	0.86 B	14 U	9 U	19 U	28 U
1,2,3-Trichlorobenzene	ug/kg	4900	18 UL	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
1,2,4-Trichlorobenzene	ug/kg	22000	18 UL	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
1,2-Dibromo-3-chloropropane	ug/kg	5.4	18 U	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
1,2-Dibromoethane	ug/kg	34	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
1,2-Dichlorobenzene	ug/kg	190000	18 UL	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
1,2-Dichloroethane	ug/kg	430	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
1,2-Dichloropropane	ug/kg	890	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
1,3-Dichlorobenzene	ug/kg		18 UL	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
1,4-Dichlorobenzene	ug/kg	2400	18 UL	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
1,4-Dioxane	ug/kg	44000	R	R	R	290 U	R	R	R
2-Butanone	ug/kg	2800000	58	67 U	4.5 J	29 U	18 U	38 U	55 U
2-Hexanone	ug/kg	21000	36 U	130	12 B	29 U	18 U	92 B	82 B
4-Methyl-2-pentanone	ug/kg	530000	36 U	67 U	1.8 J	29 U	18 U	38 U	55 U
Acetone	ug/kg	6100000	14 B	26 B	15 B	29 U	4.2 B	38 U	55 U
Benzene	ug/kg	1100	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Bromochloromethane	ug/kg		18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Bromodichloromethane	ug/kg	270	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Bromoform	ug/kg	61000	18 U	33 UJ	5.3 U	14 UJ	9 U	19 UJ	28 UJ
Bromomethane	ug/kg	730	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
CarbonDisulfide	ug/kg	82000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Carbontetrachloride	ug/kg	250	18 U	26 J	5.3 U	14 U	9 U	19 U	28 U
Chlorobenzene	ug/kg	29000	18 UL	33 UL	5.3 U	14 U	9 U	19 UL	28 U
Chloroethane	ug/kg	1500000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Chloroform	ug/kg	290	18 U	33 U	1.3 J	14 U	9 U	19 U	28 U
Chloromethane	ug/kg	12000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
cis-1,2-Dichloroethene	ug/kg	78000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
cis-1,3-Dichloropropene	ug/kg		18 UL	33 U	5.3 U	14 U	9 U	19 UL	28 U
Cyclohexane	ug/kg	700000	18 U	3.5 J	5.3 U	14 U	9 U	19 U	28 U
Dibromochloromethane	ug/kg	680	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Dichlorodifluoromethane	ug/kg	18000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Ethylbenzene	ug/kg	5400	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Isopropylbenzene	ug/kg	210000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
m,p-Xylene	ug/kg		18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Methylacetate	ug/kg	7800000	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
Methylcyclohexane	ug/kg		18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Methylenechloride	ug/kg	11000	18 U	33 UL	5.3 U	14 U	1.4 B	19 U	28 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB21-SS	APSB21-WA	APSB24-NS	APSB24-SS	APSB24-WA	APSB32-CW	APSB32D-SS
Methyltert-butylether	ug/kg	43000	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
o-Xylene	ug/kg	380000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Styrene	ug/kg	630000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Tetrachloroethene	ug/kg	550	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Toluene	ug/kg	500000	18 U	7.3 B	5.3 U	1.6 B	9 U	19 U	6.9 J
trans-1,2-Dichloroethene	ug/kg	15000	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
trans-1,3-Dichloropropene	ug/kg		18 UL	33 U	5.3 U	14 U	9 U	19 UL	28 U
Trichloroethene	ug/kg	2800	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U
Trichlorofluoromethane	ug/kg	79000	18 U	33 UL	5.3 U	14 U	9 U	19 U	28 U
Vinylchloride	ug/kg	60	18 U	33 U	5.3 U	14 U	9 U	19 U	28 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB32-NS	APSB32-SS	APSB32-WA	CKFP01-D	CKFP01-S	CKFP02-D	CKFP02-S	CKFP03-D
1,1,1-Trichloroethane	ug/kg	870000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,1,2,2-Tetrachloroethane	ug/kg	560	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 UL	8.2 U	8.9 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,1,2-Trichloroethane	ug/kg	1100	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,1-Dichloroethane	ug/kg	3300	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 UL	8.2 U	8.9 U
1,1-Dichloroethene	ug/kg	24000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,2,3-Trichlorobenzene	ug/kg	4900	0.68 B	27 UJ	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,2,4-Trichlorobenzene	ug/kg	22000	6.4 U	27 UJ	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	6.4 U	27 UJ	12 U	5.9 U	7.3 U	9.7 UL	8.2 U	8.9 U
1,2-Dibromoethane	ug/kg	34	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,2-Dichlorobenzene	ug/kg	190000	6.4 U	27 UJ	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,2-Dichloroethane	ug/kg	430	6.4 U R	27 U R	12 U R	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,2-Dichloropropane	ug/kg	890	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,3-Dichlorobenzene	ug/kg		6.4 U	27 UJ	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,4-Dichlorobenzene	ug/kg	2400	6.4 U	27 UJ	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
1,4-Dioxane	ug/kg	44000	R				R	R	R	R
2-Butanone	ug/kg	2800000	13 U	55 U	25	12 U	15 U	22 B	16 U	18 UL
2-Hexanone	ug/kg	21000	14 B	92 B	25 B	11 B	17 B	23 B	23 B	53 B
4-Methyl-2-pentanone	ug/kg	530000	13 U	55 U	25 U	12 U	15 U	19 U	16 U	18 UL
Acetone	ug/kg	6100000	13 U	55 U	72 B	2600	15 U	48 B	16 U	18 UL
Benzene	ug/kg	1100	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Bromochloromethane	ug/kg		6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 UL	8.2 U	8.9 U
Bromodichloromethane	ug/kg	270	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Bromoform	ug/kg	61000	6.4 U	27 UJ	12 U	5.9 U	7.3 U	9.7 UL	8.2 U	8.9 U
Bromomethane	ug/kg	730	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
CarbonDisulfide	ug/kg	82000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Carbontetrachloride	ug/kg	250	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Chlorobenzene	ug/kg	29000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Chloroethane	ug/kg	1500000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Chloroform	ug/kg	290	0.92 B	3.4 B	1.4 B	0.78 B	0.88 B	42 L	8.2 U	0.99 B
Chloromethane	ug/kg	12000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
cis-1,2-Dichloroethene	ug/kg	78000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
cis-1,3-Dichloropropene	ug/kg		6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Cyclohexane	ug/kg	700000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Dibromochloromethane	ug/kg	680	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 UL	8.2 U	8.9 U
Dichlorodifluoromethane	ug/kg	18000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Ethylbenzene	ug/kg	5400	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Isopropylbenzene	ug/kg	210000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
m,p-Xylene	ug/kg		6.4 U	27 U	12 U	5.9 U	7.3 U	1 J	8.2 U	8.9 U
Methylacetate	ug/kg	7800000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Methylcyclohexane	ug/kg		6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Methylenechloride	ug/kg	11000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB32-NS	APSB32-SS	APSB32-WA	CKFP01-D	CKFP01-S	CKFP02-D	CKFP02-S	CKFP03-D
Methyltert-butylether	ug/kg	43000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
o-Xylene	ug/kg	380000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Styrene	ug/kg	630000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Tetrachloroethene	ug/kg	550	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Toluene	ug/kg	500000	6.4 U	3.4 J	1.5 J	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
trans-1,2-Dichloroethene	ug/kg	15000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
trans-1,3-Dichloropropene	ug/kg		6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Trichloroethene	ug/kg	2800	6.4 U	27 U	12 U	5.9 U	7.3 U	2.6 J	8.2 U	8.9 U
Trichlorofluoromethane	ug/kg	79000	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U
Vinylchloride	ug/kg	60	6.4 U	27 U	12 U	5.9 U	7.3 U	9.7 U	8.2 U	8.9 U

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not analyzed for
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
OW – Other side of the Wissahickon
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment
SW – Surface Water
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
R - Rejected result. Analyte may or may not be present in sample.
U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP03-S	CKFP04-D	CKFP04-S	CKFP05-D	CKFP05D-D	CKFP05-S	CKFP06-D	CKFP07-D
1,1,1-Trichloroethane	ug/kg	870000	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U
1,1,2,2-Tetrachloroethane	ug/kg	560	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
1,1,2-Trichloroethane	ug/kg	1100	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
1,1-Dichloroethane	ug/kg	3300	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
1,1-Dichloroethene	ug/kg	24000	7.2 U	6.1 U	7.7 U	1.1 B	4.9 U	0.94 B	1.2 B	5.2 U
1,2,3-Trichlorobenzene	ug/kg	4900	7.2 UL	6.1 U	7.7 U	1.2 B	0.82 B	5.9 U	1.5 B	5.2 U
1,2,4-Trichlorobenzene	ug/kg	22000	7.2 UL	6.1 U	7.7 U	1 B	0.64 B	5.9 U	1.4 B	5.2 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 UJ	5.2 U
1,2-Dibromoethane	ug/kg	34	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U
1,2-Dichlorobenzene	ug/kg	190000	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 UJ	5.2 U
1,2-Dichloroethane	ug/kg	430	7.2 U	6.1 U	7.7 U	5.7 ULR	4.9 UR	5.9 U	8.1 UR	5.2 U
1,2-Dichloropropane	ug/kg	890	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
1,3-Dichlorobenzene	ug/kg		7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 UJ	5.2 U
1,4-Dichlorobenzene	ug/kg	2400	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 UJ	5.2 U
1,4-Dioxane	ug/kg	44000	R	R	R	R			R	
2-Butanone	ug/kg	2800000	14 U	12 U	15 U	11 U	9.9 U	21	330	10 U
2-Hexanone	ug/kg	21000	25 B	14 B	15 B	14 B	12 B	23 B	23 B	11 B
4-Methyl-2-pentanone	ug/kg	530000	14 U	12 U	15 U	11 U	9.9 U	12 U	16 U	10 U
Acetone	ug/kg	6100000	14 U	12 U	15 U	21 B	9 B	13 B	410	10 U
Benzene	ug/kg	1100	7.2 U	6.1 U	7.7 U	0.88 J	4.9 U	5.9 U	2 J	5.2 U
Bromochloromethane	ug/kg		7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Bromodichloromethane	ug/kg	270	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Bromoform	ug/kg	61000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 UJ	5.2 U
Bromomethane	ug/kg	730	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
CarbonDisulfide	ug/kg	82000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Carbontetrachloride	ug/kg	250	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U
Chlorobenzene	ug/kg	29000	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Chloroethane	ug/kg	1500000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Chloroform	ug/kg	290	7.2 U	0.65 B	7.7 U	0.82 B	0.73 B	0.73 B	0.87 B	5.2 U
Chloromethane	ug/kg	12000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
cis-1,2-Dichloroethene	ug/kg	78000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
cis-1,3-Dichloropropene	ug/kg		7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Cyclohexane	ug/kg	700000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Dibromochloromethane	ug/kg	680	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Dichlorodifluoromethane	ug/kg	18000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Ethylbenzene	ug/kg	5400	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 J	5.2 U
Isopropylbenzene	ug/kg	210000	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
m,p-Xylene	ug/kg		7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Methylacetate	ug/kg	7800000	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U
Methylcyclohexane	ug/kg		7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Methylenechloride	ug/kg	11000	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP03-S	CKFP04-D	CKFP04-S	CKFP05-D	CKFP05D-D	CKFP05-S	CKFP06-D	CKFP07-D
Methyltert-butylether	ug/kg	43000	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U
o-Xylene	ug/kg	380000	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Styrene	ug/kg	630000	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Tetrachloroethene	ug/kg	550	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Toluene	ug/kg	500000	7.2 UL	6.1 U	7.7 U	0.93 B	1.1 B	2 B	550	5.2 U
trans-1,2-Dichloroethene	ug/kg	15000	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
trans-1,3-Dichloropropene	ug/kg		7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Trichloroethene	ug/kg	2800	7.2 UL	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U
Trichlorofluoromethane	ug/kg	79000	7.2 U	6.1 U	7.7 U	5.7 UL	4.9 U	5.9 U	8.1 U	5.2 U
Vinylchloride	ug/kg	60	7.2 U	6.1 U	7.7 U	5.7 U	4.9 U	5.9 U	8.1 U	5.2 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

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SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

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L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP07-S	CKFP08-D	CKFP08-S	CKSB01-WA	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01
1,1,1-Trichloroethane	ug/kg	870000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,1,2,2-Tetrachloroethane	ug/kg	560	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,1,2-Trichloroethane	ug/kg	1100	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,1-Dichloroethane	ug/kg	3300	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,1-Dichloroethene	ug/kg	24000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,2,3-Trichlorobenzene	ug/kg	4900	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,2,4-Trichlorobenzene	ug/kg	22000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,2-Dibromoethane	ug/kg	34	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,2-Dichlorobenzene	ug/kg	190000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,2-Dichloroethane	ug/kg	430	7.2 U	6 U	6.1 U R	8.9 U R	6.8 U R	6 U R	6.2 U
1,2-Dichloropropane	ug/kg	890	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,3-Dichlorobenzene	ug/kg		7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,4-Dichlorobenzene	ug/kg	2400	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
1,4-Dioxane	ug/kg	44000	R	R	R				
2-Butanone	ug/kg	2800000	14 U	12 U	12 U	18 U	14 U	12 U	12 U
2-Hexanone	ug/kg	21000	29 B	17 B	12 B	20 B	15 B	12 B	14 B
4-Methyl-2-pentanone	ug/kg	530000	14 U	12 U	12 U	18 U	14 U	12 U	12 U
Acetone	ug/kg	6100000	26 B	12 U	12 U	17 B	14 U	12 U	12 U
Benzene	ug/kg	1100	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Bromochloromethane	ug/kg		7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Bromodichloromethane	ug/kg	270	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Bromoform	ug/kg	61000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Bromomethane	ug/kg	730	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
CarbonDisulfide	ug/kg	82000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Carbontetrachloride	ug/kg	250	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Chlorobenzene	ug/kg	29000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Chloroethane	ug/kg	1500000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Chloroform	ug/kg	290	0.77 B	0.66 B	6.1 U	8.9 U	6.8 U	6 U	0.78 B
Chloromethane	ug/kg	12000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
cis-1,2-Dichloroethene	ug/kg	78000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
cis-1,3-Dichloropropene	ug/kg		7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Cyclohexane	ug/kg	700000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Dibromochloromethane	ug/kg	680	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Dichlorodifluoromethane	ug/kg	18000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Ethylbenzene	ug/kg	5400	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Isopropylbenzene	ug/kg	210000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
m,p-Xylene	ug/kg		7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Methylacetate	ug/kg	7800000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Methylcyclohexane	ug/kg		7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Methylenechloride	ug/kg	11000	7.2 U	6 U	6.1 U	8.9 U	1.2 B	1.5 B	1.1 B

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP07-S	CKFP08-D	CKFP08-S	CKSB01-WA	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01
Methyltert-butylether	ug/kg	43000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
o-Xylene	ug/kg	380000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Styrene	ug/kg	630000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Tetrachloroethene	ug/kg	550	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Toluene	ug/kg	500000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
trans-1,2-Dichloroethene	ug/kg	15000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
trans-1,3-Dichloropropene	ug/kg		7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Trichloroethene	ug/kg	2800	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Trichlorofluoromethane	ug/kg	79000	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U
Vinylchloride	ug/kg	60	7.2 U	6 U	6.1 U	8.9 U	6.8 U	6 U	6.2 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01	CKSD09-RI-01
1,1,1-Trichloroethane	ug/kg	870000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,1,2,2-Tetrachloroethane	ug/kg	560	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,1,2-Trichloroethane	ug/kg	1100	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,1-Dichloroethane	ug/kg	3300	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,1-Dichloroethene	ug/kg	24000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2,3-Trichlorobenzene	ug/kg	4900	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2,4-Trichlorobenzene	ug/kg	22000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2-Dibromoethane	ug/kg	34	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2-Dichlorobenzene	ug/kg	190000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2-Dichloroethane	ug/kg	430	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,2-Dichloropropane	ug/kg	890	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,3-Dichlorobenzene	ug/kg		8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,4-Dichlorobenzene	ug/kg	2400	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
1,4-Dioxane	ug/kg	44000	R	R	R	R	R	R
2-Butanone	ug/kg	2800000	16	14 U	14 U	15 U	17 U	15 U
2-Hexanone	ug/kg	21000	17 B	12 B	12 B	15 B	16 B	15 B
4-Methyl-2-pentanone	ug/kg	530000	16 U	14 U	14 U	15 U	17 U	15 U
Acetone	ug/kg	6100000	16 U	14 U	14 U	23 B	17 U	15 U
Benzene	ug/kg	1100	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Bromochloromethane	ug/kg		8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Bromodichloromethane	ug/kg	270	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Bromoform	ug/kg	61000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Bromomethane	ug/kg	730	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
CarbonDisulfide	ug/kg	82000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Carbontetrachloride	ug/kg	250	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Chlorobenzene	ug/kg	29000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Chloroethane	ug/kg	1500000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Chloroform	ug/kg	290	1 B	0.81 B	0.84 B	1 B	1.2 B	7.5 U
Chloromethane	ug/kg	12000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
cis-1,2-Dichloroethene	ug/kg	78000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
cis-1,3-Dichloropropene	ug/kg		8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Cyclohexane	ug/kg	700000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Dibromochloromethane	ug/kg	680	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Dichlorodifluoromethane	ug/kg	18000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Ethylbenzene	ug/kg	5400	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Isopropylbenzene	ug/kg	210000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
m,p-Xylene	ug/kg		8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Methylacetate	ug/kg	7800000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Methylcyclohexane	ug/kg		8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Methylenechloride	ug/kg	11000	1.3 B	7.2 U	7.1 U	7.4 U	8.3 U	1.4 B

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01	CKSD09-RI-01
Methyltert-butylether	ug/kg	43000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
o-Xylene	ug/kg	380000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Styrene	ug/kg	630000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Tetrachloroethene	ug/kg	550	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Toluene	ug/kg	500000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
trans-1,2-Dichloroethene	ug/kg	15000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
trans-1,3-Dichloropropene	ug/kg		8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Trichloroethene	ug/kg	2800	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Trichlorofluoromethane	ug/kg	79000	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U
Vinylchloride	ug/kg	60	8 U	7.2 U	7.1 U	7.4 U	8.3 U	7.5 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01	OWSB01-SS	OWSB02-SS	OWSB03-SS
1,1,1-Trichloroethane	ug/kg	870000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,1,2,2-Tetrachloroethane	ug/kg	560	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,1,2-Trichloroethane	ug/kg	1100	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,1-Dichloroethane	ug/kg	3300	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,1-Dichloroethene	ug/kg	24000	8.8 U	0.98 J	0.96 J	8.2 U	8.2 U	0.71 J
1,2,3-Trichlorobenzene	ug/kg	4900	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,2,4-Trichlorobenzene	ug/kg	22000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,2-Dibromoethane	ug/kg	34	8.8 U	7.2 U	6.9 UR	8.2 UR	8.2 UR	6.5 U
1,2-Dichlorobenzene	ug/kg	190000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,2-Dichloroethane	ug/kg	430	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,2-Dichloropropane	ug/kg	890	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,3-Dichlorobenzene	ug/kg		8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,4-Dichlorobenzene	ug/kg	2400	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
1,4-Dioxane	ug/kg	44000	R	R	R			
2-Butanone	ug/kg	2800000	18 U	14 U	14 U	16 U	16 U	13 U
2-Hexanone	ug/kg	21000	20 B	12 B	13 B	24 B	23 B	17 B
4-Methyl-2-pentanone	ug/kg	530000	18 U	14 U	14 U	16 U	16 U	13 U
Acetone	ug/kg	6100000	18 U	14 U	14 U	16 U	16 U	13 U
Benzene	ug/kg	1100	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Bromochloromethane	ug/kg		8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Bromodichloromethane	ug/kg	270	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Bromoform	ug/kg	61000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Bromomethane	ug/kg	730	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
CarbonDisulfide	ug/kg	82000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Carbontetrachloride	ug/kg	250	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Chlorobenzene	ug/kg	29000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Chloroethane	ug/kg	1500000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Chloroform	ug/kg	290	8.8 U	1.1 B	0.98 B	0.91 B	1.1 B	0.84 B
Chloromethane	ug/kg	12000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
cis-1,2-Dichloroethene	ug/kg	78000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
cis-1,3-Dichloropropene	ug/kg		8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Cyclohexane	ug/kg	700000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Dibromochloromethane	ug/kg	680	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Dichlorodifluoromethane	ug/kg	18000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Ethylbenzene	ug/kg	5400	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Isopropylbenzene	ug/kg	210000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
m,p-Xylene	ug/kg		8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Methylacetate	ug/kg	7800000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Methylcyclohexane	ug/kg		8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Methylenechloride	ug/kg	11000	2 B	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01	OWSB01-SS	OWSB02-SS	OWSB03-SS
Methyltert-butylether	ug/kg	43000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
o-Xylene	ug/kg	380000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Styrene	ug/kg	630000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Tetrachloroethene	ug/kg	550	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Toluene	ug/kg	500000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
trans-1,2-Dichloroethene	ug/kg	15000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
trans-1,3-Dichloropropene	ug/kg		8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Trichloroethene	ug/kg	2800	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Trichlorofluoromethane	ug/kg	79000	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U
Vinylchloride	ug/kg	60	8.8 U	7.2 U	6.9 U	8.2 U	8.2 U	6.5 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB03-WA	PKSB15-CW	PKSB15-NS	PKSB15-SS	PKSB15-WA	PKSB19-SS	PKSB22-CW
1,1,1-Trichloroethane	ug/kg	870000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
1,1,2,2-Tetrachloroethane	ug/kg	560	5.9 U	6.4 U	5.9 U	8.8 U	12 UL	9.8 U	5.4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
1,1,2-Trichloroethane	ug/kg	1100	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 U	5.4 U
1,1-Dichloroethane	ug/kg	3300	5.9 U	6.4 U	5.9 U	8.8 U	12 UL	9.8 U	5.4 U
1,1-Dichloroethene	ug/kg	24000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	1.3 B	0.78 B
1,2,3-Trichlorobenzene	ug/kg	4900	5.9 UJ	6.4 U	5.9 U	8.8 UL	12 U	9.8 UJ	5.4 U
1,2,4-Trichlorobenzene	ug/kg	22000	5.9 UJ	6.4 U	5.9 U	8.8 UL	12 U	9.8 UJ	5.4 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	5.9 UJ	6.4 U	5.9 U	8.8 U	12 UL	9.8 UJ	5.4 U
1,2-Dibromoethane	ug/kg	34	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
1,2-Dichlorobenzene	ug/kg	190000	0.99 J	6.4 U	5.9 U	8.8 UL	12 U	9.8 UJ	5.4 U
1,2-Dichloroethane	ug/kg	430	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
1,2-Dichloropropane	ug/kg	890	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
1,3-Dichlorobenzene	ug/kg		5.9 UJ	6.4 U	5.9 U	8.8 UL	12 U	9.8 UJ	5.4 U
1,4-Dichlorobenzene	ug/kg	2400	5.9 UJ	6.4 U	5.9 U	8.8 UL	12 U	9.8 UJ	5.4 U
1,4-Dioxane	ug/kg	44000	R	R	R	R	R	R	110 U
2-Butanone	ug/kg	2800000	46	13 U	5.5 J	18 U	4.6 J	20 U	11 U
2-Hexanone	ug/kg	21000	9.6 B	3.1 B	2.1 B	12 B	24 U	6 B	2.8 B
4-Methyl-2-pentanone	ug/kg	530000	470	13 U	12 U	18 U	4.8 J	20 U	11 U
Acetone	ug/kg	6100000	320	8.2 B	22 B	6.6 B	24 B	20 U	11 U
Benzene	ug/kg	1100	12 K	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Bromochloromethane	ug/kg		5.9 U	6.4 U	5.9 U	8.8 U	12 UL	9.8 U	5.4 U
Bromodichloromethane	ug/kg	270	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Bromoform	ug/kg	61000	5.9 UJ	6.4 U	5.9 U	8.8 U	12 UL	9.8 UJ	5.4 U
Bromomethane	ug/kg	730	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
CarbonDisulfide	ug/kg	82000	4.2 J	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Carbontetrachloride	ug/kg	250	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
Chlorobenzene	ug/kg	29000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 U	5.4 U
Chloroethane	ug/kg	1500000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Chloroform	ug/kg	290	2.1 J	6.4 U	0.64 J	8.8 U	42 J	9.8 U	5.4 U
Chloromethane	ug/kg	12000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
cis-1,2-Dichloroethene	ug/kg	78000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
cis-1,3-Dichloropropene	ug/kg		5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 U	5.4 U
Cyclohexane	ug/kg	700000	15 K	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Dibromochloromethane	ug/kg	680	5.9 U	6.4 U	5.9 U	8.8 U	12 UL	9.8 U	5.4 U
Dichlorodifluoromethane	ug/kg	18000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Ethylbenzene	ug/kg	5400	20	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Isopropylbenzene	ug/kg	210000	1.3 J	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
m,p-Xylene	ug/kg		41	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Methylacetate	ug/kg	7800000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
Methylcyclohexane	ug/kg		12 K	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Methylenechloride	ug/kg	11000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	1.8 B	5.4 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB03-WA	PKSB15-CW	PKSB15-NS	PKSB15-SS	PKSB15-WA	PKSB19-SS	PKSB22-CW
Methyltert-butylether	ug/kg	43000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
o-Xylene	ug/kg	380000	31	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Styrene	ug/kg	630000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Tetrachloroethene	ug/kg	550	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
Toluene	ug/kg	500000	8600	0.74 J	5.9 U	8.8 U	1.8 J	4.4 B	1.2 B
trans-1,2-Dichloroethene	ug/kg	15000	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U
trans-1,3-Dichloropropene	ug/kg		5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 U	5.4 U
Trichloroethene	ug/kg	2800	5.9 U	6.4 U	5.9 U	8.8 U	3.4 J	9.8 U	5.4 U
Trichlorofluoromethane	ug/kg	79000	5.9 U	6.4 U	5.9 U	8.8 UL	12 U	9.8 UL	5.4 U
Vinylchloride	ug/kg	60	5.9 U	6.4 U	5.9 U	8.8 U	12 U	9.8 U	5.4 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB22-NS	PKSB22-WA	PKSB30D-SS	PKSB30-SS	PKSB33-CW	PKSB33-NS	PKSB33-WA
1,1,1-Trichloroethane	ug/kg	870000	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
1,1,2,2-Tetrachloroethane	ug/kg	560	6.1 U	R	7.1 U	6.2 U	5.4 U	6.5 U	R
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
1,1,2-Trichloroethane	ug/kg	1100	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,1-Dichloroethane	ug/kg	3300	6.1 U	11 UL	7.1 U	6.2 U	5.4 U	6.5 U	13 UL
1,1-Dichloroethene	ug/kg	24000	0.97 B	11 U	7.1 U	6.2 U	0.64 B	0.96 B	13 U
1,2,3-Trichlorobenzene	ug/kg	4900	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,2,4-Trichlorobenzene	ug/kg	22000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	R
1,2-Dibromoethane	ug/kg	34	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
1,2-Dichlorobenzene	ug/kg	190000	6.1 U	R	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,2-Dichloroethane	ug/kg	430	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
1,2-Dichloropropane	ug/kg	890	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,3-Dichlorobenzene	ug/kg		6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,4-Dichlorobenzene	ug/kg	2400	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
1,4-Dioxane	ug/kg	44000	120 UL	R	R	R	110 UL	130 U	R
2-Butanone	ug/kg	2800000	12 U	23 U	14 U	12 U	11 U	12 J	26 U
2-Hexanone	ug/kg	21000	2.4 B	5.7 B	9.2 B	3.7 B	3.8 B	2.7 B	5.2 B
4-Methyl-2-pentanone	ug/kg	530000	12 U	6.9 J	14 U	12 U	11 U	3.6 J	6.4 J
Acetone	ug/kg	6100000	15	38 B	14 U	12 B	11 U	40	72 B
Benzene	ug/kg	1100	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Bromochloromethane	ug/kg		6.1 U	11 UL	7.1 U	6.2 U	5.4 U	6.5 U	13 UL
Bromodichloromethane	ug/kg	270	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Bromoform	ug/kg	61000	6.1 U	11 UL	7.1 U	6.2 U	5.4 U	6.5 U	13 UL
Bromomethane	ug/kg	730	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
CarbonDisulfide	ug/kg	82000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	1.9 J	13 U
Carbontetrachloride	ug/kg	250	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
Chlorobenzene	ug/kg	29000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Chloroethane	ug/kg	1500000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Chloroform	ug/kg	290	6.1 U	71 L	7.1 U	6.2 U	5.4 U	6.5 U	63 L
Chloromethane	ug/kg	12000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
cis-1,2-Dichloroethene	ug/kg	78000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
cis-1,3-Dichloropropene	ug/kg		6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Cyclohexane	ug/kg	700000	6.1 U	11 U	7.1 U	0.63 J	5.4 U	6.5 U	13 U
Dibromochloromethane	ug/kg	680	6.1 U	11 UL	7.1 U	6.2 U	5.4 U	6.5 U	13 UL
Dichlorodifluoromethane	ug/kg	18000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Ethylbenzene	ug/kg	5400	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Isopropylbenzene	ug/kg	210000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
m,p-Xylene	ug/kg		6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Methylacetate	ug/kg	7800000	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
Methylcyclohexane	ug/kg		6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Methylenechloride	ug/kg	11000	0.69 B	1.5 B	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB22-NS	PKSB22-WA	PKSB30D-SS	PKSB30-SS	PKSB33-CW	PKSB33-NS	PKSB33-WA
Methyltert-butylether	ug/kg	43000	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
o-Xylene	ug/kg	380000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Styrene	ug/kg	630000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Tetrachloroethene	ug/kg	550	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Toluene	ug/kg	500000	1.3 B	3.1 B	7.1 U	6.2 U	5.4 U	6.5 U	1.7 J
trans-1,2-Dichloroethene	ug/kg	15000	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
trans-1,3-Dichloropropene	ug/kg		6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U
Trichloroethene	ug/kg	2800	6.1 U	9.1 J	7.1 U	6.2 U	5.4 U	6.5 U	7.2 J
Trichlorofluoromethane	ug/kg	79000	6.1 U	11 U	7.1 U	6.2 UL	5.4 U	6.5 U	13 UL
Vinylchloride	ug/kg	60	6.1 U	11 U	7.1 U	6.2 U	5.4 U	6.5 U	13 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB38-SS	PKSB40-CW	PKSB40-NS	PKSB40-WA	PKSB45-17_3	PKSB51-CW	PKSB51-NS
1,1,1-Trichloroethane	ug/kg	870000	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
1,1,2,2-Tetrachloroethane	ug/kg	560	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
1,1,2-Trichloroethane	ug/kg	1100	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
1,1-Dichloroethane	ug/kg	3300	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
1,1-Dichloroethene	ug/kg	24000	0.63 B	0.55 B	2.2 B	1.6 B	8300 U	5.7 U	7.5 U
1,2,3-Trichlorobenzene	ug/kg	4900	4.8 U	4.7 U	18 UJ	12 UL	8300 U	5.7 U	7.5 U
1,2,4-Trichlorobenzene	ug/kg	22000	4.8 U	4.7 U	18 UJ	12 UL	8300 U	5.7 U	7.5 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	4.8 U	4.7 U	18 UJ	12 U	8300 U	5.7 U	7.5 U
1,2-Dibromoethane	ug/kg	34	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
1,2-Dichlorobenzene	ug/kg	190000	4.8 U	4.7 U	18 UJ	12 UL	8300 U	5.7 U	7.5 U
1,2-Dichloroethane	ug/kg	430	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
1,2-Dichloropropane	ug/kg	890	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
1,3-Dichlorobenzene	ug/kg		4.8 U	4.7 U	18 UJ	12 UL	8300 U	5.7 U	7.5 U
1,4-Dichlorobenzene	ug/kg	2400	4.8 U	4.7 U	18 UJ	12 UL	8300 U	5.7 U	7.5 U
1,4-Dioxane	ug/kg	44000	96 U	94 U	360 U	250 U	170000 R	R	R
2-Butanone	ug/kg	2800000	9.6 U	32	36 U	25 U	17000 U	11 U	23
2-Hexanone	ug/kg	21000	2 B	2 B	10 B	13 B	17000 U	2.4 B	3 B
4-Methyl-2-pentanone	ug/kg	530000	9.6 U	9.4 U	9.6 J	30	17000 U	11 U	15 U
Acetone	ug/kg	6100000	9.6 U	97	80	16 J	17000 U	19 B	68 B
Benzene	ug/kg	1100	4.8 U	4.7 U	18 U	12 U	310000	5.7 U	7.5 U
Bromochloromethane	ug/kg		4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Bromodichloromethane	ug/kg	270	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Bromoform	ug/kg	61000	4.8 U	4.7 U	18 UJ	12 U	8300 U	5.7 U	7.5 U
Bromomethane	ug/kg	730	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
CarbonDisulfide	ug/kg	82000	4.8 U	0.86 J	9.4 J	12 U	8300 U	5.7 U	7.5 U
Carbontetrachloride	ug/kg	250	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
Chlorobenzene	ug/kg	29000	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
Chloroethane	ug/kg	1500000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Chloroform	ug/kg	290	4.8 U	4.7 U	6.1 J	1.7 J	8300 U	5.7 U	7.5 U
Chloromethane	ug/kg	12000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
cis-1,2-Dichloroethene	ug/kg	78000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
cis-1,3-Dichloropropene	ug/kg		4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Cyclohexane	ug/kg	700000	4.8 U	4.7 U	27	12 U	8300 U	5.7 U	7.5 U
Dibromochloromethane	ug/kg	680	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Dichlorodifluoromethane	ug/kg	18000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Ethylbenzene	ug/kg	5400	4.8 U	4.7 U	18 U	12 U	1300 J	5.7 U	7.5 U
Isopropylbenzene	ug/kg	210000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
m,p-Xylene	ug/kg		4.8 U	4.7 U	4.1 J	12 U	2400 J	5.7 U	7.5 U
Methylacetate	ug/kg	7800000	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
Methylcyclohexane	ug/kg		4.8 U	4.7 U	51	12 U	3900 J	5.7 U	7.5 U
Methylenechloride	ug/kg	11000	4.8 U	0.74 B	2.7 B	1.7 B	8300 U	5.7 U	7.5 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB38-SS	PKSB40-CW	PKSB40-NS	PKSB40-WA	PKSB45-17_3	PKSB51-CW	PKSB51-NS
Methyltert-butylether	ug/kg	43000	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
o-Xylene	ug/kg	380000	4.8 U	4.7 U	3.3 J	12 U	8300 U	5.7 U	7.5 U
Styrene	ug/kg	630000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Tetrachloroethene	ug/kg	550	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Toluene	ug/kg	500000	4.8 U	0.52 B	4.5 B	1.5 B	90000	1.3 B	1.6 B
trans-1,2-Dichloroethene	ug/kg	15000	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
trans-1,3-Dichloropropene	ug/kg		4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Trichloroethene	ug/kg	2800	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U
Trichlorofluoromethane	ug/kg	79000	4.8 U	4.7 U	18 U	12 UL	8300 U	5.7 U	7.5 U
Vinylchloride	ug/kg	60	4.8 U	4.7 U	18 U	12 U	8300 U	5.7 U	7.5 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

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Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

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L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB51-WA	PKSB52-CW	PKSB52-NS	PKSB52-WA	RVSB04-CW	RVSB04-NS	RVSB04-SS
1,1,1-Trichloroethane	ug/kg	870000	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
1,1,2,2-Tetrachloroethane	ug/kg	560	R	8.8 U	7.1 U	9.6 UL	18 U	6 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
1,1,2-Trichloroethane	ug/kg	1100	9.4 U	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
1,1-Dichloroethane	ug/kg	3300	9.4 UL	8.8 U	7.1 U	9.6 UL	18 U	6 U	10 U
1,1-Dichloroethene	ug/kg	24000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	3.4 B
1,2,3-Trichlorobenzene	ug/kg	4900	9.4 UL	8.8 U	1.2 B	1.3 B	2.3 B	6 U	10 UL
1,2,4-Trichlorobenzene	ug/kg	22000	9.4 UL	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
1,2-Dibromo-3-chloropropane	ug/kg	5.4	R	8.8 U	7.1 U	9.6 UL	18 U	6 U	10 U
1,2-Dibromoethane	ug/kg	34	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
1,2-Dichlorobenzene	ug/kg	190000	9.4 UR	8.8 U	7.1 U	9.6 UR	18 UL	6 UR	10 UL
1,2-Dichloroethane	ug/kg	430	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
1,2-Dichloropropane	ug/kg	890	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
1,3-Dichlorobenzene	ug/kg		9.4 UL	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
1,4-Dichlorobenzene	ug/kg	2400	9.4 UL	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
1,4-Dioxane	ug/kg	44000	R		R	R		R	
2-Butanone	ug/kg	2800000	19 U	17 B	38 B	17 B	35 U	12 U	21 U
2-Hexanone	ug/kg	21000	5.1 B	18 B	15 B	23 B	45 B	7.6 B	14 B
4-Methyl-2-pentanone	ug/kg	530000	19 U	18 U	5 J	2.8 J	35 U	1.2 B	21 U
Acetone	ug/kg	6100000	62 B	18 U	91	27 B	31 B	5.8 B	11 B
Benzene	ug/kg	1100	9.4 U	3 J	7.1 U	2.9 J	2.6 B	6 U	10 U
Bromochloromethane	ug/kg		9.4 UL	8.8 U	7.1 U	9.6 UL	18 U	6 U	10 U
Bromodichloromethane	ug/kg	270	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Bromoform	ug/kg	61000	9.4 UL	8.8 U	7.1 U	9.6 UL	18 U	6 U	10 U
Bromomethane	ug/kg	730	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
CarbonDisulfide	ug/kg	82000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Carbontetrachloride	ug/kg	250	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
Chlorobenzene	ug/kg	29000	9.4 UL	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
Chloroethane	ug/kg	1500000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Chloroform	ug/kg	290	46 L	8.8 U	7.1 U	20 L	1.9 B	0.66 B	1.1 B
Chloromethane	ug/kg	12000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
cis-1,2-Dichloroethene	ug/kg	78000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
cis-1,3-Dichloropropene	ug/kg		9.4 U	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
Cyclohexane	ug/kg	700000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Dibromochloromethane	ug/kg	680	9.4 UL	8.8 U	7.1 U	9.6 UL	18 U	6 U	10 U
Dichlorodifluoromethane	ug/kg	18000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Ethylbenzene	ug/kg	5400	9.4 UL	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Isopropylbenzene	ug/kg	210000	9.4 UL	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
m,p-Xylene	ug/kg		9.4 UL	1.1 B	1.3 B	1.1 B	18 U	6 U	10 U
Methylacetate	ug/kg	7800000	9.4 UL	8.8 UL	7.1 UL	9.6 UL	3 J	6 U	2.6 J
Methylcyclohexane	ug/kg		9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Methylenechloride	ug/kg	11000	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB51-WA	PKSB52-CW	PKSB52-NS	PKSB52-WA	RVSB04-CW	RVSB04-NS	RVSB04-SS
Methyltert-butylether	ug/kg	43000	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
o-Xylene	ug/kg	380000	9.4 UL	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Styrene	ug/kg	630000	9.4 UL	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Tetrachloroethene	ug/kg	550	9.4 UL	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
Toluene	ug/kg	500000	1.9 B	3.6 B	3.3 B	3.7 B	2.4 B	6 U	10 U
trans-1,2-Dichloroethene	ug/kg	15000	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U
trans-1,3-Dichloropropene	ug/kg		9.4 U	8.8 U	7.1 U	9.6 U	18 UL	6 U	10 UL
Trichloroethene	ug/kg	2800	4.8 L	8.8 U	7.1 U	1.6 J	18 U	6 U	10 U
Trichlorofluoromethane	ug/kg	79000	9.4 UL	8.8 UL	7.1 UL	9.6 UL	18 U	6 U	10 U
Vinylchloride	ug/kg	60	9.4 U	8.8 U	7.1 U	9.6 U	18 U	6 U	10 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB04-WA	RVSB08-NS	RVSB08-SS	RVSB08-WA	RVSB12-CW	RVSB12-NS	RVSB12-SS
1,1,1-Trichloroethane	ug/kg	870000	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
1,1,2,2-Tetrachloroethane	ug/kg	560	7.8 U	18 U	7.1 U	12 UL	6.9 U	5.1 U	9.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
1,1,2-Trichloroethane	ug/kg	1100	7.8 U	18 U	7.1 UL	12 U	6.9 U	5.1 U	9.2 UL
1,1-Dichloroethane	ug/kg	3300	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
1,1-Dichloroethene	ug/kg	24000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
1,2,3-Trichlorobenzene	ug/kg	4900	7.8 UJ	18 U	0.48 J	12 U	6.9 U	5.1 U	9.2 U
1,2,4-Trichlorobenzene	ug/kg	22000	7.8 UJ	18 U	7.1 UJ	12 U	6.9 U	5.1 U	9.2 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	7.8 UJ	18 U	7.1 UJ	12 UL	6.9 U	5.1 U	9.2 U
1,2-Dibromoethane	ug/kg	34	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
1,2-Dichlorobenzene	ug/kg	190000	7.8 UJ	18 U	7.1 UJ	12 U	6.9 U	5.1 U	9.2 U
1,2-Dichloroethane	ug/kg	430	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
1,2-Dichloropropane	ug/kg	890	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
1,3-Dichlorobenzene	ug/kg		7.8 UJ	18 U	7.1 UJ	12 U	6.9 U	5.1 U	9.2 U
1,4-Dichlorobenzene	ug/kg	2400	7.8 UJ	18 U	7.1 UJ	12 U	6.9 U	5.1 U	9.2 U
1,4-Dioxane	ug/kg	44000	160 U	360 U	140 U	240 U	R	R	R
2-Butanone	ug/kg	2800000	21	40	17	24	14 U	10 U	32
2-Hexanone	ug/kg	21000	17 B	42 B	17 B	18 B	7.6 B	5.7 B	30 B
4-Methyl-2-pentanone	ug/kg	530000	1.8 J	36 U	14 U	24 U	14 U	10 U	18 U
Acetone	ug/kg	6100000	34 B	26 B	14 B	28 B	11 B	6 B	22 B
Benzene	ug/kg	1100	7.8 U	18 U	7.1 U	12 U	1.8 B	0.91 B	1.9 B
Bromochloromethane	ug/kg		7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Bromodichloromethane	ug/kg	270	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Bromoform	ug/kg	61000	7.8 UJ	18 U	7.1 UJ	12 U	6.9 U	5.1 U	9.2 U
Bromomethane	ug/kg	730	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
CarbonDisulfide	ug/kg	82000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Carbontetrachloride	ug/kg	250	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
Chlorobenzene	ug/kg	29000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Chloroethane	ug/kg	1500000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Chloroform	ug/kg	290	3.4 B	3 B	1 B	27	0.79 B	0.58 B	0.98 B
Chloromethane	ug/kg	12000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
cis-1,2-Dichloroethene	ug/kg	78000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
cis-1,3-Dichloropropene	ug/kg		7.8 U	18 U	7.1 UL	12 U	6.9 U	5.1 U	9.2 UL
Cyclohexane	ug/kg	700000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Dibromochloromethane	ug/kg	680	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Dichlorodifluoromethane	ug/kg	18000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Ethylbenzene	ug/kg	5400	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Isopropylbenzene	ug/kg	210000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
m,p-Xylene	ug/kg		7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Methylacetate	ug/kg	7800000	2 J	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
Methylcyclohexane	ug/kg		7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Methylenechloride	ug/kg	11000	7.8 U	18 U	7.1 U	12 U	1.1 B	0.55 B	2 J

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB04-WA	RVSB08-NS	RVSB08-SS	RVSB08-WA	RVSB12-CW	RVSB12-NS	RVSB12-SS
Methyltert-butylether	ug/kg	43000	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
o-Xylene	ug/kg	380000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Styrene	ug/kg	630000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Tetrachloroethene	ug/kg	550	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Toluene	ug/kg	500000	7.8 U	18 U	7.1 U	12 U	1.5 B	0.57 B	1.6 B
trans-1,2-Dichloroethene	ug/kg	15000	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
trans-1,3-Dichloropropene	ug/kg		7.8 U	18 U	7.1 UL	12 U	6.9 U	5.1 U	9.2 UL
Trichloroethene	ug/kg	2800	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U
Trichlorofluoromethane	ug/kg	79000	7.8 U	18 U	7.1 U	12 U	6.9 UL	5.1 U	9.2 U
Vinylchloride	ug/kg	60	7.8 U	18 U	7.1 U	12 U	6.9 U	5.1 U	9.2 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB17-CW	RVSB17-NS	RVSB17-SS	RVSB17-WA	RVSB19-CW	RVSB19-NS	RVSB19-SS
1,1,1-Trichloroethane	ug/kg	870000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,1,2,2-Tetrachloroethane	ug/kg	560	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,1,2-Trichloroethane	ug/kg	1100	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UL
1,1-Dichloroethane	ug/kg	3300	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,1-Dichloroethene	ug/kg	24000	0.89 B	0.84 B	1.5 B	1.5 B	1.2 B	6.3 U	5.2 B
1,2,3-Trichlorobenzene	ug/kg	4900	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	1.2 B	26 UJ
1,2,4-Trichlorobenzene	ug/kg	22000	5.4 U	6.2 U	8.9 U	9.8 U	0.85 B	0.84 B	26 UJ
1,2-Dibromo-3-chloropropane	ug/kg	5.4	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UJ
1,2-Dibromoethane	ug/kg	34	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,2-Dichlorobenzene	ug/kg	190000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UJ
1,2-Dichloroethane	ug/kg	430	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,2-Dichloropropane	ug/kg	890	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
1,3-Dichlorobenzene	ug/kg		5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UJ
1,4-Dichlorobenzene	ug/kg	2400	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UJ
1,4-Dioxane	ug/kg	44000	R	120 R	R	R	R	R	R
2-Butanone	ug/kg	2800000	11 U	12 U	18 U	20 U	13 U	13 U	31 J
2-Hexanone	ug/kg	21000	11 U	12 U	18 U	20 U	8.1 B	8.4 B	23 B
4-Methyl-2-pentanone	ug/kg	530000	11 U	1.5 J	18 U	1.6 J	13 U	13 U	52 U
Acetone	ug/kg	6100000	3.5 B	3.1 B	9.3 B	6.6 B	8.9 B	59 B	180
Benzene	ug/kg	1100	5.4 U	6.2 U	8.9 U	9.8 U	1.9 B	2 B	6.7 B
Bromochloromethane	ug/kg		5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Bromodichloromethane	ug/kg	270	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Bromoform	ug/kg	61000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UJ
Bromomethane	ug/kg	730	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
CarbonDisulfide	ug/kg	82000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Carbontetrachloride	ug/kg	250	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Chlorobenzene	ug/kg	29000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UL
Chloroethane	ug/kg	1500000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Chloroform	ug/kg	290	5.4 U	6.2 U	8.9 U	9.8 U	0.81 B	1.1 B	2.8 B
Chloromethane	ug/kg	12000	5.4 U	0.77 J	8.9 U	9.8 U	6.4 U	6.3 U	26 U
cis-1,2-Dichloroethene	ug/kg	78000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UL
cis-1,3-Dichloropropene	ug/kg		5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UL
Cyclohexane	ug/kg	700000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Dibromochloromethane	ug/kg	680	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Dichlorodifluoromethane	ug/kg	18000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Ethylbenzene	ug/kg	5400	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Isopropylbenzene	ug/kg	210000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
m,p-Xylene	ug/kg		5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Methylacetate	ug/kg	7800000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Methylcyclohexane	ug/kg		5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Methylenechloride	ug/kg	11000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB17-CW	RVSB17-NS	RVSB17-SS	RVSB17-WA	RVSB19-CW	RVSB19-NS	RVSB19-SS
Methyltert-butylether	ug/kg	43000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
o-Xylene	ug/kg	380000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Styrene	ug/kg	630000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Tetrachloroethene	ug/kg	550	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Toluene	ug/kg	500000	1.1 B	1 B	2.5 B	1.8 B	1.8 B	3.1 B	4.9 B
trans-1,2-Dichloroethene	ug/kg	15000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UL
trans-1,3-Dichloropropene	ug/kg		5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 UL
Trichloroethene	ug/kg	2800	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Trichlorofluoromethane	ug/kg	79000	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U
Vinylchloride	ug/kg	60	5.4 U	6.2 U	8.9 U	9.8 U	6.4 U	6.3 U	26 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

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SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB24-CW	RVSB24-SS	RVSB24-WA	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01
1,1,1-Trichloroethane	ug/kg	870000	12 U	13 U	11 U	8 U	44 UL	8.1 UL
1,1,2,2-Tetrachloroethane	ug/kg	560	12 U	13 U	11 U	8 U	44 UL	8.1 UL
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	12 U	13 U	11 U	8 U	44 UL	8.1 UL
1,1,2-Trichloroethane	ug/kg	1100	12 U	13 U	11 U	8 U	44 U	8.1 UL
1,1-Dichloroethane	ug/kg	3300	12 U	13 U	11 U	8 U	44 U	8.1 UL
1,1-Dichloroethene	ug/kg	24000	12 U	13 U	11 U	1.1 B	5.5 B	8.1 U
1,2,3-Trichlorobenzene	ug/kg	4900	12 UL	13 U	11 U	8 U	44 U	8.1 UL
1,2,4-Trichlorobenzene	ug/kg	22000	12 UL	13 U	11 U	8 U	44 U	8.1 UL
1,2-Dibromo-3-chloropropane	ug/kg	5.4	12 U	13 U	11 U	8 U	44 UL	8.1 UL
1,2-Dibromoethane	ug/kg	34	12 U	13 U	11 U	8 U	44 UL	8.1 UL
1,2-Dichlorobenzene	ug/kg	190000	12 UL	13 U	11 U	8 U	44 U	8.1 UL
1,2-Dichloroethane	ug/kg	430	12 U	13 U	11 U	8 U	44 UL	8.1 UL
1,2-Dichloropropane	ug/kg	890	12 U	13 U	11 U	8 U	44 U	8.1 UL
1,3-Dichlorobenzene	ug/kg		12 UL	13 U	11 U	8 U	44 U	8.1 UL
1,4-Dichlorobenzene	ug/kg	2400	12 UL	13 U	11 U	8 U	44 U	8.1 UL
1,4-Dioxane	ug/kg	44000	R	R	R	160 UL	890 UL	160 UL
2-Butanone	ug/kg	2800000	24 U	26 U	22 U	32	57 J	32
2-Hexanone	ug/kg	21000	23 B	22 B	18 B	9.8 B	65 B	4.9 B
4-Methyl-2-pentanone	ug/kg	530000	24 U	26 U	22 U	16 U	89 U	16 U
Acetone	ug/kg	6100000	24 U	26 U	22 U	210	87 B	25 B
Benzene	ug/kg	1100	12 U	13 U	11 U	8 U	44 U	8.1 UL
Bromochloromethane	ug/kg		12 U	13 U	11 U	8 U	44 U	8.1 UL
Bromodichloromethane	ug/kg	270	12 U	13 U	11 U	8 U	44 U	8.1 UL
Bromoform	ug/kg	61000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Bromomethane	ug/kg	730	12 U	13 U	11 U	8 U	44 U	8.1 UL
CarbonDisulfide	ug/kg	82000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Carbontetrachloride	ug/kg	250	12 U	13 U	11 U	8 U	44 UL	8.1 UL
Chlorobenzene	ug/kg	29000	12 UL	13 U	11 U	8 U	44 U	8.1 UL
Chloroethane	ug/kg	1500000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Chloroform	ug/kg	290	12 U	13 U	11 U	8 U	44 U	8.1 UL
Chloromethane	ug/kg	12000	12 U	13 U	11 U	8 U	44 U	8.1 UL
cis-1,2-Dichloroethene	ug/kg	78000	12 U	13 U	11 U	8 U	44 U	8.1 U
cis-1,3-Dichloropropene	ug/kg		12 U	13 U	11 U	8 U	44 U	8.1 UL
Cyclohexane	ug/kg	700000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Dibromochloromethane	ug/kg	680	12 U	13 U	11 U	8 U	44 U	8.1 UL
Dichlorodifluoromethane	ug/kg	18000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Ethylbenzene	ug/kg	5400	12 U	13 U	11 U	8 U	44 U	8.1 UL
Isopropylbenzene	ug/kg	210000	12 U	13 U	11 U	8 U	44 U	8.1 UL
m,p-Xylene	ug/kg		12 U	13 U	11 U	8 U	44 U	8.1 UL
Methylacetate	ug/kg	7800000	12 U	13 U	11 U	8 U	44 UL	8.1 UL
Methylcyclohexane	ug/kg		12 U	13 U	11 U	8 U	44 U	8.1 UL
Methylenechloride	ug/kg	11000	12 U	13 U	11 U	8 U	4.7 B	8.1 UL

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB24-CW	RVSB24-SS	RVSB24-WA	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01
Methyltert-butylether	ug/kg	43000	12 U	13 U	11 U	8 U	44 UL	8.1 UL
o-Xylene	ug/kg	380000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Styrene	ug/kg	630000	12 U	13 U	11 U	8 U	44 U	8.1 UL
Tetrachloroethene	ug/kg	550	12 U	13 U	11 U	8 U	44 U	8.1 UL
Toluene	ug/kg	500000	12 U	1.4 J	1.2 J	0.83 B	22 B	8.1 UL
trans-1,2-Dichloroethene	ug/kg	15000	12 U	13 U	11 U	8 U	44 U	8.1 U
trans-1,3-Dichloropropene	ug/kg		12 U	13 U	11 U	8 U	44 U	8.1 UL
Trichloroethene	ug/kg	2800	12 U	13 U	11 U	8 U	44 U	8.1 UL
Trichlorofluoromethane	ug/kg	79000	12 U	13 U	11 U	8 U	44 UL	8.1 UL
Vinylchloride	ug/kg	60	12 U	13 U	11 U	8 U	44 U	8.1 UL

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01
1,1,1-Trichloroethane	ug/kg	870000	69 U	46 U	37 U	16 U	62 U	72 U
1,1,2,2-Tetrachloroethane	ug/kg	560	69 U	46 U	37 U	16 U	62 U	72 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	69 U	46 U	37 U	16 U	62 U	72 U
1,1,2-Trichloroethane	ug/kg	1100	69 U	46 U	37 U	16 U	62 U	72 U
1,1-Dichloroethane	ug/kg	3300	69 U	46 U	37 U	16 U	62 U	72 U
1,1-Dichloroethene	ug/kg	24000	8.6 B	46 U	4.6 B	1.9 J	62 U	7.8 J
1,2,3-Trichlorobenzene	ug/kg	4900	69 U	46 U	37 UJ	16 UL	62 UL	72 U
1,2,4-Trichlorobenzene	ug/kg	22000	69 U	46 U	37 UJ	16 UL	62 UL	72 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	69 U	46 U	37 UJ	16 U	62 U	72 U
1,2-Dibromoethane	ug/kg	34	69 U	46 U	37 U	16 U	62 U	72 U
1,2-Dichlorobenzene	ug/kg	190000	69 U	46 U	37 UJ	16 UL	62 UL	72 U
1,2-Dichloroethane	ug/kg	430	69 U	46 U	37 U	16 U	62 U	72 U
1,2-Dichloropropane	ug/kg	890	69 U	46 U	37 U	16 U	62 U	72 U
1,3-Dichlorobenzene	ug/kg		69 U	46 U	37 UJ	16 UL	62 UL	72 U
1,4-Dichlorobenzene	ug/kg	2400	69 U	46 U	37 UJ	16 UL	62 UL	72 U
1,4-Dioxane	ug/kg	44000	1400 UL	920 UL	740 UL	320 UL	1200 UL	1400 UL
2-Butanone	ug/kg	2800000	150	88 J	90	170	210	150
2-Hexanone	ug/kg	21000	63 B	39 B	38 B	22 B	66 B	61 B
4-Methyl-2-pentanone	ug/kg	530000	140 U	92 U	74 U	32 U	44 B	140 U
Acetone	ug/kg	6100000	300 B	110 B	160 B	370	990	210 B
Benzene	ug/kg	1100	69 U	46 U	37 U	16 U	62 U	72 U
Bromochloromethane	ug/kg		69 U	46 U	37 U	16 U	62 U	72 U
Bromodichloromethane	ug/kg	270	69 U	46 U	37 U	16 U	62 U	72 U
Bromoform	ug/kg	61000	69 U	46 U	37 UJ	16 U	62 U	72 U
Bromomethane	ug/kg	730	69 U	46 U	37 U	16 U	62 U	72 U
CarbonDisulfide	ug/kg	82000	17 J	8.9 J	12 J	16 U	32 J	22 J
Carbontetrachloride	ug/kg	250	69 U	46 U	37 U	16 U	62 U	72 U
Chlorobenzene	ug/kg	29000	69 U	46 U	37 U	16 UL	62 UL	72 U
Chloroethane	ug/kg	1500000	69 U	46 U	37 U	16 U	62 U	72 U
Chloroform	ug/kg	290	69 U	46 U	37 U	16 U	62 U	72 U
Chloromethane	ug/kg	12000	69 U	46 U	37 U	16 U	62 U	72 U
cis-1,2-Dichloroethene	ug/kg	78000	69 U	46 U	37 U	16 U	62 U	72 U
cis-1,3-Dichloropropene	ug/kg		69 U	46 U	37 U	16 U	62 U	72 U
Cyclohexane	ug/kg	700000	69 U	46 U	37 U	16 U	62 U	72 U
Dibromochloromethane	ug/kg	680	69 U	46 U	37 U	16 U	62 U	72 U
Dichlorodifluoromethane	ug/kg	18000	69 U	46 U	37 U	16 U	62 U	72 U
Ethylbenzene	ug/kg	5400	69 U	46 U	37 U	16 U	62 U	72 U
Isopropylbenzene	ug/kg	210000	69 U	46 U	37 U	16 U	62 U	72 U
m,p-Xylene	ug/kg		69 U	46 U	37 U	16 U	62 U	72 U
Methylacetate	ug/kg	7800000	69 U	46 U	37 U	16 U	62 U	72 U
Methylcyclohexane	ug/kg		69 U	46 U	37 U	16 U	62 U	72 U
Methylenechloride	ug/kg	11000	7.4 B	46 U	37 U	16 U	62 U	8 B

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01
Methyltert-butylether	ug/kg	43000	69 U	46 U	37 U	16 U	62 U	72 U
o-Xylene	ug/kg	380000	69 U	46 U	37 U	16 U	62 U	72 U
Styrene	ug/kg	630000	69 U	46 U	37 U	16 U	62 U	72 U
Tetrachloroethene	ug/kg	550	69 U	46 U	37 U	16 U	62 U	72 U
Toluene	ug/kg	500000	14 B	12 B	5.7 B	6.5 B	20 B	24 B
trans-1,2-Dichloroethene	ug/kg	15000	69 U	46 U	37 U	16 U	62 U	72 U
trans-1,3-Dichloropropene	ug/kg		69 U	46 U	37 U	16 U	62 U	72 U
Trichloroethene	ug/kg	2800	69 U	46 U	37 U	16 U	62 U	72 U
Trichlorofluoromethane	ug/kg	79000	69 U	46 U	37 U	16 U	62 U	72 U
Vinylchloride	ug/kg	60	69 U	46 U	37 U	16 U	62 U	72 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01
1,1,1-Trichloroethane	ug/kg	870000	270 U	110 UL	93 UL	51 U	12 U	62 U
1,1,2,2-Tetrachloroethane	ug/kg	560	270 U	110 U	93 UL	51 U	12 U	62 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	270 U	110 UL	93 UL	51 U	12 U	62 U
1,1,2-Trichloroethane	ug/kg	1100	270 U	110 U	93 UL	51 U	12 U	62 U
1,1-Dichloroethane	ug/kg	3300	270 U	110 U	93 UL	51 U	12 U	62 U
1,1-Dichloroethene	ug/kg	24000	37 B	13 B	93 U	51 U	12 U	62 U
1,2,3-Trichlorobenzene	ug/kg	4900	270 U	110 U	93 UL	51 U	12 UL	62 UJ
1,2,4-Trichlorobenzene	ug/kg	22000	270 U	110 U	93 UL	51 U	12 UL	62 UJ
1,2-Dibromo-3-chloropropane	ug/kg	5.4	270 U	110 U	93 UL	51 U	12 U	62 UJ
1,2-Dibromoethane	ug/kg	34	270 U	110 UL	93 UL	51 U	12 U	62 U
1,2-Dichlorobenzene	ug/kg	190000	270 U	110 U	93 UL	51 U	12 UL	62 UJ
1,2-Dichloroethane	ug/kg	430	270 U	110 UL	93 UL	51 U	12 U	62 U
1,2-Dichloropropane	ug/kg	890	270 U	110 U	93 UL	51 U	12 U	62 U
1,3-Dichlorobenzene	ug/kg		270 U	110 U	93 UL	51 U	12 UL	62 UJ
1,4-Dichlorobenzene	ug/kg	2400	270 U	110 U	93 UL	51 U	12 UL	62 UJ
1,4-Dioxane	ug/kg	44000	5500 UL	2200 UL	1900 UL	1000 UL	230 UL	1200 UL
2-Butanone	ug/kg	2800000	550 U	180 J	110 J	110	72	170
2-Hexanone	ug/kg	21000	310 B	88 B	45 B	55 B	16 B	82 B
4-Methyl-2-pentanone	ug/kg	530000	550 U	220 U	190 U	100 U	23 U	120 U
Acetone	ug/kg	6100000	550 U	410 B	250 B	230 B	130 B	250 B
Benzene	ug/kg	1100	270 U	110 U	93 UL	51 U	12 U	62 U
Bromochloromethane	ug/kg		270 U	110 U	93 UL	51 U	12 U	62 U
Bromodichloromethane	ug/kg	270	270 U	110 U	93 UL	51 U	12 U	62 U
Bromoform	ug/kg	61000	270 U	110 U	93 UL	51 U	12 U	62 UJ
Bromomethane	ug/kg	730	270 U	110 U	93 UL	51 U	12 U	62 U
CarbonDisulfide	ug/kg	82000	46 J	28 J	21 J	20 J	4.1 J	28 J
Carbontetrachloride	ug/kg	250	270 U	110 UL	93 UL	51 U	12 U	62 U
Chlorobenzene	ug/kg	29000	270 U	110 U	93 UL	51 U	12 UL	62 U
Chloroethane	ug/kg	1500000	270 U	110 U	93 UL	51 U	12 U	62 U
Chloroform	ug/kg	290	270 U	110 U	93 UL	51 U	12 U	62 U
Chloromethane	ug/kg	12000	270 U	110 U	93 UL	51 U	12 U	62 U
cis-1,2-Dichloroethene	ug/kg	78000	270 U	110 U	93 U	51 U	12 U	62 U
cis-1,3-Dichloropropene	ug/kg		270 U	110 U	93 UL	51 U	12 U	62 U
Cyclohexane	ug/kg	700000	270 U	110 U	93 UL	51 U	12 U	62 U
Dibromochloromethane	ug/kg	680	270 U	110 U	93 UL	51 U	12 U	62 U
Dichlorodifluoromethane	ug/kg	18000	270 U	110 U	93 UL	51 U	12 U	62 U
Ethylbenzene	ug/kg	5400	270 U	110 U	93 UL	51 U	12 U	62 U
Isopropylbenzene	ug/kg	210000	270 U	110 U	93 UL	51 U	12 U	62 U
m,p-Xylene	ug/kg		270 U	110 U	93 UL	51 U	12 U	62 U
Methylacetate	ug/kg	7800000	270 U	110 UL	93 UL	51 U	12 U	62 U
Methylcyclohexane	ug/kg		270 U	110 U	93 UL	51 U	12 U	62 U
Methylenechloride	ug/kg	11000	270 U	11 B	93 UL	8 B	1.6 B	62 U

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01
Methyltert-butylether	ug/kg	43000	270 U	110 UL	93 UL	51 U	12 U	62 U
o-Xylene	ug/kg	380000	270 U	110 U	93 UL	51 U	12 U	62 U
Styrene	ug/kg	630000	270 U	110 U	93 UL	51 U	12 U	62 U
Tetrachloroethene	ug/kg	550	270 U	110 U	93 UL	51 U	12 U	62 U
Toluene	ug/kg	500000	33 B	12 B	93 UL	18 B	4.1 B	14 B
trans-1,2-Dichloroethene	ug/kg	15000	270 U	110 U	93 U	51 U	12 U	62 U
trans-1,3-Dichloropropene	ug/kg		270 U	110 U	93 UL	51 U	12 U	62 U
Trichloroethene	ug/kg	2800	270 U	110 U	93 UL	51 U	12 U	62 U
Trichlorofluoromethane	ug/kg	79000	270 U	110 UL	93 UL	51 U	12 U	62 U
Vinylchloride	ug/kg	60	270 U	110 U	93 UL	51 U	12 U	62 U

Notes:

ug/kg - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).

AP – Asbestos Pile

CK – Creek

FP – Floodplain

PK – Park

OW – Other side of the Wissahickon

RV – Reservoir

SB – Soil Boring

PZ – Piezometer

SD – Sediment

SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD15-RI-01
1,1,1-Trichloroethane	ug/kg	870000	68 U
1,1,2,2-Tetrachloroethane	ug/kg	560	68 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	4300000	68 U
1,1,2-Trichloroethane	ug/kg	1100	68 U
1,1-Dichloroethane	ug/kg	3300	68 U
1,1-Dichloroethene	ug/kg	24000	6.9 J
1,2,3-Trichlorobenzene	ug/kg	4900	68 U
1,2,4-Trichlorobenzene	ug/kg	22000	68 U
1,2-Dibromo-3-chloropropane	ug/kg	5.4	68 U
1,2-Dibromoethane	ug/kg	34	68 U
1,2-Dichlorobenzene	ug/kg	190000	68 U
1,2-Dichloroethane	ug/kg	430	68 U
1,2-Dichloropropane	ug/kg	890	68 U
1,3-Dichlorobenzene	ug/kg		68 U
1,4-Dichlorobenzene	ug/kg	2400	68 U
1,4-Dioxane	ug/kg	44000	1400 UL
2-Butanone	ug/kg	2800000	190
2-Hexanone	ug/kg	21000	60 B
4-Methyl-2-pentanone	ug/kg	530000	140 U
Acetone	ug/kg	6100000	140 U
Benzene	ug/kg	1100	68 U
Bromochloromethane	ug/kg		68 U
Bromodichloromethane	ug/kg	270	68 U
Bromoform	ug/kg	61000	68 U
Bromomethane	ug/kg	730	68 U
CarbonDisulfide	ug/kg	82000	26 J
Carbontetrachloride	ug/kg	250	68 U
Chlorobenzene	ug/kg	29000	68 U
Chloroethane	ug/kg	1500000	68 U
Chloroform	ug/kg	290	68 U
Chloromethane	ug/kg	12000	68 U
cis-1,2-Dichloroethene	ug/kg	78000	68 U
cis-1,3-Dichloropropene	ug/kg		68 U
Cyclohexane	ug/kg	700000	68 U
Dibromochloromethane	ug/kg	680	68 U
Dichlorodifluoromethane	ug/kg	18000	68 U
Ethylbenzene	ug/kg	5400	68 U
Isopropylbenzene	ug/kg	210000	68 U
m,p-Xylene	ug/kg		68 U
Methylacetate	ug/kg	7800000	68 U
Methylcyclohexane	ug/kg		68 U
Methylenechloride	ug/kg	11000	9.7 B

Table C-2
Volatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD15-RI-01
Methyltert-butylether	ug/kg	43000	68 U
o-Xylene	ug/kg	380000	68 U
Styrene	ug/kg	630000	68 U
Tetrachloroethene	ug/kg	550	68 U
Toluene	ug/kg	500000	7.3 B
trans-1,2-Dichloroethene	ug/kg	15000	68 U
trans-1,3-Dichloropropene	ug/kg		68 U
Trichloroethene	ug/kg	2800	68 U
Trichlorofluoromethane	ug/kg	79000	68 U
Vinylchloride	ug/kg	60	68 U

Notes:
ug/kg - microgram per kilogram
Blank cells indicate analyte not analyzed for
RSLs = EPA Region 3 Risk Based Concentration Values for Residential Soil, provided by ORNL (Updated December 2009).
AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
OW – Other side of the Wissahickon
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment
SW – Surface Water
Data Qualifiers:
J - Analyte present. Reported value may not be accurate or precise.
B - Analyte not detected substantially above the level reported in laboratory or field blanks.
L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.
K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.
R - Rejected result. Analyte may or may not be present in sample.
U - Analyte not detected

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01	CKSW04-RI-01
1,1'-Biphenyl	UG/L	1800	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4,5-Tetrachlorobenzene	UG/L	11	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,2'-Oxybis(1-chloropropane)	UG/L	3.2	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,3,4,6-Tetrachlorophenol	UG/L	1100	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-Trichlorophenol	UG/L	3700	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	UG/L	61	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	UG/L	110	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	UG/L	730	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	UG/L	73	50 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	UG/L	2.2	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	UG/L	37	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Chloronaphthalene	UG/L	2900	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	UG/L	180	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylnaphthalene	UG/L	150	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Methylphenol	UG/L	1800	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	UG/L	370	50 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3,3'-Dichlorobenzidine	UG/L	1.5	R	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	UG/L		50 U	9.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	UG/L	3.7	50 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloro-3-methylphenol	UG/L	3700	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chloroaniline	UG/L	3.4	R	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methylphenol	UG/L	180	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	UG/L	34	50 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	UG/L		50 U	20 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	UG/L	2200	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acenaphthylene	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetophenone	UG/L	3700	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Anthracene	UG/L	11000	25 U	10 UL	5 U	5 U	5 UL	5 U	5 U	5 U	5 U
Atrazine	UG/L	2.9	25 U	10 UL	5 U	5 U	5 UL	5 U	5 U	5 U	5 U
Benzaldehyde	UG/L	3700	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzo(a)anthracene	UG/L	0.29	25 U	10 UL	5 U	5 U	5 UL	5 U	5 U	5 U	5 U
Benzo(a)pyrene	UG/L	0.029	25 U	R	5 UL	5 UL	5 UL	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	UG/L	0.29	25 U	R	5 UL	5 UL	5 UL	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene	UG/L		25 U	R	5 UL	5 UL	5 UL	5 U	5 U	5 U	1.3 J
Benzo(k)fluoranthene	UG/L	2.9	25 U	R	5 UL	5 UL	5 UL	5 U	5 U	5 U	5 U
Bis(2-Chloroethoxy)methane	UG/L	110	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-Chloroethyl)ether	UG/L	0.12	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-ethylhexyl)phthalate	UG/L	48	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	UG/L	350	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01	CKSW04-RI-01
Caprolactam	UG/L	18000	25 U	10 U	5 U	3.6 J	9.9 J	5 U	5 U	5 U	5 U
Carbazole	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chrysene	UG/L	29	25 U	10 UL	5 U	5 U	5 UL	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene	UG/L	0.029	25 U	R	5 UL	5 UL	5 UL	5 U	5 U	5 U	1.1 J
Dibenzofuran	UG/L	37	2.6 J	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Diethylphthalate	UG/L	29000	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dimethylphthalate	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	UG/L	3700	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Di-n-octylphthalate	UG/L		25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Fluoranthene	UG/L	1500	5.1 J	10 UL	5 U	0.77 J	5 UL	5 U	5 U	5 U	5 U
Fluorene	UG/L	1500	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorobenzene	UG/L	0.42	25 U	10 UL	5 U	5 U	5 UL	5 U	5 U	5 U	5 U
Hexachlorobutadiene	UG/L	8.6	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	UG/L	220	R	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	UG/L	48	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	UG/L	0.29	25 U	R	5 UL	5 UL	5 UL	5 U	5 U	5 U	1.2 J
Isophorone	UG/L	710	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Naphthalene	UG/L	1.4	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	UG/L	1.2	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	UG/L	0.096	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitrosodiphenylamine	UG/L	140	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pentachlorophenol	UG/L	5.6	50 U	20 U	10 U	10 U	5.9 B	10 U	10 U	10 U	10 U
Phenanthrene	UG/L		11 J	10 UL	5 U	5 U	5 UL	5 U	5 U	5 U	5 U
Phenol	UG/L	11000	25 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Pyrene	UG/L	1100	4.5 J	10 UL	5 U	0.71 J	5 UL	5 U	5 U	5 U	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	CKSW05-RI-01	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01	FB-091119	FB-100120	PKPZ01-RI-01	PKPZ02D-RI-01
1,1'-Biphenyl	UG/L	1800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
1,2,4,5-Tetrachlorobenzene	UG/L	11	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,2'-Oxybis(1-chloropropane)	UG/L	3.2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,3,4,6-Tetrachlorophenol	UG/L	1100	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,4,5-Trichlorophenol	UG/L	3700	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,4,6-Trichlorophenol	UG/L	61	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,4-Dichlorophenol	UG/L	110	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,4-Dimethylphenol	UG/L	730	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,4-Dinitrophenol	UG/L	73	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
2,4-Dinitrotoluene	UG/L	2.2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2,6-Dinitrotoluene	UG/L	37	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2-Chloronaphthalene	UG/L	2900	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
2-Chlorophenol	UG/L	180	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2-Methylnaphthalene	UG/L	150	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
2-Methylphenol	UG/L	1800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
2-Nitroaniline	UG/L	370	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
2-Nitrophenol	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
3,3'-Dichlorobenzidine	UG/L	1.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	10 UL
3-Nitroaniline	UG/L		10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
4,6-Dinitro-2-methylphenol	UG/L	3.7	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
4-Bromophenyl-phenylether	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
4-Chloro-3-methylphenol	UG/L	3700	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
4-Chloroaniline	UG/L	3.4	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	10 UL
4-Chlorophenyl-phenylether	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
4-Methylphenol	UG/L	180	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
4-Nitroaniline	UG/L	34	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
4-Nitrophenol	UG/L		10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
Acenaphthene	UG/L	2200	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
Acenaphthylene	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
Acetophenone	UG/L	3700	5 U	0.8 B	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Anthracene	UG/L	11000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Atrazine	UG/L	2.9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Benzaldehyde	UG/L	3700	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
Benzo(a)anthracene	UG/L	0.29	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Benzo(a)pyrene	UG/L	0.029	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	R
Benzo(b)fluoranthene	UG/L	0.29	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	R
Benzo(g,h,i)perylene	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	R
Benzo(k)fluoranthene	UG/L	2.9	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	R
Bis(2-Chloroethoxy)methane	UG/L	110	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Bis(2-Chloroethyl)ether	UG/L	0.12	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Bis(2-ethylhexyl)phthalate	UG/L	48	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Butylbenzylphthalate	UG/L	350	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	CKSW05-RI-01	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01	FB-091119	FB-100120	PKPZ01-RI-01	PKPZ02D-RI-01
Caprolactam	UG/L	18000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Carbazole	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Chrysene	UG/L	29	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Dibenzo(a,h)anthracene	UG/L	0.029	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	R
Dibenzofuran	UG/L	37	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Diethylphthalate	UG/L	29000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Dimethylphthalate	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Di-n-butylphthalate	UG/L	3700	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Di-n-octylphthalate	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Fluoranthene	UG/L	1500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Fluorene	UG/L	1500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Hexachlorobenzene	UG/L	0.42	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Hexachlorobutadiene	UG/L	8.6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Hexachlorocyclopentadiene	UG/L	220	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	10 UL
Hexachloroethane	UG/L	48	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Indeno(1,2,3-cd)pyrene	UG/L	0.29	5 U	5 U	5 U	5 U	5 U	5 U	5 U	R	R
Isophorone	UG/L	710	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Naphthalene	UG/L	1.4	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
Nitrobenzene	UG/L	1.2	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
N-Nitroso-di-n-propylamine	UG/L	0.096	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
N-Nitrosodiphenylamine	UG/L	140	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	10 UL
Pentachlorophenol	UG/L	5.6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	20 UL
Phenanthrene	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R
Phenol	UG/L	11000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	R
Pyrene	UG/L	1100	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 UL	R

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
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PZ – Piezometer
SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

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L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ02-RI-01	PKPZ03-RI-01	RB-091123	RB-091207	RB-100115	RB1-100120	RB2-100120	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01
1,1'-Biphenyl	UG/L	1800	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
1,2,4,5-Tetrachlorobenzene	UG/L	11	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2,2'-Oxybis(1-chloropropane)	UG/L	3.2	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2,3,4,6-Tetrachlorophenol	UG/L	1100	5 U	5 U	5.3 U	0.84 B	5 U	5 UL	5 UL	5 U	5 U	5 U
2,4,5-Trichlorophenol	UG/L	3700	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2,4,6-Trichlorophenol	UG/L	61	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2,4-Dichlorophenol	UG/L	110	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2,4-Dimethylphenol	UG/L	730	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	UG/L	73	10 U	10 U	11 U	10 U	10 U	10 U	10 UL	10 U	10 U	10 U
2,4-Dinitrotoluene	UG/L	2.2	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2,6-Dinitrotoluene	UG/L	37	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2-Chloronaphthalene	UG/L	2900	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2-Chlorophenol	UG/L	180	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2-Methylnaphthalene	UG/L	150	5 U	1.7 J	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
2-Methylphenol	UG/L	1800	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	UG/L	370	10 U	10 U	11 U	10 U	10 U	10 U	10 UL	10 U	10 U	10 U
2-Nitrophenol	UG/L		5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
3,3'-Dichlorobenzidine	UG/L	1.5	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	UG/L		10 U	10 U	11 U	10 U	10 U	10 U	10 UL	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	UG/L	3.7	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	UG/L		5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
4-Chloro-3-methylphenol	UG/L	3700	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
4-Chloroaniline	UG/L	3.4	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	UG/L		5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
4-Methylphenol	UG/L	180	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitroaniline	UG/L	34	10 U	10 U	11 U	10 U	10 U	10 U	10 UL	10 U	10 U	10 U
4-Nitrophenol	UG/L		10 U	10 U	11 U	10 U	10 U	10 U	10 UL	10 U	10 U	10 U
Acenaphthene	UG/L	2200	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Acenaphthylene	UG/L		5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Acetophenone	UG/L	3700	5 U	5 U	5.3 U	5 U	0.76 B	0.54 J	5 UL	5 U	5 U	5 U
Anthracene	UG/L	11000	5 U	5 U	5.3 U	2.9 B	5 U	5 UL	5 UL	5 U	5 U	5 U
Atrazine	UG/L	2.9	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Benzaldehyde	UG/L	3700	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Benzo(a)anthracene	UG/L	0.29	5 UL	5 U	5.3 U	2.9 B	5 U	5 UL	5 UL	5 U	5 U	5 U
Benzo(a)pyrene	UG/L	0.029	5 UL	5 U	5.3 U	1 J	5 U	5 UL	5 UL	5 U	5 U	5 UL
Benzo(b)fluoranthene	UG/L	0.29	5 UL	5 U	5.3 U	1.6 B	5 U	5 UL	5 UL	5 U	5 U	5 UL
Benzo(g,h,i)perylene	UG/L		5 UL	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 UL
Benzo(k)fluoranthene	UG/L	2.9	5 UL	5 U	5.3 U	0.64 J	5 U	5 UL	5 UL	5 U	5 U	5 UL
Bis(2-Chloroethoxy)methane	UG/L	110	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Bis(2-Chloroethyl)ether	UG/L	0.12	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Bis(2-ethylhexyl)phthalate	UG/L	48	5 U	5 U	1.3 J	5 U	5 U	5 UL	5 UL	5 U	0.52 J	5 U
Butylbenzylphthalate	UG/L	350	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ02-RI-01	PKPZ03-RI-01	RB-091123	RB-091207	RB-100115	RB1-100120	RB2-100120	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01
Caprolactam	UG/L	18000	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Carbazole	UG/L		5 U	0.58 J	5.3 U	2.5 B	5 U	5 UL	5 UL	5 U	5 U	5 U
Chrysene	UG/L	29	5 UL	5 U	5.3 U	2.6 B	5 U	5 UL	5 UL	5 U	5 U	5 U
Dibenzo(a,h)anthracene	UG/L	0.029	5 UL	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 UL
Dibenzofuran	UG/L	37	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Diethylphthalate	UG/L	29000	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Dimethylphthalate	UG/L		5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Di-n-butylphthalate	UG/L	3700	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Di-n-octylphthalate	UG/L		5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Fluoranthene	UG/L	1500	5 UL	5 U	5.3 U	19 B	5 U	5 UL	5 UL	5 U	5 U	5 U
Fluorene	UG/L	1500	5 U	5 U	5.3 U	0.73 J	5 U	5 UL	5 UL	5 U	5 U	5 U
Hexachlorobenzene	UG/L	0.42	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Hexachlorobutadiene	UG/L	8.6	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Hexachlorocyclopentadiene	UG/L	220	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	UG/L	48	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	UG/L	0.29	5 UL	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 UL
Isophorone	UG/L	710	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Naphthalene	UG/L	1.4	5 U	2.1 J	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Nitrobenzene	UG/L	1.2	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	UG/L	0.096	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
N-Nitrosodiphenylamine	UG/L	140	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Pentachlorophenol	UG/L	5.6	10 U	10 U	11 U	80 B	10 U	10 UL	10 UL	10 U	10 U	10 U
Phenanthrene	UG/L		5 U	5 U	5.3 U	23 B	5 U	5 UL	5 UL	5 U	5 U	5 U
Phenol	UG/L	11000	5 U	5 U	5.3 U	5 U	5 U	5 UL	5 UL	5 U	5 U	5 U
Pyrene	UG/L	1100	5 UL	5 U	5.3 U	13 B	5 U	5 UL	5 UL	5 U	5 U	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01
1,1'-Biphenyl	UG/L	1800	5 U	5 U	5 U
1,2,4,5-Tetrachlorobenzene	UG/L	11	5 U	5 U	5 U
2,2'-Oxybis(1-chloropropane)	UG/L	3.2	5 U	5 U	5 U
2,3,4,6-Tetrachlorophenol	UG/L	1100	5 U	5 U	5 U
2,4,5-Trichlorophenol	UG/L	3700	5 U	5 U	5 U
2,4,6-Trichlorophenol	UG/L	61	5 U	5 U	5 U
2,4-Dichlorophenol	UG/L	110	5 U	5 U	5 U
2,4-Dimethylphenol	UG/L	730	5 U	5 U	5 U
2,4-Dinitrophenol	UG/L	73	10 U	10 U	10 U
2,4-Dinitrotoluene	UG/L	2.2	5 U	5 U	5 U
2,6-Dinitrotoluene	UG/L	37	5 U	5 U	5 U
2-Chloronaphthalene	UG/L	2900	5 U	5 UL	5 U
2-Chlorophenol	UG/L	180	5 U	5 U	5 U
2-Methylnaphthalene	UG/L	150	5 U	5 UL	5 U
2-Methylphenol	UG/L	1800	5 U	5 U	5 U
2-Nitroaniline	UG/L	370	10 U	10 U	10 U
2-Nitrophenol	UG/L		5 U	5 U	5 U
3,3'-Dichlorobenzidine	UG/L	1.5	5 U	R	5 U
3-Nitroaniline	UG/L		10 U	10 U	10 U
4,6-Dinitro-2-methylphenol	UG/L	3.7	10 U	10 U	10 U
4-Bromophenyl-phenylether	UG/L		5 U	5 U	5 U
4-Chloro-3-methylphenol	UG/L	3700	5 U	5 U	5 U
4-Chloroaniline	UG/L	3.4	5 U	R	5 U
4-Chlorophenyl-phenylether	UG/L		5 U	5 U	5 U
4-Methylphenol	UG/L	180	5 U	5 U	5 U
4-Nitroaniline	UG/L	34	10 U	10 U	10 U
4-Nitrophenol	UG/L		10 U	10 U	10 U
Acenaphthene	UG/L	2200	5 U	5 UL	5 U
Acenaphthylene	UG/L		5 U	5 UL	5 U
Acetophenone	UG/L	3700	5 U	5 U	5 U
Anthracene	UG/L	11000	5 U	5 UL	5 U
Atrazine	UG/L	2.9	5 U	5 UL	5 U
Benzaldehyde	UG/L	3700	5 U	5 UL	5 U
Benzo(a)anthracene	UG/L	0.29	5 U	5 UL	5 U
Benzo(a)pyrene	UG/L	0.029	5 U	5 UL	5 U
Benzo(b)fluoranthene	UG/L	0.29	5 U	5 UL	5 U
Benzo(g,h,i)perylene	UG/L		5 U	5 UL	5 U
Benzo(k)fluoranthene	UG/L	2.9	5 U	5 UL	5 U
Bis(2-Chloroethoxy)methane	UG/L	110	5 U	5 U	5 U
Bis(2-Chloroethyl)ether	UG/L	0.12	5 U	5 U	5 U
Bis(2-ethylhexyl)phthalate	UG/L	48	5 U	5 U	5 U
Butylbenzylphthalate	UG/L	350	5 U	5 U	5 U

Table C-3
Semivolatiles Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01
Caprolactam	UG/L	18000	5 U	5 U	5 U
Carbazole	UG/L		5 U	5 U	5 U
Chrysene	UG/L	29	5 U	5 UL	5 U
Dibenzo(a,h)anthracene	UG/L	0.029	5 U	5 UL	5 U
Dibenzofuran	UG/L	37	5 U	5 U	5 U
Diethylphthalate	UG/L	29000	5 U	5 U	5 U
Dimethylphthalate	UG/L		5 U	5 U	5 U
Di-n-butylphthalate	UG/L	3700	5 U	5 U	5 U
Di-n-octylphthalate	UG/L		5 U	5 U	5 U
Fluoranthene	UG/L	1500	5 U	5 UL	5 U
Fluorene	UG/L	1500	5 U	5 U	5 U
Hexachlorobenzene	UG/L	0.42	5 U	5 UL	5 U
Hexachlorobutadiene	UG/L	8.6	5 U	5 U	5 U
Hexachlorocyclopentadiene	UG/L	220	5 U	R	5 U
Hexachloroethane	UG/L	48	5 U	5 U	5 U
Indeno(1,2,3-cd)pyrene	UG/L	0.29	5 U	5 UL	5 U
Isophorone	UG/L	710	5 U	5 U	5 U
Naphthalene	UG/L	1.4	5 U	5 UL	5 U
Nitrobenzene	UG/L	1.2	5 U	5 U	5 U
N-Nitroso-di-n-propylamine	UG/L	0.096	5 U	5 U	5 U
N-Nitrosodiphenylamine	UG/L	140	5 U	5 U	5 U
Pentachlorophenol	UG/L	5.6	10 U	10 U	10 U
Phenanthrene	UG/L		5 U	5 UL	5 U
Phenol	UG/L	11000	5 U	5 UL	5 U
Pyrene	UG/L	1100	5 U	5 UL	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SW – Surface Water

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS	APSB08131617-WA	APSB09101112-CW
1,1'-Biphenyl	ug/kg	390000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
2,4,5-Trichlorophenol	ug/kg	610000	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
2,4,6-Trichlorophenol	ug/kg	44000	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
2,4-Dichlorophenol	ug/kg	18000	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
2,4-Dimethylphenol	ug/kg	120000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2,4-Dinitrophenol	ug/kg	12000	760 U	420 U	490 U	780 U	420 U	1400 U	1500 U
2,4-Dinitrotoluene	ug/kg	1600	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2,6-Dinitrotoluene	ug/kg	6100	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2-Chloronaphthalene	ug/kg	630000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2-Chlorophenol	ug/kg	39000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2-Methylnaphthalene	ug/kg	31000	85 J	220 U	38 J	400 U	220 U	270 J	800 U
2-Methylphenol	ug/kg	310000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
2-Nitroaniline	ug/kg	61000	760 U	420 U	490 U	780 U	420 U	1400 U	1500 U
2-Nitrophenol	ug/kg		390 U	220 U	250 U	400 U	220 U	710 UL	800 U
3,3'-Dichlorobenzidine	ug/kg	1100	390 U	220 U	250 U	400 U	220 U	710 U	800 U
3-Nitroaniline	ug/kg		760 U	420 U	490 U	780 U	420 U	1400 U	1500 U
4,6-Dinitro-2-methylphenol	ug/kg	610	760 U	420 U	490 U	780 U	420 U	1400 U	1500 U
4-Bromophenyl-phenylether	ug/kg		390 U	220 U	250 U	400 U	220 U	710 U	800 U
4-Chloro-3-methylphenol	ug/kg	610000	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
4-Chloroaniline	ug/kg	2400	390 U	220 U	250 U	400 U	220 U	710 U	800 U
4-Chlorophenyl-phenylether	ug/kg		390 U	220 U	250 U	400 U	220 U	710 U	800 U
4-Methylphenol	ug/kg	31000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
4-Nitroaniline	ug/kg	24000	760 U	420 U	490 U	780 U	420 U	1400 U	1500 U
4-Nitrophenol	ug/kg		760 U	420 U	490 U	780 U	420 U	1400 U	1500 U
Acenaphthene	ug/kg	340000	550	220 U	43 J	400 U	220 U	710 U	530 J
Acenaphthylene	ug/kg		140 J	220 U	250 U	400 U	220 U	710 U	800 U
Acetophenone	ug/kg	780000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Anthracene	ug/kg	1700000	1900	220 U	140 J	96 J	31 J	710 U	2300
Atrazine	ug/kg	2100	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Benzaldehyde	ug/kg	780000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Benzo(a)anthracene	ug/kg	150	4100 J	54 J	630	550	42 J	710 U	4900
Benzo(a)pyrene	ug/kg	15	4800	45 J	400	560	38 J	710 U	3900
Benzo(b)fluoranthene	ug/kg	150	4800 J	51 J	830	780	43 J	710 U	5000
Benzo(g,h,i)perylene	ug/kg		1700 J	39 J	240 J	230 J	220 U	710 U	1200
Benzo(k)fluoranthene	ug/kg	1500	2700	23 J	300	330 J	220 U	710 U	2000
Bis(2-Chloroethoxy)methane	ug/kg	18000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Bis(2-Chloroethyl)ether	ug/kg	210	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	77 J	33 J	73 J	41 J	220 U	710 U	91 J
Butylbenzylphthalate	ug/kg	260000	110 J	220 U	250 U	48 J	220 U	710 U	800 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS	APSB08131617-WA	APSB09101112-CW
Caprolactam	ug/kg	3100000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Carbazole	ug/kg		360 J	220 U	250 U	400 U	220 U	710 U	210 J
Chrysene	ug/kg	15000	3800 J	64 J	680	590	38 J	710 U	4500
Dibenzo(a,h)anthracene	ug/kg	15	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Dibenzofuran	ug/kg	7800	450	220 U	250 U	400 U	220 U	710 U	290 J
Diethylphthalate	ug/kg	4900000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Dimethylphthalate	ug/kg		390 U	220 U	250 U	400 U	220 U	710 U	800 U
Di-n-butylphthalate	ug/kg	610000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Di-n-octylphthalate	ug/kg		390 U	220 U	250 U	400 U	220 U	710 U	800 U
Fluoranthene	ug/kg	230000	8700 J	93 J	1100	1100	110 J	710 U	13000 J
Fluorene	ug/kg	230000	970	220 U	66 J	400 U	220 U	710 U	720 J
Hexachlorobenzene	ug/kg	300	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Hexachlorobutadiene	ug/kg	6200	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
Hexachlorocyclopentadiene	ug/kg	37000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Hexachloroethane	ug/kg	35000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	2200 J	31 J	290 J	280 J	22 J	710 U	1800
Isophorone	ug/kg	510000	390 U	220 U	250 U	400 U	220 U	710 UL	800 U
Naphthalene	ug/kg	3600	72 J	220 U	250 U	400 U	220 U	710 U	800 U
Nitrobenzene	ug/kg	4800	390 U	220 U	250 U	400 U	220 U	710 U	800 U
N-Nitroso-di-n-propylamine	ug/kg	69	390 U	220 U	250 U	400 U	220 U	710 U	800 U
N-Nitrosodiphenylamine	ug/kg	99000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Pentachlorophenol	ug/kg	3000	760 U	420 U	490 U	780 U	420 U	1400 UL	1500 U
Phenanthrene	ug/kg		5100	56 J	630	390 J	110 J	2500	6100
Phenol	ug/kg	1800000	390 U	220 U	250 U	400 U	220 U	710 U	800 U
Pyrene	ug/kg	170000	6400 J	86 J	870	850	93 J	710 U	9200

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

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U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB09101112-NS	APSB09101112-WA	APSB10-SS	APSB13-SS	APSB15212325D-NS	APSB15212325-NS	APSB15212325-WA	APSB20-21
1,1'-Biphenyl	ug/kg	390000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
2,3,4,6-Tetrachlorophenol	ug/kg	180000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,4,5-Trichlorophenol	ug/kg	610000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,4,6-Trichlorophenol	ug/kg	44000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,4-Dichlorophenol	ug/kg	18000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,4-Dimethylphenol	ug/kg	120000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,4-Dinitrophenol	ug/kg	12000	440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 U
2,4-Dinitrotoluene	ug/kg	1600	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2,6-Dinitrotoluene	ug/kg	6100	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2-Chloronaphthalene	ug/kg	630000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2-Chlorophenol	ug/kg	39000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
2-Methylnaphthalene	ug/kg	31000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
2-Methylphenol	ug/kg	310000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
2-Nitroaniline	ug/kg	61000	440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 U
2-Nitrophenol	ug/kg		230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
3,3'-Dichlorobenzidine	ug/kg	1100	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
3-Nitroaniline	ug/kg		440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 U
4,6-Dinitro-2-methylphenol	ug/kg	610	440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 UJ
4-Bromophenyl-phenylether	ug/kg		230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
4-Chloro-3-methylphenol	ug/kg	610000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
4-Chloroaniline	ug/kg	2400	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
4-Chlorophenyl-phenylether	ug/kg		230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
4-Methylphenol	ug/kg	31000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
4-Nitroaniline	ug/kg	24000	440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 U
4-Nitrophenol	ug/kg		440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 U
Acenaphthene	ug/kg	340000	230 U	450 U	120 J	370 U	210 U	210 U	1000 U	740 U
Acenaphthylene	ug/kg		230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Acetophenone	ug/kg	780000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Anthracene	ug/kg	1700000	230 U	450 U	520	370 U	210 U	210 U	200 J	740 UJ
Atrazine	ug/kg	2100	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Benzaldehyde	ug/kg	780000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Benzo(a)anthracene	ug/kg	150	230 U	62 J	1500	37 J	210 U	210 U	1000 U	31000 J
Benzo(a)pyrene	ug/kg	15	230 U	450 U	1300	48 J	210 U	210 U	1000 U	520 J
Benzo(b)fluoranthene	ug/kg	150	230 U	53 J	1700	68 J	210 U	210 U	1000 U	740 UJ
Benzo(g,h,i)perylene	ug/kg		230 U	450 U	560	370 U	210 U	210 U	430 J	740 UJ
Benzo(k)fluoranthene	ug/kg	1500	230 U	450 U	630	370 U	210 U	210 U	1000 U	740 UJ
Bis(2-Chloroethoxy)methane	ug/kg	18000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Bis(2-Chloroethyl)ether	ug/kg	210	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Bis(2-ethylhexyl)phthalate	ug/kg	35000	230 U	53 J	400 U	370 U	210 U	210 U	1000 U	740 UJ
Butylbenzylphthalate	ug/kg	260000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB09101112-NS	APSB09101112-WA	APSB10-SS	APSB13-SS	APSB15212325D-NS	APSB15212325-NS	APSB15212325-WA	APSB20-21
Caprolactam	ug/kg	3100000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Carbazole	ug/kg		230 U	450 U	140 J	370 U	210 U	210 U	1000 U	740 UJ
Chrysene	ug/kg	15000	230 U	79 J	1400	53 J	210 U	210 U	1000 U	87000 J
Dibenzo(a,h)anthracene	ug/kg	15	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Dibenzofuran	ug/kg	7800	230 U	450 U	81 J	370 U	210 U	210 U	1000 U	740 U
Diethylphthalate	ug/kg	4900000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Dimethylphthalate	ug/kg		230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Di-n-butylphthalate	ug/kg	610000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Di-n-octylphthalate	ug/kg		230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Fluoranthene	ug/kg	230000	22 J	91 J	2900	97 J	210 U	210 U	1000 U	390 J
Fluorene	ug/kg	230000	230 U	450 U	210 J	370 U	210 U	210 U	1000 U	740 U
Hexachlorobenzene	ug/kg	300	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Hexachlorobutadiene	ug/kg	6200	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Hexachlorocyclopentadiene	ug/kg	37000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Hexachloroethane	ug/kg	35000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Indeno(1,2,3-cd)pyrene	ug/kg	150	230 U	450 U	730	370 U	210 U	210 U	130 J	740 UJ
Isophorone	ug/kg	510000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Naphthalene	ug/kg	3600	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
Nitrobenzene	ug/kg	4800	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 U
N-Nitroso-di-n-propylamine	ug/kg	69	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
N-Nitrosodiphenylamine	ug/kg	99000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Pentachlorophenol	ug/kg	3000	440 U	880 U	770 U	720 U	410 U	420 U	2000 U	1400 UJ
Phenanthrene	ug/kg		230 U	450 U	1700	42 J	210 U	210 U	750 J	740 UJ
Phenol	ug/kg	1800000	230 U	450 U	400 U	370 U	210 U	210 U	1000 U	740 UJ
Pyrene	ug/kg	170000	230 U	74 J	2200	75 J	210 U	210 U	1000 U	740 UJ

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB21-SS	APSB24262728-NS	APSB24262728-WA	APSB24-SS	APSB303132-CW	APSB303132-WA	APSB3132-NS	APSB32D-SS	APSB32-SS
1,1'-Biphenyl	ug/kg	390000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,4,5-Trichlorophenol	ug/kg	610000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,4,6-Trichlorophenol	ug/kg	44000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,4-Dichlorophenol	ug/kg	18000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,4-Dimethylphenol	ug/kg	120000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,4-Dinitrophenol	ug/kg	12000	790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
2,4-Dinitrotoluene	ug/kg	1600	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2,6-Dinitrotoluene	ug/kg	6100	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2-Chloronaphthalene	ug/kg	630000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2-Chlorophenol	ug/kg	39000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2-Methylnaphthalene	ug/kg	31000	400 U	210 U	390 U	38 J	930 U	3400 U	220 U	1000 U	500 U
2-Methylphenol	ug/kg	310000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
2-Nitroaniline	ug/kg	61000	790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
2-Nitrophenol	ug/kg		400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
3,3'-Dichlorobenzidine	ug/kg	1100	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
3-Nitroaniline	ug/kg		790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
4,6-Dinitro-2-methylphenol	ug/kg	610	790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
4-Bromophenyl-phenylether	ug/kg		400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 UL
4-Chloro-3-methylphenol	ug/kg	610000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
4-Chloroaniline	ug/kg	2400	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
4-Chlorophenyl-phenylether	ug/kg		400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 UL
4-Methylphenol	ug/kg	31000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
4-Nitroaniline	ug/kg	24000	790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
4-Nitrophenol	ug/kg		790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
Acenaphthene	ug/kg	340000	400 U	210 U	390 U	260	930 U	3400 U	220 U	1000 U	500 U
Acenaphthylene	ug/kg		400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Acetophenone	ug/kg	780000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Anthracene	ug/kg	1700000	400 U	210 U	390 U	380	930 U	3400 U	220 U	1000 U	500 U
Atrazine	ug/kg	2100	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Benzaldehyde	ug/kg	780000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Benzo(a)anthracene	ug/kg	150	400 UL	210 U	49 J	1000	250 J	3400 U	220 U	240 J	290 J
Benzo(a)pyrene	ug/kg	15	400 UL	210 U	390 U	820	930 U	3400 U	220 U	280 J	290 J
Benzo(b)fluoranthene	ug/kg	150	52 J	210 U	390 U	1100	440 J	3400 U	220 U	1000 U	450 J
Benzo(g,h,i)perylene	ug/kg		400 UL	210 U	390 U	290	930 U	3400 U	220 U	1000 U	500 U
Benzo(k)fluoranthene	ug/kg	1500	400 UL	210 U	390 U	450	200 J	3400 U	220 U	1000 U	180 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Bis(2-Chloroethyl)ether	ug/kg	210	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	400 U	210 U	44 J	48 J	94 J	3400 U	220 U	1000 U	500 U
Butylbenzylphthalate	ug/kg	260000	400 U	210 U	390 U	22 J	110 J	3400 U	220 U	120 J	80 J

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB21-SS	APSB24262728-NS	APSB24262728-WA	APSB24-SS	APSB303132-CW	APSB303132-WA	APSB3132-NS	APSB32D-SS	APSB32-SS
Caprolactam	ug/kg	3100000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Carbazole	ug/kg		400 U	210 U	390 U	130 J	930 U	3400 U	220 U	1000 U	500 UL
Chrysene	ug/kg	15000	42 J	210 U	82 J	1000	340 J	3400 U	220 U	310 J	290 J
Dibenzo(a,h)anthracene	ug/kg	15	400 UL	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Dibenzofuran	ug/kg	7800	400 U	210 U	390 U	76 J	930 U	3400 U	220 U	1000 U	500 UL
Diethylphthalate	ug/kg	4900000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Dimethylphthalate	ug/kg		400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Di-n-butylphthalate	ug/kg	610000	400 U	22 J	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Di-n-octylphthalate	ug/kg		400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Fluoranthene	ug/kg	230000	78 J	210 U	41 J	2300	550 J	3400 U	220 U	460 J	480 J
Fluorene	ug/kg	230000	400 U	210 U	390 U	180 J	930 U	3400 U	220 U	1000 U	500 UL
Hexachlorobenzene	ug/kg	300	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Hexachlorobutadiene	ug/kg	6200	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Hexachlorocyclopentadiene	ug/kg	37000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Hexachloroethane	ug/kg	35000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	400 UL	210 U	390 U	430	230 J	3400 U	220 U	190 J	200 J
Isophorone	ug/kg	510000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Naphthalene	ug/kg	3600	400 U	22 J	390 U	27 J	930 U	3400 U	220 U	1000 U	500 U
Nitrobenzene	ug/kg	4800	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
N-Nitroso-di-n-propylamine	ug/kg	69	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
N-Nitrosodiphenylamine	ug/kg	99000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Pentachlorophenol	ug/kg	3000	790 U	420 U	760 U	430 U	1800 U	6500 U	420 U	2000 U	970 U
Phenanthrene	ug/kg		42 J	210 U	65 J	1500	930 U	3400 U	220 U	1000 U	190 J
Phenol	ug/kg	1800000	400 U	210 U	390 U	220 U	930 U	3400 U	220 U	1000 U	500 U
Pyrene	ug/kg	170000	58 J	210 U	100 J	1800	370 J	3400 U	220 U	360 J	360 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

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Data Qualifiers:

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R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP01-D	CKFP01-S	CKFP02-D	CKFP02-S	CKFP03-D	CKFP03-S	CKFP04-D	CKFP04-S	CKFP05-D	CKFP05D-D	CKFP05-S	CKFP06-D
1,1'-Biphenyl	ug/kg	390000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,3,4,6-Tetrachlorophenol	ug/kg	180000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,4,5-Trichlorophenol	ug/kg	610000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,4,6-Trichlorophenol	ug/kg	44000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,4-Dichlorophenol	ug/kg	18000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,4-Dimethylphenol	ug/kg	120000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,4-Dinitrophenol	ug/kg	12000	770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
2,4-Dinitrotoluene	ug/kg	1600	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2,6-Dinitrotoluene	ug/kg	6100	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2-Chloronaphthalene	ug/kg	630000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2-Chlorophenol	ug/kg	39000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2-Methylnaphthalene	ug/kg	31000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	57 J
2-Methylphenol	ug/kg	310000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
2-Nitroaniline	ug/kg	61000	770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
2-Nitrophenol	ug/kg		400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
3,3'-Dichlorobenzidine	ug/kg	1100	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
3-Nitroaniline	ug/kg		770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
4,6-Dinitro-2-methylphenol	ug/kg	610	770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
4-Bromophenyl-phenylether	ug/kg		400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
4-Chloro-3-methylphenol	ug/kg	610000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
4-Chloroaniline	ug/kg	2400	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
4-Chlorophenyl-phenylether	ug/kg		400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
4-Methylphenol	ug/kg	31000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	460 J
4-Nitroaniline	ug/kg	24000	770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
4-Nitrophenol	ug/kg		770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
Acenaphthene	ug/kg	340000	400 U	790 U	530 U	74 J	940 U	520 U	390 J	96 J	69 J	62 J	40 J	340 J
Acenaphthylene	ug/kg		400 U	790 U	530 U	42 J	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	150 J
Acetophenone	ug/kg	780000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Anthracene	ug/kg	1700000	400 U	430 J	160 J	320	440 J	360 J	1500 J	400	180 J	130 J	110 J	1200 J
Atrazine	ug/kg	2100	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Benzaldehyde	ug/kg	780000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Benzo(a)anthracene	ug/kg	150	400 U	2000	950	2100 L	2000	1700	2900	1300	800	690	490	5500 J
Benzo(a)pyrene	ug/kg	15	400 U	1700	850	2300	1500	1500	2100	1100	780	680	460	5400 J
Benzo(b)fluoranthene	ug/kg	150	400 U	2800	1100	3500	2100	1900	2700	1600	930	810	540	4300 J
Benzo(g,h,i)perylene	ug/kg		400 U	790 U	530 U	280 U	820 J	740	990 J	550	280	220	150 J	1600 J
Benzo(k)fluoranthene	ug/kg	1500	400 U	810	490 J	970	810 J	860	1000 J	530	320	390	230	2900 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Bis(2-Chloroethyl)ether	ug/kg	210	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Bis(2-ethylhexyl)phthalate	ug/kg	35000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	75 J	31 J	220 J
Butylbenzylphthalate	ug/kg	260000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP01-D	CKFP01-S	CKFP02-D	CKFP02-S	CKFP03-D	CKFP03-S	CKFP04-D	CKFP04-S	CKFP05-D	CKFP05D-D	CKFP05-S	CKFP06-D
Caprolactam	ug/kg	3100000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Carbazole	ug/kg		400 U	330 J	72 J	170 J	290 J	220 J	590 J	240 J	95 J	88 J	58 J	620 J
Chrysene	ug/kg	15000	400 U	2000	850	2100 L	2000	1800	2700	1300	860	740	520	5800 J
Dibenzo(a,h)anthracene	ug/kg	15	400 U	400 J	250 J	400	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Dibenzofuran	ug/kg	7800	400 U	790 U	530 U	280 U	940 U	520 U	620 J	89 J	24 J	190 U	220 U	160 J
Diethylphthalate	ug/kg	4900000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Dimethylphthalate	ug/kg		400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Di-n-butylphthalate	ug/kg	610000	400 U	790 U	530 U	280 U	940 U	150 J	2000 U	390 U	210 U	190 U	220 U	400 UJ
Di-n-octylphthalate	ug/kg		400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Fluoranthene	ug/kg	230000	400 U	7000	2000	5400	4300	3900	6000	3500	1900	1300	1100	11000 J
Fluorene	ug/kg	230000	400 U	790 U	530 U	280 U	940 U	520 U	980 J	170 J	86 J	72 J	52 J	510 J
Hexachlorobenzene	ug/kg	300	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Hexachlorobutadiene	ug/kg	6200	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Hexachlorocyclopentadiene	ug/kg	37000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Hexachloroethane	ug/kg	35000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Indeno(1,2,3-cd)pyrene	ug/kg	150	400 U	980	460 J	1100	850 J	810	1000 J	570	390	340	250	2700 J
Isophorone	ug/kg	510000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Naphthalene	ug/kg	3600	400 U	790 U	530 U	280 U	940 U	520 U	490 J	390 U	210 U	190 U	220 U	55 J
Nitrobenzene	ug/kg	4800	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
N-Nitroso-di-n-propylamine	ug/kg	69	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
N-Nitrosodiphenylamine	ug/kg	99000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Pentachlorophenol	ug/kg	3000	770 U	1500 U	1000 U	540 U	1800 U	1000 U	4000 U	750 U	410 U	370 U	420 U	770 UJ
Phenanthrene	ug/kg		400 U	3800	1000	2800	2900	2300	6800	2300	1100	950	670	5500 J
Phenol	ug/kg	1800000	400 U	790 U	530 U	280 U	940 U	520 U	2000 U	390 U	210 U	190 U	220 U	400 UJ
Pyrene	ug/kg	170000	400 U	3700	1300	3900 L	3000	2900	4800	2300	1700	1400	980	11000 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
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SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP07-D	CKFP07-S	CKFP08-D	CKFP08-S	CKSB01-WA	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01
1,1'-Biphenyl	ug/kg	390000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,4,5-Trichlorophenol	ug/kg	610000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,4,6-Trichlorophenol	ug/kg	44000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,4-Dichlorophenol	ug/kg	18000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,4-Dimethylphenol	ug/kg	120000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,4-Dinitrophenol	ug/kg	12000	4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
2,4-Dinitrotoluene	ug/kg	1600	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2,6-Dinitrotoluene	ug/kg	6100	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2-Chloronaphthalene	ug/kg	630000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2-Chlorophenol	ug/kg	39000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2-Methylnaphthalene	ug/kg	31000	2100	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2-Methylphenol	ug/kg	310000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
2-Nitroaniline	ug/kg	61000	4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
2-Nitrophenol	ug/kg		2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
3,3'-Dichlorobenzidine	ug/kg	1100	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
3-Nitroaniline	ug/kg		4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
4,6-Dinitro-2-methylphenol	ug/kg	610	4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
4-Bromophenyl-phenylether	ug/kg		2000 U	470 U	210 U	210 UL	250 UL	180 U	170 U	210 U	220 U	230 U
4-Chloro-3-methylphenol	ug/kg	610000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
4-Chloroaniline	ug/kg	2400	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
4-Chlorophenyl-phenylether	ug/kg		2000 U	470 U	210 U	210 UL	250 UL	180 U	170 U	210 U	220 U	230 U
4-Methylphenol	ug/kg	31000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
4-Nitroaniline	ug/kg	24000	4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
4-Nitrophenol	ug/kg		4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
Acenaphthene	ug/kg	340000	2700	220 J	27 J	210 U	250 U	64 J	170 U	40 J	58 J	230 U
Acenaphthylene	ug/kg		2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Acetophenone	ug/kg	780000	2000 U	470 U	210 U	210 U	250 U	58 B	75 B	210 U	220 U	230 U
Anthracene	ug/kg	1700000	3100	440 J	86 J	52 J	250 U	210	44 J	120 J	170 J	52 J
Atrazine	ug/kg	2100	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Benzaldehyde	ug/kg	780000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Benzo(a)anthracene	ug/kg	150	7700	2600	420	300 L	33 J	730	170 J	460	710	250
Benzo(a)pyrene	ug/kg	15	5600	2600	390	220	250 U	540	150 J	400	650	240
Benzo(b)fluoranthene	ug/kg	150	7500	3800	470	310	250 U	470	170 J	580	810	320
Benzo(g,h,i)perylene	ug/kg		2300	470 U	150 J	210 U	250 U	93 J	46 J	130 J	260	100 J
Benzo(k)fluoranthene	ug/kg	1500	2800	1300	200 J	100 J	250 U	190	64 J	230	300	150 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Bis(2-Chloroethyl)ether	ug/kg	210	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	2000 U	470 U	35 B	210 U	250 U	180 U	170 U	36 B	220 U	31 B
Butylbenzylphthalate	ug/kg	260000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	27 J	220 U	230 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP07-D	CKFP07-S	CKFP08-D	CKFP08-S	CKSB01-WA	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01
Caprolactam	ug/kg	3100000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Carbazole	ug/kg		1800 J	220 J	52 J	210 UL	250 UL	180 U	170 U	120 J	100 J	30 J
Chrysene	ug/kg	15000	7200	2400	490	270 L	26 J	850	120 J	680	780	300
Dibenzo(a,h)anthracene	ug/kg	15	2000 U	620	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Dibenzofuran	ug/kg	7800	1200 J	470 U	210 U	210 UL	250 UL	180 U	170 U	25 J	34 J	230 U
Diethylphthalate	ug/kg	4900000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Dimethylphthalate	ug/kg		2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Di-n-butylphthalate	ug/kg	610000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Di-n-octylphthalate	ug/kg		2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Fluoranthene	ug/kg	230000	17000	5300	880	480 L	55 J	810	250	1400	1600	490
Fluorene	ug/kg	230000	1700 J	150 J	37 J	210 UL	250 UL	56 J	170 U	49 J	82 J	230 U
Hexachlorobenzene	ug/kg	300	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Hexachlorobutadiene	ug/kg	6200	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Hexachlorocyclopentadiene	ug/kg	37000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Hexachloroethane	ug/kg	35000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	2700	1200	250	140 J	250 U	150 J	69 J	220	350	130 J
Isophorone	ug/kg	510000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Naphthalene	ug/kg	3600	480 J	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Nitrobenzene	ug/kg	4800	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
N-Nitroso-di-n-propylamine	ug/kg	69	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
N-Nitrosodiphenylamine	ug/kg	99000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Pentachlorophenol	ug/kg	3000	4000 U	920 U	410 U	410 U	480 U	350 U	340 U	400 U	430 U	450 U
Phenanthrene	ug/kg		15000	3600	530	330	250 U	570	170 J	810	1100	320
Phenol	ug/kg	1800000	2000 U	470 U	210 U	210 U	250 U	180 U	170 U	210 U	220 U	230 U
Pyrene	ug/kg	170000	12000	4600	870 J	390 L	45 J	1900	260	1100	1300 J	450 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
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Data Qualifiers:

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U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01	OWSB01-SS	OWSB02-SS
1,1'-Biphenyl	ug/kg	390000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,4,5-Trichlorophenol	ug/kg	610000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,4,6-Trichlorophenol	ug/kg	44000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,4-Dichlorophenol	ug/kg	18000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,4-Dimethylphenol	ug/kg	120000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,4-Dinitrophenol	ug/kg	12000	440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
2,4-Dinitrotoluene	ug/kg	1600	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2,6-Dinitrotoluene	ug/kg	6100	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2-Chloronaphthalene	ug/kg	630000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2-Chlorophenol	ug/kg	39000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2-Methylnaphthalene	ug/kg	31000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2-Methylphenol	ug/kg	310000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
2-Nitroaniline	ug/kg	61000	440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
2-Nitrophenol	ug/kg		230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
3,3'-Dichlorobenzidine	ug/kg	1100	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
3-Nitroaniline	ug/kg		440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
4,6-Dinitro-2-methylphenol	ug/kg	610	440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
4-Bromophenyl-phenylether	ug/kg		230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 UL
4-Chloro-3-methylphenol	ug/kg	610000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
4-Chloroaniline	ug/kg	2400	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
4-Chlorophenyl-phenylether	ug/kg		230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 UL
4-Methylphenol	ug/kg	31000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
4-Nitroaniline	ug/kg	24000	440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
4-Nitrophenol	ug/kg		440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
Acenaphthene	ug/kg	340000	120 J	140 J	25 J	190 U	100 J	70 J	70 J	240 U	250 U
Acenaphthylene	ug/kg		230 U	25 J	190 U	190 U	26 J	210 U	390 U	240 U	250 U
Acetophenone	ug/kg	780000	230 U	250 U	190 U	45 B	260 U	210 U	79 B	240 U	250 U
Anthracene	ug/kg	1700000	330	320	150 J	190 U	310	200 J	260 J	240 U	44 J
Atrazine	ug/kg	2100	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Benzaldehyde	ug/kg	780000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Benzo(a)anthracene	ug/kg	150	1200	1100	750	79 J	1100	910	1000	120 J	230 J
Benzo(a)pyrene	ug/kg	15	990	950	640	84 J	1000	800	910	140 J	200 J
Benzo(b)fluoranthene	ug/kg	150	1300	1100	740	96 J	1300	1000	1100	160 J	210 J
Benzo(g,h,i)perylene	ug/kg		420	360	260	37 J	360	350	310 J	55 J	250 UL
Benzo(k)fluoranthene	ug/kg	1500	500	480	300	54 J	540	390	440	71 J	110 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Bis(2-Chloroethyl)ether	ug/kg	210	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	65 B	250 U	26 B	190 U	180 B	100 B	85 B	35 B	250 U
Butylbenzylphthalate	ug/kg	260000	230 U	250 U	190 U	190 U	26 J	42 J	390 U	240 U	250 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01	OWSB01-SS	OWSB02-SS
Caprolactam	ug/kg	3100000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Carbazole	ug/kg		230	190 J	45 J	190 U	150 J	120 J	130 J	24 J	250 UL
Chrysene	ug/kg	15000	1300	1200	800	82 J	1300	1000	1100	160 J	210 J
Dibenzo(a,h)anthracene	ug/kg	15	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 UL
Dibenzofuran	ug/kg	7800	57 J	61 J	190 U	190 U	64 J	47 J	40 J	240 U	250 UL
Diethylphthalate	ug/kg	4900000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Dimethylphthalate	ug/kg		230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Di-n-butylphthalate	ug/kg	610000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Di-n-octylphthalate	ug/kg		230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Fluoranthene	ug/kg	230000	2600	2400	1200	110 J	2700	1800	2300	260 L	470 L
Fluorene	ug/kg	230000	140 J	180 J	38 J	190 U	150 J	89 J	100 J	240 U	250 UL
Hexachlorobenzene	ug/kg	300	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Hexachlorobutadiene	ug/kg	6200	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Hexachlorocyclopentadiene	ug/kg	37000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Hexachloroethane	ug/kg	35000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	550	510	330	53 J	570	460	520	88 J	250 UL
Isophorone	ug/kg	510000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Naphthalene	ug/kg	3600	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Nitrobenzene	ug/kg	4800	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
N-Nitroso-di-n-propylamine	ug/kg	69	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
N-Nitrosodiphenylamine	ug/kg	99000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Pentachlorophenol	ug/kg	3000	440 U	490 U	360 U	360 U	500 U	420 U	770 U	470 U	480 U
Phenanthrene	ug/kg		1900	1900	610	61 J	1900	1200	1500	220 J	240 J
Phenol	ug/kg	1800000	230 U	250 U	190 U	190 U	260 U	210 U	390 U	240 U	250 U
Pyrene	ug/kg	170000	2200 J	2000 J	1100 J	130 J	2100 J	1500 J	1900	230 J	310 L

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	OWSB03-SS	PKSB03042226-CW	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW	PKSB06192940-NS	PKSB06192940-WA
1,1'-Biphenyl	ug/kg	390000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
2,4,5-Trichlorophenol	ug/kg	610000	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
2,4,6-Trichlorophenol	ug/kg	44000	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
2,4-Dichlorophenol	ug/kg	18000	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
2,4-Dimethylphenol	ug/kg	120000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2,4-Dinitrophenol	ug/kg	12000	420 U	390 U	410 U	370 U	1800 U	410 U	2100 U
2,4-Dinitrotoluene	ug/kg	1600	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2,6-Dinitrotoluene	ug/kg	6100	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2-Chloronaphthalene	ug/kg	630000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2-Chlorophenol	ug/kg	39000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2-Methylnaphthalene	ug/kg	31000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2-Methylphenol	ug/kg	310000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
2-Nitroaniline	ug/kg	61000	420 U	390 U	410 U	370 U	1800 U	410 U	2100 U
2-Nitrophenol	ug/kg		220 U	200 U	210 U	190 U	940 U	210 U	1100 U
3,3'-Dichlorobenzidine	ug/kg	1100	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
3-Nitroaniline	ug/kg		420 U	390 U	410 U	370 U	1800 U	410 U	2100 U
4,6-Dinitro-2-methylphenol	ug/kg	610	420 U	390 U	410 U	370 U	1800 U	410 U	2100 U
4-Bromophenyl-phenylether	ug/kg		220 U	200 U	210 U	190 U	940 U	210 U	1100 U
4-Chloro-3-methylphenol	ug/kg	610000	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
4-Chloroaniline	ug/kg	2400	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
4-Chlorophenyl-phenylether	ug/kg		220 U	200 U	210 U	190 U	940 U	210 U	1100 U
4-Methylphenol	ug/kg	31000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
4-Nitroaniline	ug/kg	24000	420 U	390 U	410 U	370 U	1800 U	410 U	2100 U
4-Nitrophenol	ug/kg		420 U	390 U	410 U	370 U	1800 U	410 U	2100 U
Acenaphthene	ug/kg	340000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Acenaphthylene	ug/kg		220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Acetophenone	ug/kg	780000	78 B	200 U	210 U	190 U	940 U	210 U	1100 U
Anthracene	ug/kg	1700000	72 J	200 U	210 U	37 J	100 J	210 U	120 J
Atrazine	ug/kg	2100	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Benzaldehyde	ug/kg	780000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Benzo(a)anthracene	ug/kg	150	380	200 U	54 J	91 J	350 J	210 U	1100
Benzo(a)pyrene	ug/kg	15	360	200 U	70 J	140 J	690 J	210 U	1500
Benzo(b)fluoranthene	ug/kg	150	430	200 U	130 J	140 J	480 J	210 U	1800
Benzo(g,h,i)perylene	ug/kg		180 J	200 U	210 U	150 J	700 J	210 U	840 J
Benzo(k)fluoranthene	ug/kg	1500	190 J	200 U	120 J	44 J	220 J	210 U	670 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Bis(2-Chloroethyl)ether	ug/kg	210	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	30 B	200 U	32 J	190 U	940 U	210 U	1100 U
Butylbenzylphthalate	ug/kg	260000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	OWSB03-SS	PKSB03042226-CW	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW	PKSB06192940-NS	PKSB06192940-WA
Caprolactam	ug/kg	3100000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Carbazole	ug/kg		56 J	200 U	210 U	190 U	940 U	210 U	1100 U
Chrysene	ug/kg	15000	460	200 U	77 J	180 J	320 J	210 U	1100
Dibenzo(a,h)anthracene	ug/kg	15	220 U	200 U	210 U	32 J	150 J	210 U	310 J
Dibenzofuran	ug/kg	7800	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Diethylphthalate	ug/kg	4900000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Dimethylphthalate	ug/kg		220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Di-n-butylphthalate	ug/kg	610000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Di-n-octylphthalate	ug/kg		220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Fluoranthene	ug/kg	230000	930	35 J	130 J	160 J	600 J	210 U	1900
Fluorene	ug/kg	230000	40 J	200 U	210 U	190 U	940 U	210 U	1100 U
Hexachlorobenzene	ug/kg	300	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Hexachlorobutadiene	ug/kg	6200	220 U	200 U	210 U	190 UL	940 U	210 U	1100 U
Hexachlorocyclopentadiene	ug/kg	37000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Hexachloroethane	ug/kg	35000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	210 J	200 U	45 J	79 J	240 J	210 U	950 J
Isophorone	ug/kg	510000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Naphthalene	ug/kg	3600	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Nitrobenzene	ug/kg	4800	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
N-Nitroso-di-n-propylamine	ug/kg	69	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
N-Nitrosodiphenylamine	ug/kg	99000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Pentachlorophenol	ug/kg	3000	420 U	390 U	410 U	370 UL	1800 U	410 U	2100 U
Phenanthrene	ug/kg		550	200 U	210 U	150 J	490 J	210 U	470 J
Phenol	ug/kg	1800000	220 U	200 U	210 U	190 U	940 U	210 U	1100 U
Pyrene	ug/kg	170000	790 J	31 J	110 J	150 J	500 J	210 U	1400

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB08101215-CW	PKSB08101215-NS	PKSB08101215-WA	PKSB13303335-CW	PKSB13303335-NS	PKSB13303335-WA	PKSB15-SS
1,1'-Biphenyl	ug/kg	390000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,4,5-Trichlorophenol	ug/kg	610000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,4,6-Trichlorophenol	ug/kg	44000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,4-Dichlorophenol	ug/kg	18000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,4-Dimethylphenol	ug/kg	120000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,4-Dinitrophenol	ug/kg	12000	770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
2,4-Dinitrotoluene	ug/kg	1600	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2,6-Dinitrotoluene	ug/kg	6100	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2-Chloronaphthalene	ug/kg	630000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2-Chlorophenol	ug/kg	39000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2-Methylnaphthalene	ug/kg	31000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
2-Methylphenol	ug/kg	310000	400 U	190 U	1500 U	130 J	200 J	1000 U	280 U
2-Nitroaniline	ug/kg	61000	770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
2-Nitrophenol	ug/kg		400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
3,3'-Dichlorobenzidine	ug/kg	1100	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
3-Nitroaniline	ug/kg		770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
4,6-Dinitro-2-methylphenol	ug/kg	610	770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
4-Bromophenyl-phenylether	ug/kg		400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
4-Chloro-3-methylphenol	ug/kg	610000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
4-Chloroaniline	ug/kg	2400	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
4-Chlorophenyl-phenylether	ug/kg		400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
4-Methylphenol	ug/kg	31000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
4-Nitroaniline	ug/kg	24000	770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
4-Nitrophenol	ug/kg		770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
Acenaphthene	ug/kg	340000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Acenaphthylene	ug/kg		400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Acetophenone	ug/kg	780000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Anthracene	ug/kg	1700000	110 J	190 U	210 J	210 U	240 U	120 J	280 U
Atrazine	ug/kg	2100	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Benzaldehyde	ug/kg	780000	400 U	190 U	1500 U	210 U	36 J	1000 U	280 U
Benzo(a)anthracene	ug/kg	150	310 J	190 U	1100 J	24 J	44 J	520 J	58 J
Benzo(a)pyrene	ug/kg	15	350 J	190 U	1800	31 J	58 J	390 J	86 J
Benzo(b)fluoranthene	ug/kg	150	350 J	20 J	1100 J	26 J	60 J	320 J	95 J
Benzo(g,h,i)perylene	ug/kg		240 J	190 U	1400 J	40 J	49 J	120 J	55 J
Benzo(k)fluoranthene	ug/kg	1500	150 J	190 U	330 J	210 U	240 U	1000 U	32 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Bis(2-Chloroethyl)ether	ug/kg	210	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	400 U	190 U	1500 U	210 U	31 J	1000 U	44 J
Butylbenzylphthalate	ug/kg	260000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB08101215-CW	PKSB08101215-NS	PKSB08101215-WA	PKSB13303335-CW	PKSB13303335-NS	PKSB13303335-WA	PKSB15-SS
Caprolactam	ug/kg	3100000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Carbazole	ug/kg		42 J	190 U	1500 U	210 U	240 U	1000 U	280 U
Chrysene	ug/kg	15000	350 J	190 U	1600	25 J	60 J	580 J	84 J
Dibenzo(a,h)anthracene	ug/kg	15	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Dibenzofuran	ug/kg	7800	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Diethylphthalate	ug/kg	4900000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Dimethylphthalate	ug/kg		400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Di-n-butylphthalate	ug/kg	610000	400 U	190 U	1500 U	41 J	45 J	1000 U	66 J
Di-n-octylphthalate	ug/kg		400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Fluoranthene	ug/kg	230000	600	29 J	1200 J	30 J	85 J	390 J	120 J
Fluorene	ug/kg	230000	62 J	190 U	1500 U	210 U	240 U	1000 U	280 U
Hexachlorobenzene	ug/kg	300	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Hexachlorobutadiene	ug/kg	6200	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Hexachlorocyclopentadiene	ug/kg	37000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Hexachloroethane	ug/kg	35000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	130 J	190 U	460 J	210 U	27 J	1000 U	35 J
Isophorone	ug/kg	510000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Naphthalene	ug/kg	3600	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Nitrobenzene	ug/kg	4800	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
N-Nitroso-di-n-propylamine	ug/kg	69	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
N-Nitrosodiphenylamine	ug/kg	99000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Pentachlorophenol	ug/kg	3000	770 U	380 U	2800 U	410 U	470 U	2000 U	550 U
Phenanthrene	ug/kg		450	190 U	1300 J	28 J	49 J	750 J	69 J
Phenol	ug/kg	1800000	400 U	190 U	1500 U	210 U	240 U	1000 U	280 U
Pyrene	ug/kg	170000	500	25 J	1600	45 J	82 J	940 J	110 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
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Data Qualifiers:

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K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB19-SS	PKSB30D-SS	PKSB30-SS	PKSB38444851-CW	PKSB38444851-NS	PKSB38444851-WA	PKSB38-SS	PKSB45-17_3	PKSB52-CW
1,1'-Biphenyl	ug/kg	390000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	340000	170 UJ
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,4,5-Trichlorophenol	ug/kg	610000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,4,6-Trichlorophenol	ug/kg	44000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,4-Dichlorophenol	ug/kg	18000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,4-Dimethylphenol	ug/kg	120000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,4-Dinitrophenol	ug/kg	12000	1100 U	430 U	430 U	870 U	370 U	2200 UJ	360 U	500000 U	330 UJ
2,4-Dinitrotoluene	ug/kg	1600	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2,6-Dinitrotoluene	ug/kg	6100	570 U	220 U	220 U	450 U	54 J	1100 UJ	180 U	260000 U	170 UJ
2-Chloronaphthalene	ug/kg	630000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
2-Chlorophenol	ug/kg	39000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
2-Methylnaphthalene	ug/kg	31000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	3100000	170 UJ
2-Methylphenol	ug/kg	310000	570 U	220 U	220 U	450 U	37 J	1100 UJ	180 U	260000 U	170 U
2-Nitroaniline	ug/kg	61000	1100 U	430 U	430 U	870 U	370 U	2200 UJ	360 U	500000 U	330 UJ
2-Nitrophenol	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
3,3'-Dichlorobenzidine	ug/kg	1100	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
3-Nitroaniline	ug/kg		1100 U	430 U	430 U	870 U	330 J	2200 UJ	360 U	500000 U	330 UJ
4,6-Dinitro-2-methylphenol	ug/kg	610	1100 U	430 U	430 U	870 U	370 U	2200 UJ	360 U	500000 U	330 UJ
4-Bromophenyl-phenylether	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
4-Chloro-3-methylphenol	ug/kg	610000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
4-Chloroaniline	ug/kg	2400	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
4-Chlorophenyl-phenylether	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
4-Methylphenol	ug/kg	31000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
4-Nitroaniline	ug/kg	24000	1100 U	430 U	430 U	870 U	370 U	2200 UJ	360 U	500000 U	330 UJ
4-Nitrophenol	ug/kg		1100 U	430 U	430 U	870 U	370 U	2200 UJ	360 U	500000 U	330 UJ
Acenaphthene	ug/kg	340000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	930000	170 UJ
Acenaphthylene	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Acetophenone	ug/kg	780000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
Anthracene	ug/kg	1700000	570 U	220 U	220 U	180 J	190 U	1100 UJ	180 U	1000000	19 J
Atrazine	ug/kg	2100	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Benzaldehyde	ug/kg	780000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
Benzo(a)anthracene	ug/kg	150	570 U	220 U	220 U	810	38 J	920 J	180 U	1400000	110 J
Benzo(a)pyrene	ug/kg	15	150 J	220 U	220 U	790	43 J	1200 J	180 U	1300000	110 J
Benzo(b)fluoranthene	ug/kg	150	150 J	25 J	25 J	990	72 J	750 J	180 U	1200000	150 J
Benzo(g,h,i)perylene	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	440000 J	66 J
Benzo(k)fluoranthene	ug/kg	1500	570 U	220 U	220 U	410 J	74 J	1100 UJ	180 U	450000	50 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Bis(2-Chloroethyl)ether	ug/kg	210	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	400 J	66 J	65 J	450 U	64 J	1100 UJ	180 U	260000 U	84 J
Butylbenzylphthalate	ug/kg	260000	570 U	220 U	220 U	450 U	90 J	1100 UJ	180 U	260000 U	120 J

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB19-SS	PKSB30D-SS	PKSB30-SS	PKSB38444851-CW	PKSB38444851-NS	PKSB38444851-WA	PKSB38-SS	PKSB45-17_3	PKSB52-CW
Caprolactam	ug/kg	3100000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Carbazole	ug/kg		570 U	220 U	220 U	55 J	190 U	1100 UJ	180 U	240000 J	170 UJ
Chrysene	ug/kg	15000	570 U	220 U	220 U	700	40 J	1300 J	180 U	1600000	130 J
Dibenzo(a,h)anthracene	ug/kg	15	570 U	220 U	220 U	150 J	190 U	1100 UJ	180 U	260000 U	170 UJ
Dibenzofuran	ug/kg	7800	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Diethylphthalate	ug/kg	4900000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Dimethylphthalate	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Di-n-butylphthalate	ug/kg	610000	94 J	30 J	36 J	450 U	30 J	1100 UJ	180 U	260000 U	170 UJ
Di-n-octylphthalate	ug/kg		570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Fluoranthene	ug/kg	230000	170 J	33 J	35 J	1900	93 J	1100 UJ	180 U	1600000	210 J
Fluorene	ug/kg	230000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	930000	170 UJ
Hexachlorobenzene	ug/kg	300	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Hexachlorobutadiene	ug/kg	6200	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Hexachlorocyclopentadiene	ug/kg	37000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Hexachloroethane	ug/kg	35000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	110 J	220 U	220 U	430 J	22 J	490 J	180 U	430000 J	63 J
Isophorone	ug/kg	510000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Naphthalene	ug/kg	3600	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	3200000	170 UJ
Nitrobenzene	ug/kg	4800	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
N-Nitroso-di-n-propylamine	ug/kg	69	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
N-Nitrosodiphenylamine	ug/kg	99000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 UJ
Pentachlorophenol	ug/kg	3000	1100 U	430 U	430 U	870 U	370 U	2200 UJ	360 U	500000 U	330 UJ
Phenanthrene	ug/kg		570 U	220 U	220 U	1000	190 U	1100 UJ	180 U	3100000	100 J
Phenol	ug/kg	1800000	570 U	220 U	220 U	450 U	190 U	1100 UJ	180 U	260000 U	170 U
Pyrene	ug/kg	170000	200 J	27 J	29 J	1300	73 J	1400 J	180 U	2600000	190 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

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CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB52-NS	PKSB52-WA	RVSB011920-CW	RVSB011920-NS	RVSB020304-CW	RVSB020304-NS	RVSB020304-WA	RVSB04-SS
1,1'-Biphenyl	ug/kg	390000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
2,4,5-Trichlorophenol	ug/kg	610000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
2,4,6-Trichlorophenol	ug/kg	44000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
2,4-Dichlorophenol	ug/kg	18000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
2,4-Dimethylphenol	ug/kg	120000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2,4-Dinitrophenol	ug/kg	12000	380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 U
2,4-Dinitrotoluene	ug/kg	1600	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2,6-Dinitrotoluene	ug/kg	6100	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2-Chloronaphthalene	ug/kg	630000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2-Chlorophenol	ug/kg	39000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2-Methylnaphthalene	ug/kg	31000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2-Methylphenol	ug/kg	310000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
2-Nitroaniline	ug/kg	61000	380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 U
2-Nitrophenol	ug/kg		200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
3,3'-Dichlorobenzidine	ug/kg	1100	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
3-Nitroaniline	ug/kg		380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 U
4,6-Dinitro-2-methylphenol	ug/kg	610	380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 U
4-Bromophenyl-phenylether	ug/kg		200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
4-Chloro-3-methylphenol	ug/kg	610000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
4-Chloroaniline	ug/kg	2400	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
4-Chlorophenyl-phenylether	ug/kg		200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
4-Methylphenol	ug/kg	31000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
4-Nitroaniline	ug/kg	24000	380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 U
4-Nitrophenol	ug/kg		380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 U
Acenaphthene	ug/kg	340000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Acenaphthylene	ug/kg		200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Acetophenone	ug/kg	780000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Anthracene	ug/kg	1700000	200 U	53 J	79 J	200 U	26 J	200 U	200 U	200 U
Atrazine	ug/kg	2100	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Benzaldehyde	ug/kg	780000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Benzo(a)anthracene	ug/kg	150	200 U	290 J	610	200 U	230 J	200 U	27 J	140 J
Benzo(a)pyrene	ug/kg	15	200 U	420 J	670	200 U	260	200 U	200 U	160 J
Benzo(b)fluoranthene	ug/kg	150	200 U	340 J	910	200 U	410	200 U	200 U	240 L
Benzo(g,h,i)perylene	ug/kg		200 U	530 K	240 J	200 U	140 J	200 U	200 U	200 UL
Benzo(k)fluoranthene	ug/kg	1500	200 U	100 J	330	200 U	130 J	200 U	200 U	91 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Bis(2-Chloroethyl)ether	ug/kg	210	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	200 U	450 U	98 J	200 U	57 J	200 U	200 U	23 J
Butylbenzylphthalate	ug/kg	260000	200 U	450 U	70 J	200 U	260 U	200 U	200 U	200 UL

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB52-NS	PKSB52-WA	RVSB011920-CW	RVSB011920-NS	RVSB020304-CW	RVSB020304-NS	RVSB020304-WA	RVSB04-SS
Caprolactam	ug/kg	3100000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Carbazole	ug/kg		200 U	450 U	48 J	200 U	28 J	200 U	200 U	200 UL
Chrysene	ug/kg	15000	200 U	630 K	750	200 U	320	200 U	35 J	190 J
Dibenzo(a,h)anthracene	ug/kg	15	200 U	450 U	230 U	200 U	54 J	200 U	200 U	200 UL
Dibenzofuran	ug/kg	7800	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Diethylphthalate	ug/kg	4900000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Dimethylphthalate	ug/kg		200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Di-n-butylphthalate	ug/kg	610000	200 U	450 U	46 J	20 J	260 U	19 J	200 U	28 J
Di-n-octylphthalate	ug/kg		200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Fluoranthene	ug/kg	230000	200 U	330 J	1200	200 U	630	200 U	59 J	370 L
Fluorene	ug/kg	230000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Hexachlorobenzene	ug/kg	300	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Hexachlorobutadiene	ug/kg	6200	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 UL
Hexachlorocyclopentadiene	ug/kg	37000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Hexachloroethane	ug/kg	35000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	200 U	170 J	260 J	200 U	160 J	200 U	200 U	120 J
Isophorone	ug/kg	510000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Naphthalene	ug/kg	3600	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Nitrobenzene	ug/kg	4800	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
N-Nitroso-di-n-propylamine	ug/kg	69	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
N-Nitrosodiphenylamine	ug/kg	99000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Pentachlorophenol	ug/kg	3000	380 U	880 U	440 U	400 U	510 U	380 U	380 U	390 UL
Phenanthrene	ug/kg		200 U	230 J	450	200 U	210 J	200 U	200 U	140 J
Phenol	ug/kg	1800000	200 U	450 U	230 U	200 U	260 U	200 U	200 U	200 U
Pyrene	ug/kg	170000	200 U	540 J	1000	200 U	440	200 U	51 J	270 L

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

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CK – Creek
FP – Floodplain
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RV – Reservoir
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R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB05060708-NS	RVSB05060708-WA	RVSB050607-CW	RVSB08-SS	RVSB09101112-CW	RVSB091011-WA	RVSB1112-NS	RVSB12-SS
1,1'-Biphenyl	ug/kg	390000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,4,5-Trichlorophenol	ug/kg	610000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,4,6-Trichlorophenol	ug/kg	44000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,4-Dichlorophenol	ug/kg	18000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,4-Dimethylphenol	ug/kg	120000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,4-Dinitrophenol	ug/kg	12000	400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
2,4-Dinitrotoluene	ug/kg	1600	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2,6-Dinitrotoluene	ug/kg	6100	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2-Chloronaphthalene	ug/kg	630000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2-Chlorophenol	ug/kg	39000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2-Methylnaphthalene	ug/kg	31000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2-Methylphenol	ug/kg	310000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
2-Nitroaniline	ug/kg	61000	400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
2-Nitrophenol	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
3,3'-Dichlorobenzidine	ug/kg	1100	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
3-Nitroaniline	ug/kg		400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
4,6-Dinitro-2-methylphenol	ug/kg	610	400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
4-Bromophenyl-phenylether	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
4-Chloro-3-methylphenol	ug/kg	610000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
4-Chloroaniline	ug/kg	2400	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
4-Chlorophenyl-phenylether	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
4-Methylphenol	ug/kg	31000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
4-Nitroaniline	ug/kg	24000	400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
4-Nitrophenol	ug/kg		400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
Acenaphthene	ug/kg	340000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Acenaphthylene	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Acetophenone	ug/kg	780000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Anthracene	ug/kg	1700000	200 U	710 U	220 U	260 U	23 J	220 U	210 U	280 U
Atrazine	ug/kg	2100	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Benzaldehyde	ug/kg	780000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Benzo(a)anthracene	ug/kg	150	200 U	710 U	40 J	130 J	72 J	220 U	210 U	120 J
Benzo(a)pyrene	ug/kg	15	200 U	710 U	220 U	140 J	68 J	220 U	210 U	140 J
Benzo(b)fluoranthene	ug/kg	150	200 U	710 U	220 U	210 J	89 J	220 U	210 U	180 J
Benzo(g,h,i)perylene	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Benzo(k)fluoranthene	ug/kg	1500	200 U	710 U	220 U	70 J	29 J	220 U	210 U	75 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Bis(2-Chloroethyl)ether	ug/kg	210	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	200 U	710 U	27 J	39 J	230 U	220 U	210 U	89 J
Butylbenzylphthalate	ug/kg	260000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	420 J

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB05060708-NS	RVSB05060708-WA	RVSB050607-CW	RVSB08-SS	RVSB09101112-CW	RVSB091011-WA	RVSB1112-NS	RVSB12-SS
Caprolactam	ug/kg	3100000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Carbazole	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Chrysene	ug/kg	15000	200 U	710 U	51 J	160 J	79 J	220 U	210 U	140 J
Dibenzo(a,h)anthracene	ug/kg	15	200 U	710 U	220 U	28 J	230 U	220 U	210 U	280 U
Dibenzofuran	ug/kg	7800	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Diethylphthalate	ug/kg	4900000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Dimethylphthalate	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Di-n-butylphthalate	ug/kg	610000	200 U	710 U	220 U	36 J	230 U	220 U	210 U	29 J
Di-n-octylphthalate	ug/kg		200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Fluoranthene	ug/kg	230000	200 U	710 U	71 J	310	140 J	220 U	210 U	190 J
Fluorene	ug/kg	230000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Hexachlorobenzene	ug/kg	300	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Hexachlorobutadiene	ug/kg	6200	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Hexachlorocyclopentadiene	ug/kg	37000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Hexachloroethane	ug/kg	35000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	200 U	710 U	32 J	85 J	28 J	220 U	210 U	67 J
Isophorone	ug/kg	510000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Naphthalene	ug/kg	3600	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Nitrobenzene	ug/kg	4800	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
N-Nitroso-di-n-propylamine	ug/kg	69	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
N-Nitrosodiphenylamine	ug/kg	99000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Pentachlorophenol	ug/kg	3000	400 U	1400 U	430 U	510 U	450 U	430 U	400 U	530 U
Phenanthrene	ug/kg		200 U	710 U	220 U	130 J	120 J	220 U	210 U	96 J
Phenol	ug/kg	1800000	200 U	710 U	220 U	260 U	230 U	220 U	210 U	280 U
Pyrene	ug/kg	170000	200 U	710 U	69 J	230 J	130 J	220 U	210 U	200 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB15161718-CW	RVSB15161718-NS	RVSB15161718-WA	RVSB17-SS	RVSB19-SS	RVSB21222324-CW	RVSB21222324-WA	RVSB24-SS
1,1'-Biphenyl	ug/kg	390000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,4,5-Trichlorophenol	ug/kg	610000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,4,6-Trichlorophenol	ug/kg	44000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,4-Dichlorophenol	ug/kg	18000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,4-Dimethylphenol	ug/kg	120000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,4-Dinitrophenol	ug/kg	12000	420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
2,4-Dinitrotoluene	ug/kg	1600	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2,6-Dinitrotoluene	ug/kg	6100	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2-Chloronaphthalene	ug/kg	630000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2-Chlorophenol	ug/kg	39000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2-Methylnaphthalene	ug/kg	31000	220 U	210 U	35 J	270 U	510 U	28 J	250 U	36 J
2-Methylphenol	ug/kg	310000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
2-Nitroaniline	ug/kg	61000	420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
2-Nitrophenol	ug/kg		220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
3,3'-Dichlorobenzidine	ug/kg	1100	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
3-Nitroaniline	ug/kg		420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
4,6-Dinitro-2-methylphenol	ug/kg	610	420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
4-Bromophenyl-phenylether	ug/kg		220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
4-Chloro-3-methylphenol	ug/kg	610000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
4-Chloroaniline	ug/kg	2400	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
4-Chlorophenyl-phenylether	ug/kg		220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
4-Methylphenol	ug/kg	31000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
4-Nitroaniline	ug/kg	24000	420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
4-Nitrophenol	ug/kg		420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
Acenaphthene	ug/kg	340000	24 J	210 U	200 U	45 J	510 U	210 U	250 U	210 U
Acenaphthylene	ug/kg		55 J	210 U	200 U	41 J	510 U	210 U	250 U	210 U
Acetophenone	ug/kg	780000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Anthracene	ug/kg	1700000	180 J	210 U	200 U	160 J	510 U	210 U	250 U	210 U
Atrazine	ug/kg	2100	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Benzaldehyde	ug/kg	780000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Benzo(a)anthracene	ug/kg	150	490	210 U	35 J	740	380 J	210 U	64 J	47 J
Benzo(a)pyrene	ug/kg	15	340	210 U	35 J	850	400 J	210 U	55 J	210 U
Benzo(b)fluoranthene	ug/kg	150	640	210 U	57 J	1200	540	210 U	85 J	63 J
Benzo(g,h,i)perylene	ug/kg		200 J	210 U	200 U	360 J	510 U	210 U	250 U	210 U
Benzo(k)fluoranthene	ug/kg	1500	230	210 U	20 J	480	190 J	210 U	29 J	26 J
Bis(2-Chloroethoxy)methane	ug/kg	18000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Bis(2-Chloroethyl)ether	ug/kg	210	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	84 J	21 J	27 J	71 J	160 J	33 J	250 U	31 J
Butylbenzylphthalate	ug/kg	260000	220 U	210 U	200 U	38 J	220 J	210 U	250 U	210 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB15161718-CW	RVSB15161718-NS	RVSB15161718-WA	RVSB17-SS	RVSB19-SS	RVSB21222324-CW	RVSB21222324-WA	RVSB24-SS
Caprolactam	ug/kg	3100000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Carbazole	ug/kg		38 J	210 U	200 U	84 J	510 U	210 U	250 U	210 U
Chrysene	ug/kg	15000	530	210 U	75 J	880	440 J	210 U	76 J	44 J
Dibenzo(a,h)anthracene	ug/kg	15	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Dibenzofuran	ug/kg	7800	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Diethylphthalate	ug/kg	4900000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Dimethylphthalate	ug/kg		220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Di-n-butylphthalate	ug/kg	610000	220 U	210 U	200 U	36 J	91 J	210 U	250 U	210 U
Di-n-octylphthalate	ug/kg		220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Fluoranthene	ug/kg	230000	830	210 U	71 J	1600	610	210 U	190 J	68 J
Fluorene	ug/kg	230000	39 J	210 U	200 U	52 J	510 U	210 U	250 U	210 U
Hexachlorobenzene	ug/kg	300	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Hexachlorobutadiene	ug/kg	6200	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Hexachlorocyclopentadiene	ug/kg	37000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Hexachloroethane	ug/kg	35000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	240 J	210 U	20 J	460 J	170 J	210 U	28 J	31 J
Isophorone	ug/kg	510000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Naphthalene	ug/kg	3600	220 U	210 U	23 J	270 U	510 U	210 U	250 U	210 U
Nitrobenzene	ug/kg	4800	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
N-Nitroso-di-n-propylamine	ug/kg	69	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
N-Nitrosodiphenylamine	ug/kg	99000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Pentachlorophenol	ug/kg	3000	420 U	400 U	380 U	530 U	980 U	410 U	490 U	410 U
Phenanthrene	ug/kg		480	210 U	56 J	720	230 J	210 U	60 J	210 U
Phenol	ug/kg	1800000	220 U	210 U	200 U	270 U	510 U	210 U	250 U	210 U
Pyrene	ug/kg	170000	720	210 U	59 J	1300	630	210 U	120 J	60 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01
1,1'-Biphenyl	ug/kg	390000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,4,5-Trichlorophenol	ug/kg	610000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,4,6-Trichlorophenol	ug/kg	44000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,4-Dichlorophenol	ug/kg	18000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,4-Dimethylphenol	ug/kg	120000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,4-Dinitrophenol	ug/kg	12000	530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
2,4-Dinitrotoluene	ug/kg	1600	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2,6-Dinitrotoluene	ug/kg	6100	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2-Chloronaphthalene	ug/kg	630000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2-Chlorophenol	ug/kg	39000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2-Methylnaphthalene	ug/kg	31000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2-Methylphenol	ug/kg	310000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
2-Nitroaniline	ug/kg	61000	530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
2-Nitrophenol	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
3,3'-Dichlorobenzidine	ug/kg	1100	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
3-Nitroaniline	ug/kg		530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
4,6-Dinitro-2-methylphenol	ug/kg	610	530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
4-Bromophenyl-phenylether	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
4-Chloro-3-methylphenol	ug/kg	610000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
4-Chloroaniline	ug/kg	2400	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
4-Chlorophenyl-phenylether	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
4-Methylphenol	ug/kg	31000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
4-Nitroaniline	ug/kg	24000	530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
4-Nitrophenol	ug/kg		530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
Acenaphthene	ug/kg	340000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Acenaphthylene	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Acetophenone	ug/kg	780000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Anthracene	ug/kg	1700000	270 U	790 U	230 U	1100 U	700 U	670 U	120 J	1400 U	2200 U
Atrazine	ug/kg	2100	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Benzaldehyde	ug/kg	780000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Benzo(a)anthracene	ug/kg	150	35 J	790 U	230 U	1100 U	97 J	110 J	410 J	1400 U	2200 U
Benzo(a)pyrene	ug/kg	15	31 J	790 U	230 U	1100 U	130 J	140 J	370 J	1400 U	2200 U
Benzo(b)fluoranthene	ug/kg	150	44 J	790 U	230 U	130 J	200 J	200 J	470	1400 U	2200 U
Benzo(g,h,i)perylene	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Benzo(k)fluoranthene	ug/kg	1500	270 U	790 U	230 U	1100 U	700 U	85 J	170 J	1400 U	2200 U
Bis(2-Chloroethoxy)methane	ug/kg	18000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Bis(2-Chloroethyl)ether	ug/kg	210	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	51 J	790 U	230 U	1100 U	82 J	670 U	72 J	1400 U	2200 U
Butylbenzylphthalate	ug/kg	260000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01
Caprolactam	ug/kg	3100000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Carbazole	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	47 J	1400 U	2200 U
Chrysene	ug/kg	15000	32 J	790 U	230 U	1100 U	130 J	150 J	410 J	1400 U	2200 U
Dibenzo(a,h)anthracene	ug/kg	15	270 U	790 U	230 U	1100 U	700 U	670 U	65 J	1400 U	2200 U
Dibenzofuran	ug/kg	7800	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Diethylphthalate	ug/kg	4900000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Dimethylphthalate	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Di-n-butylphthalate	ug/kg	610000	29 J	790 U	40 J	1100 U	72 J	670 U	59 J	1400 U	2200 U
Di-n-octylphthalate	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Fluoranthene	ug/kg	230000	50 J	92 J	230 U	160 J	230 J	250 J	910	1400 U	240 J
Fluorene	ug/kg	230000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Hexachlorobenzene	ug/kg	300	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Hexachlorobutadiene	ug/kg	6200	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Hexachlorocyclopentadiene	ug/kg	37000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Hexachloroethane	ug/kg	35000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	270 U	790 U	230 U	1100 U	82 J	92 J	190 J	1400 U	2200 U
Isophorone	ug/kg	510000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Naphthalene	ug/kg	3600	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Nitrobenzene	ug/kg	4800	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
N-Nitroso-di-n-propylamine	ug/kg	69	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
N-Nitrosodiphenylamine	ug/kg	99000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Pentachlorophenol	ug/kg	3000	530 U	1500 U	450 U	2100 U	1400 U	1300 U	900 U	2800 U	4300 U
Phenanthrene	ug/kg		270 U	790 U	230 U	1100 U	700 U	670 U	480	1400 U	2200 U
Phenol	ug/kg	1800000	270 U	790 U	230 U	1100 U	700 U	670 U	470 U	1400 U	2200 U
Pyrene	ug/kg	170000	43 J	86 J	230 U	130 J	190 J	210 J	720	1400 U	2200 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
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SD – Sediment

Data Qualifiers:

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K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01	RVSD15-RI-01
1,1'-Biphenyl	ug/kg	390000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
1,2,4,5-Tetrachlorobenzene	ug/kg	1800	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,2'-Oxybis(1-chloropropane)	ug/kg	4600	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,3,4,6-Tetrachlorophenol	ug/kg	180000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,4,5-Trichlorophenol	ug/kg	610000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,4,6-Trichlorophenol	ug/kg	44000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,4-Dichlorophenol	ug/kg	18000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,4-Dimethylphenol	ug/kg	120000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,4-Dinitrophenol	ug/kg	12000	3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
2,4-Dinitrotoluene	ug/kg	1600	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2,6-Dinitrotoluene	ug/kg	6100	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2-Chloronaphthalene	ug/kg	630000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2-Chlorophenol	ug/kg	39000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2-Methylnaphthalene	ug/kg	31000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2-Methylphenol	ug/kg	310000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
2-Nitroaniline	ug/kg	61000	3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
2-Nitrophenol	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
3,3'-Dichlorobenzidine	ug/kg	1100	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
3-Nitroaniline	ug/kg		3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
4,6-Dinitro-2-methylphenol	ug/kg	610	3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
4-Bromophenyl-phenylether	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
4-Chloro-3-methylphenol	ug/kg	610000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
4-Chloroaniline	ug/kg	2400	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
4-Chlorophenyl-phenylether	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
4-Methylphenol	ug/kg	31000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
4-Nitroaniline	ug/kg	24000	3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
4-Nitrophenol	ug/kg		3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
Acenaphthene	ug/kg	340000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Acenaphthylene	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Acetophenone	ug/kg	780000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Anthracene	ug/kg	1700000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Atrazine	ug/kg	2100	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Benzaldehyde	ug/kg	780000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Benzo(a)anthracene	ug/kg	150	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Benzo(a)pyrene	ug/kg	15	220 J	1600 U	1700 U	210 J	790 U	3300 U	240 J
Benzo(b)fluoranthene	ug/kg	150	310 J	1600 U	1700 U	200 J	790 U	3300 U	290 J
Benzo(g,h,i)perylene	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Benzo(k)fluoranthene	ug/kg	1500	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Bis(2-Chloroethoxy)methane	ug/kg	18000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Bis(2-Chloroethyl)ether	ug/kg	210	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Bis(2-ethylhexyl)phthalate	ug/kg	35000	2000 U	160 J	1700 U	1500 U	790 U	3300 U	230 J
Butylbenzylphthalate	ug/kg	260000	2000 U	1600 U	200 J	1500 U	790 U	3300 U	2200 U

Table C-4
Semivolatiles Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01	RVSD15-RI-01
Caprolactam	ug/kg	3100000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Carbazole	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Chrysene	ug/kg	15000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	220 J
Dibenzo(a,h)anthracene	ug/kg	15	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Dibenzofuran	ug/kg	7800	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Diethylphthalate	ug/kg	4900000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Dimethylphthalate	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Di-n-butylphthalate	ug/kg	610000	2000 U	250 J	200 J	1500 U	790 U	3300 U	340 J
Di-n-octylphthalate	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Fluoranthene	ug/kg	230000	370 J	1600 U	1700 U	280 J	790 U	3300 U	410 J
Fluorene	ug/kg	230000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Hexachlorobenzene	ug/kg	300	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Hexachlorobutadiene	ug/kg	6200	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Hexachlorocyclopentadiene	ug/kg	37000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Hexachloroethane	ug/kg	35000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Indeno(1,2,3-cd)pyrene	ug/kg	150	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Isophorone	ug/kg	510000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Naphthalene	ug/kg	3600	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Nitrobenzene	ug/kg	4800	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
N-Nitroso-di-n-propylamine	ug/kg	69	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
N-Nitrosodiphenylamine	ug/kg	99000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Pentachlorophenol	ug/kg	3000	3800 U	3000 U	3400 U	2800 U	1500 U	6500 U	4300 U
Phenanthrene	ug/kg		2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Phenol	ug/kg	1800000	2000 U	1600 U	1700 U	1500 U	790 U	3300 U	2200 U
Pyrene	ug/kg	170000	310 J	1600 U	1700 U	230 J	790 U	3300 U	350 J

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

R - Rejected result. Analyte may or may not be present in sample.

U - Analyte not detected

Table C-5
Aroclors and Pesticides Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01	CKSW01-RI-01	CKSW02-RI-01	CKSW03-RI-01
Aroclor-1016	UG/L	9.6	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1221	UG/L	0.068	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1232	UG/L	0.068	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1242	UG/L	0.34	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1248	UG/L	0.34	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1254	UG/L	0.34	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1260	UG/L	0.34	1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1262	UG/L		1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
Aroclor-1268	UG/L		1.4 UJ	1 U	1 UJ	1.3 UJ	1.3 UJ	1 U	1 U	1 U
4,4'-DDD	UG/L	2.8	0.0057 J	0.1 U	0.1 UJ	0.12 U	0.16 UJ	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	2	0.1 U	0.1 U	0.1 UJ	0.12 U	0.16 UJ	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	2	0.1 U	0.1 U	0.1 UJ	0.12 U	0.16 UJ	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.04	0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
alpha-BHC	UG/L	0.11	0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
alpha-Chlordane	UG/L		0.05 U	0.05 U	0.05 UJ	0.0075 J	0.078 UJ	0.05 U	0.05 U	0.05 U
beta-BHC	UG/L	0.37	0.0058 J	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
delta-BHC	UG/L		0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
Dieldrin	UG/L	0.042	0.1 U	0.1 U	0.1 UJ	0.014 J	0.16 UJ	0.1 U	0.1 U	0.0093 J
EndosulfanI	UG/L		0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
EndosulfanII	UG/L		0.0096 J	0.1 U	0.1 UJ	0.12 U	0.01 J	0.1 U	0.1 U	0.1 U
Endosulfansulfate	UG/L		0.1 U	0.0076 J	0.1 UJ	0.0098 J	0.16 UJ	0.1 U	0.1 U	0.1 U
Endrin	UG/L	11	0.1 U	0.1 U	0.1 UJ	0.12 U	0.16 UJ	0.1 U	0.1 U	0.1 U
Endrinaldehyde	UG/L		0.1 U	0.1 U	0.1 UJ	0.12 U	0.16 UJ	0.006 J	0.1 U	0.1 U
Endrinketone	UG/L		0.01 J	0.1 U	0.1 UJ	0.12 U	0.16 UJ	0.1 U	0.1 U	0.1 U
gamma-BHC(Lindane)	UG/L	0.61	0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
gamma-Chlordane	UG/L		0.05 U	0.05 U	0.05 UJ	0.0087 J	0.078 UJ	0.05 U	0.05 U	0.05 U
Heptachlor	UG/L	0.15	0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
Heptachlorepoxide	UG/L	0.074	0.05 U	0.05 U	0.05 UJ	0.058 U	0.078 UJ	0.05 U	0.05 U	0.05 U
Methoxychlor	UG/L	180	0.5 U	0.051 J	0.5 UJ	0.58 U	0.032 J	0.5 U	0.5 U	0.031 B
Toxaphene	UG/L	0.61	5 U	5 U	5 UJ	5.8 U	7.8 UJ	5 U	5 U	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
FP – Floodplain
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U - Analyte not detected

Table C-5
Aroclors and Pesticides Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	CKSW04-RI-01	CKSW05-RI-01	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01	CKSW08-RI-01	FB-091119	FB-100120
Aroclor-1016	UG/L	9.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1221	UG/L	0.068	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1232	UG/L	0.068	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1242	UG/L	0.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1248	UG/L	0.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1254	UG/L	0.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1260	UG/L	0.34	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1262	UG/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Aroclor-1268	UG/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
4,4'-DDD	UG/L	2.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.04	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
alpha-BHC	UG/L	0.11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
alpha-Chlordane	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
beta-BHC	UG/L	0.37	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
delta-BHC	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	UG/L	0.042	0.1 U	0.1 U	0.0094 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
EndosulfanI	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
EndosulfanII	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfansulfate	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrinaldehyde	UG/L		0.0056 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrinketone	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
gamma-BHC(Lindane)	UG/L	0.61	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-Chlordane	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	UG/L	0.15	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlorepoxide	UG/L	0.074	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methoxychlor	UG/L	180	0.5 U	0.043 B	0.043 B	0.051 B	0.053 B	0.025 B	0.5 U	0.043 B
Toxaphene	UG/L	0.61	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
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Table C-5
Aroclors and Pesticides Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ02-RI-01	PKPZ03-RI-01	RB-091120	RB-091123	RB-091207	RB-100115	RB1-100120
Aroclor-1016	UG/L	9.6	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1221	UG/L	0.068	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1232	UG/L	0.068	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1242	UG/L	0.34	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1248	UG/L	0.34	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1254	UG/L	0.34	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1260	UG/L	0.34	1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1262	UG/L		1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
Aroclor-1268	UG/L		1 UJ	1 U	1 UJ	1 U	1 U	1.2 U	1 UJ	1 U	1 U
4,4'-DDD	UG/L	2.8	0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
4,4'-DDE	UG/L	2	0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
4,4'-DDT	UG/L	2	0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
Aldrin	UG/L	0.04	0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
alpha-BHC	UG/L	0.11	0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
alpha-Chlordane	UG/L		0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
beta-BHC	UG/L	0.37	0.05 UL	0.05 UJ	0.05 UJ	0.0087 J	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
delta-BHC	UG/L		0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
Dieldrin	UG/L	0.042	0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
EndosulfanI	UG/L		0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
EndosulfanII	UG/L		0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
Endosulfansulfate	UG/L		0.1 UL	0.0080 J	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
Endrin	UG/L	11	0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
Endrinaldehyde	UG/L		0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
Endrinketone	UG/L		0.1 UL	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 UJ	0.1 U
gamma-BHC(Lindane)	UG/L	0.61	0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
gamma-Chlordane	UG/L		0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
Heptachlor	UG/L	0.15	0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
Heptachlorepoxide	UG/L	0.074	0.05 UL	0.05 UJ	0.05 UJ	0.05 U	0.054 U	0.058 U	0.05 U	0.05 UJ	0.05 U
Methoxychlor	UG/L	180	0.0064 J	0.0071 J	0.5 UJ	0.5 U	0.0054 J	0.58 U	0.5 U	0.021 B	0.033 B
Toxaphene	UG/L	0.61	5 UL	5 UJ	5 UJ	5 U	5.4 U	5.8 U	5 U	5 UJ	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

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Table C-5
Aroclors and Pesticides Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	RB2-100120	RVSW01-RI-01	RVSW02-RI-01	RVSW03D-RI-01	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01
Aroclor-1016	UG/L	9.6	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1221	UG/L	0.068	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1232	UG/L	0.068	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1242	UG/L	0.34	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1248	UG/L	0.34	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1254	UG/L	0.34	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1260	UG/L	0.34	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1262	UG/L		1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1268	UG/L		1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
4,4'-DDD	UG/L	2.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	UG/L	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	UG/L	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aldrin	UG/L	0.04	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
alpha-BHC	UG/L	0.11	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
alpha-Chlordane	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
beta-BHC	UG/L	0.37	0.05 U	0.05 U	0.05 U	0.0075 J	0.0069 J	0.0058 J	0.05 U
delta-BHC	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	UG/L	0.042	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
EndosulfanI	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
EndosulfanII	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfansulfate	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	UG/L	11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrinaldehyde	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrinketone	UG/L		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
gamma-BHC(Lindane)	UG/L	0.61	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-Chlordane	UG/L		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	UG/L	0.15	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlorepoxide	UG/L	0.074	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methoxychlor	UG/L	180	0.034 B	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toxaphene	UG/L	0.61	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS	APSB08131617-WA
Aroclor-1016	ug/kg	390	33 J	42 U	47 U	38 U	44 U	140 U
Aroclor-1221	ug/kg	140	38 U	42 U	47 U	38 U	44 U	140 U
Aroclor-1232	ug/kg	140	38 U	42 U	47 U	38 U	44 U	140 U
Aroclor-1242	ug/kg	220	38 U	42 U	47 U	38 U	44 U	140 U
Aroclor-1248	ug/kg	220	38 U	42 U	47 U	38 U	44 U	140 U
Aroclor-1254	ug/kg	220	62 J	42 U	47 U	38 U	44 U	16 J
Aroclor-1260	ug/kg	220	38 U	42 U	47 U	38 U	44 U	140 U
Aroclor-1262	ug/kg		38 U	42 U	47 U	38 U	44 U	140 U
Aroclor-1268	ug/kg		38 U	42 U	47 U	38 U	44 U	140 U
4,4'-DDD	ug/kg	2000	0.36 J	0.095 J	0.052 J	0.17 J	4.3 U	14 U
4,4'-DDE	ug/kg	1400	0.097 J	4.3 U	0.38 J	0.53 J	4.3 U	14 U
4,4'-DDT	ug/kg	1700	0.19 J	0.13 J	0.42 J	0.85 J	4.3 U	0.99 J
Aldrin	ug/kg	29	0.17 J	2.2 U	0.068 J	0.071 J	2.2 U	1.2 J
alpha-BHC	ug/kg	77	0.041 J	2.2 U	0.026 J	0.02 J	2.2 U	7 U
alpha-Chlordane	ug/kg		0.27 J	2.2 U	0.16 J	0.21 J	2.2 U	7 U
beta-BHC	ug/kg	270	0.26 B	0.11 B	0.12 B	0.16 B	2.2 U	7 U
delta-BHC	ug/kg		0.076 J	2.2 U	0.082 J	0.043 J	2.2 U	7 U
Dieldrin	ug/kg	30	0.76 J	0.026 J	0.39 J	0.42 J	4.3 U	3.4 J
EndosulfanI	ug/kg		0.6 J	2.2 U	0.12 J	0.024 J	2.2 U	1.2 J
EndosulfanII	ug/kg		5.1	0.27 J	4.2 J	1 J	4.3 U	2.6 J
Endosulfansulfate	ug/kg		0.57 J	0.15 J	0.23 J	0.068 J	4.3 U	2.7 J
Endrin	ug/kg	1800	1.1 J	0.15 J	0.12 J	0.28 J	4.3 U	14 U
Endrinaldehyde	ug/kg		0.91 J	0.086 J	0.28 J	0.33 J	0.25 J	6.1 J
Endrinketone	ug/kg		3.5 J	0.1 J	0.91 J	0.19 J	4.3 U	14 U
gamma-BHC(Lindane)	ug/kg	520	0.069 J	2.2 U	2.4 U	0.035 J	2.2 U	7 U
gamma-Chlordane	ug/kg		0.46 J	2.2 U	0.041 J	0.18 J	2.2 U	7 U
Heptachlor	ug/kg	110	0.29 J	2.2 U	0.21 J	0.086 J	2.2 U	5.6 J
Heptachlorepoxide	ug/kg	53	0.11 J	2.2 U	0.028 J	0.079 J	2.2 U	7 U
Methoxychlor	ug/kg	31000	0.79 J	0.42 B	0.26 B	0.17 B	22 U	9.7 J
Toxaphene	ug/kg	440	190 U	220 U	240 U	190 U	220 U	700 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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AP – Asbestos Pile
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PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB09101112-CW	APSB09101112-NS	APSB09101112-WA	APSB10-SS	APSB13-SS	APSB15212325D-NS
Aroclor-1016	ug/kg	390	40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1221	ug/kg	140	40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1232	ug/kg	140	40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1242	ug/kg	220	40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1248	ug/kg	220	40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1254	ug/kg	220	40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1260	ug/kg	220	40 U	43 U	88 U	38 U	27 J	41 U
Aroclor-1262	ug/kg		40 U	43 U	88 U	38 U	74 U	41 U
Aroclor-1268	ug/kg		40 U	43 U	88 U	38 U	74 U	41 U
4,4'-DDD	ug/kg	2000	0.14 J	4.4 U	0.13 J	0.17 J	7.3 U	0.031 J
4,4'-DDE	ug/kg	1400	0.26 J	4.4 U	8.5 U	0.028 J	7.3 U	3.9 U
4,4'-DDT	ug/kg	1700	2.7 J	4.4 U	0.22 J	0.11 J	1.5 J	3.9 U
Aldrin	ug/kg	29	0.22 J	2.2 U	4.4 U	0.069 J	3.8 U	2 U
alpha-BHC	ug/kg	77	1.9 U	2.2 U	4.4 U	2 U	3.8 U	2 U
alpha-Chlordane	ug/kg		4.4	2.2 U	0.45 J	0.28 J	3.8 U	2 U
beta-BHC	ug/kg	270	0.25 B	2.2 U	0.18 B	0.31 B	0.61 J	2 U
delta-BHC	ug/kg		0.073 J	2.2 U	4.4 U	0.073 J	3.8 U	2 U
Dieldrin	ug/kg	30	0.36 J	4.4 U	0.38 J	0.26 J	7.3 U	3.9 U
EndosulfanI	ug/kg		0.22 J	2.2 U	0.31 J	0.12 J	3.8 U	2 U
EndosulfanII	ug/kg		0.34 J	0.1 J	8.5 U	2.3 J	7.3 U	0.14 J
Endosulfansulfate	ug/kg		0.34 J	4.4 U	0.084 J	0.45 J	0.43 J	0.08 J
Endrin	ug/kg	1800	0.38 J	4.4 U	0.071 J	0.58 J	7.3 U	0.03 J
Endrinaldehyde	ug/kg		0.19 J	4.4 U	0.12 J	0.64 J	7.3 U	3.9 U
Endrinketone	ug/kg		1.1 J	0.088 J	0.36 J	1.8 J	1.4 J	0.16 J
gamma-BHC(Lindane)	ug/kg	520	0.087 J	2.2 U	4.4 U	0.27 J	3.8 U	2 U
gamma-Chlordane	ug/kg		4.3 J	0.052 J	0.32 J	0.19 J	3.8 U	0.032 J
Heptachlor	ug/kg	110	0.1 J	0.041 J	0.085 J	0.18 J	3.8 U	0.042 J
Heptachlorepoxide	ug/kg	53	0.85 J	2.2 U	4.4 U	0.023 J	3.8 U	2 U
Methoxychlor	ug/kg	31000	0.26 B	0.19 B	1.2 J	0.34 B	38 U	0.22 B
Toxaphene	ug/kg	440	190 U	220 U	440 U	200 U	380 U	200 U

Notes:

ug/L - microgram per kilogram

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Data Qualifiers:

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B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB15212325-NS	APSB15212325-WA	APSB20-21	APSB21-SS	APSB24262728-NS	APSB24262728-WA	APSB24-SS
Aroclor-1016	ug/kg	390	41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1221	ug/kg	140	41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1232	ug/kg	140	41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1242	ug/kg	220	41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1248	ug/kg	220	41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1254	ug/kg	220	41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1260	ug/kg	220	41 U	6.5 J	140 U	31 J	41 U	77 U	5.6 J
Aroclor-1262	ug/kg		41 U	100 U	140 U	99 U	41 U	77 U	45 U
Aroclor-1268	ug/kg		41 U	100 U	140 U	99 U	41 U	77 U	45 U
4,4'-DDD	ug/kg	2000	0.083 J	0.46 J	0.62 J	0.083 J	4.1 U	0.51 J	4.5 U
4,4'-DDE	ug/kg	1400	4 U	0.25 J	0.17 J	7.8 U	4.1 U	7.1 U	0.73 J
4,4'-DDT	ug/kg	1700	4 U	0.29 J	13 J	1.1 J	4.1 U	0.76 J	1.1 J
Aldrin	ug/kg	29	2.1 U	0.15 J	0.69 J	4 U	2.1 U	3.7 U	2.3 U
alpha-BHC	ug/kg	77	2.1 U	5.1 U	7.4 U	4 U	2.1 U	3.7 U	2.3 U
alpha-Chlordane	ug/kg		2.1 U	0.15 J	0.42 J	0.096 J	2.1 U	3.7 U	2.3 U
beta-BHC	ug/kg	270	2.1 U	0.27 B	0.57 B	0.24 B	2.1 U	3.7 U	0.56 J
delta-BHC	ug/kg		2.1 U	0.17 J	7.4 U	4 U	2.1 U	3.7 U	2.3 U
Dieldrin	ug/kg	30	0.053 J	1.3 J	10 J	0.55 J	4.1 U	0.63 J	4.5 U
EndosulfanI	ug/kg		2.1 U	0.14 J	0.99 J	0.05 J	2.1 U	3.7 U	2.3 U
EndosulfanII	ug/kg		0.17 J	9.8 U	1.4 J	0.11 J	4.1 U	0.78 J	0.9 J
Endosulfansulfate	ug/kg		0.096 J	0.2 J	1.6 J	0.37 J	4.1 U	7.1 U	0.45 J
Endrin	ug/kg	1800	0.082 J	0.15 J	0.53 J	0.07 J	4.1 U	7.1 U	4.5 U
Endrinaldehyde	ug/kg		4 U	0.5 J	4 J	7.8 U	4.1 U	0.99 J	4.5 U
Endrinketone	ug/kg		0.089 J	1.6 J	25 J	0.77 J	4.1 U	7.1 U	2.5 J
gamma-BHC(Lindane)	ug/kg	520	2.1 U	5.1 U	7.4 U	4 U	2.1 U	3.7 U	1.7 J
gamma-Chlordane	ug/kg		2.1 U	0.56 J	0.67 J	0.069 J	2.1 U	3.7 U	0.29 J
Heptachlor	ug/kg	110	0.037 J	0.12 J	0.32 J	0.097 J	2.1 U	3.7 U	0.37 J
Heptachlorepoxide	ug/kg	53	2.1 U	0.098 J	1.2 J	0.11 J	2.1 U	3.7 U	2.3 U
Methoxychlor	ug/kg	31000	0.093 B	0.23 B	6.6 J	0.33 B	21 U	0.47 J	23 U
Toxaphene	ug/kg	440	210 U	510 U	740 U	400 U	210 U	370 U	230 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	APSB303132-CW	APSB303132-WA	APSB3132-NS	APSB32D-SS	APSB32-SS	APTF01-SS	APTF02-SS	APTF03-SS
Aroclor-1016	ug/kg	390	89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1221	ug/kg	140	89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1232	ug/kg	140	89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1242	ug/kg	220	89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1248	ug/kg	220	89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1254	ug/kg	220	89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1260	ug/kg	220	18 J	62 U	39 U	12 J	12 J	14 J	370	92 U
Aroclor-1262	ug/kg		89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
Aroclor-1268	ug/kg		89 U	62 U	39 U	100 U	97 U	92 U	74 U	92 U
4,4'-DDD	ug/kg	2000	0.28 J	0.26 J	4.2 U	0.10 J	0.21 J			
4,4'-DDE	ug/kg	1400	0.47 J	0.073 J	4.2 U	0.47 J	0.49 J			
4,4'-DDT	ug/kg	1700	5.5 J	0.17 J	0.21 J	4.1 J	4.2 J			
Aldrin	ug/kg	29	4.6 U	0.045 J	0.036 J	5.2 U	4.9 U			
alpha-BHC	ug/kg	77	4.6 U	3.5 U	2.2 U	5.2 U	4.9 U			
alpha-Chlordane	ug/kg		0.28 J	3.5 U	2.2 U	5.2 U	0.13 J			
beta-BHC	ug/kg	270	0.71 B	0.11 B	0.061 B	0.42 B	0.46 B			
delta-BHC	ug/kg		4.6 U	3.5 U	0.029 J	5.2 U	4.9 U			
Dieldrin	ug/kg	30	0.7 J	0.24 J	0.049 J	0.31 J	0.64 J			
EndosulfanI	ug/kg		4.6 U	0.056 J	2.2 U	5.2 U	4.9 U			
EndosulfanII	ug/kg		1.3 J	0.28 J	4.2 U	1.3 J	0.7 J			
Endosulfansulfate	ug/kg		0.083 J	0.54 J	0.033 J	0.13 J	0.25 J			
Endrin	ug/kg	1800	0.27 J	0.13 J	0.058 J	0.17 J	0.44 J			
Endrinaldehyde	ug/kg		0.19 J	0.57 J	4.2 U	0.16 J	0.12 J			
Endrinketone	ug/kg		3.8 J	0.3 J	4.2 U	3.3 J	2.5 J			
gamma-BHC(Lindane)	ug/kg	520	0.23 J	3.5 U	2.2 U	0.091 J	0.17 J			
gamma-Chlordane	ug/kg		0.14 J	0.18 J	0.043 J	0.13 J	0.26 J			
Heptachlor	ug/kg	110	0.21 B	0.06 B	2.2 U	0.12 B	0.18 B			
Heptachlorepoxide	ug/kg	53	0.24 J	0.08 J	2.2 U	0.12 J	0.19 J			
Methoxychlor	ug/kg	31000	0.66 B	2.1 J	0.48 B	0.36 B	0.39 B			
Toxaphene	ug/kg	440	460 U	350 U	220 U	520 U	490 U			

Notes:

ug/L - microgram per kilogram

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP01-D	CKFP01-S	CKFP02-D	CKFP02-S	CKFP03-D	CKFP03-S	CKFP04-D	CKFP04-S	CKFP05-D	CKFP05D-D
Aroclor-1016	ug/kg	390	36 U	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
Aroclor-1221	ug/kg	140	36 U	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
Aroclor-1232	ug/kg	140	36 U	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
Aroclor-1242	ug/kg	220	36 U	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
Aroclor-1248	ug/kg	220	20 J	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
Aroclor-1254	ug/kg	220	36 U	38 U	9.3 J	32 J	72	24 J	17 J	9.6 J	41 U	37 U
Aroclor-1260	ug/kg	220	15 J	7.9 J	52 U	54 U	42 U	49 U	38 U	36 U	15 J	11 J
Aroclor-1262	ug/kg		36 U	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
Aroclor-1268	ug/kg		36 U	38 U	52 U	54 U	42 U	49 U	38 U	36 U	41 U	37 U
4,4'-DDD	ug/kg	2000	0.88 J	0.59 J	0.32 J	0.52 J	0.72 J	1.5 J	0.21 J	1.1 J	0.2 J	0.43 J
4,4'-DDE	ug/kg	1400	4.7	2.4 J	0.12 J	0.89 J	0.44 J	2.4 J	0.17 J	0.46 J	2.6 J	1.5 J
4,4'-DDT	ug/kg	1700	16 J	6.8	0.86 J	6.1	16	60	1.9 J	2.7 J	7.4	6.5
Aldrin	ug/kg	29	0.091 J	0.019 J	0.15 J	0.36 J	0.031 J	0.12 J	0.038 J	0.14 J	0.045 J	0.065 J
alpha-BHC	ug/kg	77	0.037 J	0.024 J	2.7 U	0.02 J	0.076 J	0.054 J	2 U	0.042 J	0.04 J	0.025 J
alpha-Chlordane	ug/kg		1.9 J	1.9 J	2.7 U	0.54 J	1.3 J	2.1 J	0.39 J	0.5 J	0.055 J	0.32 J
beta-BHC	ug/kg	270	0.12 B	0.18 B	0.36 B	0.63 J	0.25 B	0.12 B	0.11 B	0.17 B	0.21 J	0.17 J
delta-BHC	ug/kg		0.056 J	0.052 J	0.046 J	0.11 J	0.16 J	0.074 J	0.058 J	0.13 J	0.12 J	0.086 J
Dieldrin	ug/kg	30	2 J	1.8 J	0.22 J	0.2 J	0.24 J	0.24 J	0.66 J	0.88 J	5.2 J	3.7 J
EndosulfanI	ug/kg		0.092 J	0.12 J	0.12 J	0.38 J	0.98 J	1.4 J	0.059 J	0.13 J	0.087 J	0.17 J
EndosulfanII	ug/kg		2.3 J	0.17 J	3.1 J	0.51 J	2.2 J	3.1 J	0.15 J	0.084 J	0.92 J	0.45 J
Endosulfansulfate	ug/kg		0.20 J	0.17 J	0.33 J	0.29 J	0.14 J	0.25 J	0.061 J	0.18 J	0.12 J	0.18 J
Endrin	ug/kg	1800	0.073 J	0.13 J	0.15 J	0.094 J	3.4 J	0.53 J	0.031 J	0.081 J	0.072 J	0.14 J
Endrinaldehyde	ug/kg		1.8 J	0.089 J	0.14 J	0.64 J	1.3 J	1.4 J	0.19 J	0.34 J	0.96 J	0.56 J
Endrinketone	ug/kg		7.6 J	5.1 J	8.9 J	12 J	6.4 J	6.6 J	2.9 J	4.9 J	5.7 J	3.9 J
gamma-BHC(Lindane)	ug/kg	520	0.25 J	0.047 J	2.7 U	0.28 J	0.12 J	0.21 J	2 U	0.089 J	2.1 U	2.1 U
gamma-Chlordane	ug/kg		1.5 J	1.6 J	0.094 J	0.45 J	0.62 J	1.3 J	0.43 J	0.44 J	0.1 J	0.071 J
Heptachlor	ug/kg	110	0.36 J	0.16 B	0.22 B	0.28 B	0.12 B	0.16 B	0.093 B	0.13 B	0.27 J	0.03 J
Heptachlorepoxide	ug/kg	53	0.4 J	0.29 J	0.054 J	0.24 J	0.3 J	0.23 J	0.076 J	0.1 J	0.09 J	0.054 J
Methoxychlor	ug/kg	31000	0.71 B	0.34 B	0.33 B	0.56 B	0.28 B	0.22 B	0.24 B	0.78 B	0.27 J	0.25 J
Toxaphene	ug/kg	440	200 U	200 U	270 U	270 U	230 U	260 U	200 U	190 U	210 U	210 U

Notes:

ug/L - microgram per kilogram

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Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKFP05-S	CKFP06-D	CKFP07-D	CKFP07-S	CKFP08-D	CKFP08-S	CKSB01-WA	CKSD01-RI-01	CKSD02-RI-01
Aroclor-1016	ug/kg	390	41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
Aroclor-1221	ug/kg	140	41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
Aroclor-1232	ug/kg	140	41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
Aroclor-1242	ug/kg	220	41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
Aroclor-1248	ug/kg	220	41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
Aroclor-1254	ug/kg	220	41 U	38 U	32 J	16 J	40 U	40 U	47 U	34 U	34 U
Aroclor-1260	ug/kg	220	10 J	29 J	39 U	45 U	8.9 J	6.3 J	47 U	34 U	34 U
Aroclor-1262	ug/kg		41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
Aroclor-1268	ug/kg		41 U	38 U	39 U	45 U	40 U	40 U	47 U	34 U	34 U
4,4'-DDD	ug/kg	2000	0.3 J	2.1 J	0.67 J	0.45 J	0.18 J	0.2 J	4.7 U	0.082 J	0.093 J
4,4'-DDE	ug/kg	1400	0.91 J	4.2	0.8 J	0.44 J	0.34 J	0.25 J	4.7 U	0.15 J	0.035 J
4,4'-DDT	ug/kg	1700	5.2	28	1 J	9.7 J	1.7 J	0.91 J	4.7 U	0.19 J	0.093 J
Aldrin	ug/kg	29	0.018 J	0.076 J	0.27 J	0.041 J	0.095 J	0.038 J	0.021 J	0.03 J	0.029 J
alpha-BHC	ug/kg	77	0.073 J	0.058 J	0.039 J	0.084 J	2.1 U	2.1 U	2.4 U	0.026 J	0.033 JP
alpha-Chlordane	ug/kg		0.46 J	0.3 J	0.3 J	0.68 J	2.1 U	0.18 J	2.4 U	0.072 J	0.091 J
beta-BHC	ug/kg	270	0.27 J	0.3 J	0.22 B	0.35 B	0.096 B	0.29 B	0.061 B	1.9 U	0.014 JP
delta-BHC	ug/kg		0.092 J	0.47 J	0.074 J	0.3 J	2.1 U	0.078 B	0.036 J	1.9 U	0.04 J
Dieldrin	ug/kg	30	1.2 J	0.11 J	1.1 J	0.18 J	0.31 J	0.47 J	4.7 U	0.24 J	1 J
EndosulfanI	ug/kg		0.12 J	0.48 J	0.19 J	0.31 J	0.045 J	2.1 U	2.4 U	1.9 U	0.3 J
EndosulfanII	ug/kg		1.4 J	0.87 J	0.6 J	2.4 J	0.19 J	0.12 J	4.7 U	0.06 J	0.1 J
Endosulfansulfate	ug/kg		0.093 J	0.5 J	0.80 J	0.32 J	0.052 J	0.18 J	4.7 U	3.6 U	0.028 J
Endrin	ug/kg	1800	0.12 J	0.13 J	0.33 J	0.15 J	0.061 J	0.048 J	4.7 U	0.057 J	0.044 J
Endrinaldehyde	ug/kg		0.5 J	0.24 J	1.2 J	1.5 J	0.39 J	0.38 J	4.7 U	0.29 J	0.13 J
Endrinketone	ug/kg		4 J	22 J	16 J	12 J	0.26 J	2.1 J	4.7 U	0.096 J	0.047 J
gamma-BHC(Lindane)	ug/kg	520	2.2 U	0.25 J	0.17 J	0.13 J	0.038 J	0.29 J	2.4 U	0.028 J	1.8 U
gamma-Chlordane	ug/kg		0.12 J	0.78 J	0.34 J	0.19 J	0.18 J	0.13 J	2.4 U	0.19 J	0.22 J
Heptachlor	ug/kg	110	0.12 J	0.26 J	0.25 B	0.22 B	0.09 B	0.13 B	0.033 B	0.025 J	0.027 J
Heptachlorepoxide	ug/kg	53	0.047 J	0.63 J	0.26 J	0.12 J	0.12 J	0.037 J	2.4 U	0.028 J	0.06 J
Methoxychlor	ug/kg	31000	0.3 J	1 J	2.7 J	0.43 B	0.13 B	0.11 B	24 U	19 U	18 U
Toxaphene	ug/kg	440	220 U	200 U	200 U	230 U	210 U	210 U	240 U	190 U	180 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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AP – Asbestos Pile
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Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01	CKSD07-RI-01	CKSD08-RI-01	CKSD09-RI-01
Aroclor-1016	ug/kg	390	42 U	40 U	46 U	43 U	49 U	38 U	38 U
Aroclor-1221	ug/kg	140	42 U	40 U	46 U	43 U	49 U	38 U	38 U
Aroclor-1232	ug/kg	140	42 U	40 U	46 U	43 U	49 U	38 U	38 U
Aroclor-1242	ug/kg	220	42 U	40 U	46 U	43 U	49 U	38 U	38 U
Aroclor-1248	ug/kg	220	42 U	40 U	46 U	43 U	49 U	38 U	38 U
Aroclor-1254	ug/kg	220	66	40 U	5.2 J	43 U	49 U	38 U	38 U
Aroclor-1260	ug/kg	220	42 U	40 U	2.8 J	43 U	9.5 J	38 U	38 U
Aroclor-1262	ug/kg		42 U	40 U	46 U	43 U	49 U	38 U	38 U
Aroclor-1268	ug/kg		42 U	40 U	46 U	43 U	49 U	38 U	38 U
4,4'-DDD	ug/kg	2000	3.3 J	0.53 J	0.13 J	0.54 J	1.2 J	0.3 J	0.2 J
4,4'-DDE	ug/kg	1400	1.9 J	0.15 J	0.14 J	0.45 J	0.37 J	0.31 J	0.095 J
4,4'-DDT	ug/kg	1700	4.3	0.082 J	0.57 J	1 J	1.6 J	0.66 J	0.15 J
Aldrin	ug/kg	29	0.48 J	0.03 J	0.036 J	0.039 J	1.7 J	0.012 J	0.051 J
alpha-BHC	ug/kg	77	0.028 J	2.2 U	2.3 U	2.3 U	2.5 U	1.9 U	0.027 J
alpha-Chlordane	ug/kg		1.2 J	0.89 J	0.38 J	2.1 J	0.78 J	0.72 J	0.51 J
beta-BHC	ug/kg	270	0.22 J	0.14 B	0.12 B	0.062 B	0.13 B	0.044 B	0.041 J
delta-BHC	ug/kg		2.2 U	2.2 U	0.021 B	0.062 B	0.096 B	0.026 B	0.13 J
Dieldrin	ug/kg	30	1.3 J	0.88 J	0.64 J	2.6 J	8.3	0.75 J	0.26 J
EndosulfanI	ug/kg		0.25 J	0.11 J	0.096 J	0.048 J	0.089 J	0.022 J	0.096 J
EndosulfanII	ug/kg		0.83 J	0.065 J	0.095 J	4.5 U	0.59 J	0.75 J	0.098 J
Endosulfansulfate	ug/kg		0.091 J	0.17 J	0.082 J	0.16 J	0.056 J	0.048 J	0.12 J
Endrin	ug/kg	1800	0.072 J	0.18 J	0.028 J	0.11 J	0.024 J	0.04 J	0.073 J
Endrinaldehyde	ug/kg		0.53 J	0.53 J	0.11 J	0.45 J	0.4 J	0.13 J	0.055 J
Endrinketone	ug/kg		4.1 J	0.47 J	0.19 J	0.3 J	0.44 J	0.18 J	4.7 J
gamma-BHC(Lindane)	ug/kg	520	0.13 J	2.2 U	2.3 U	2.3 U	0.061 J	1.9 U	1.9 U
gamma-Chlordane	ug/kg		0.73 J	0.46 J	0.27 J	1.5 J	0.42 J	0.5 J	0.59 J
Heptachlor	ug/kg	110	0.1 J	0.15 J	2.3 U	0.1 B	0.079 B	0.041 B	0.093 J
Heptachlorepoxide	ug/kg	53	0.22 J	0.26 J	0.13 J	0.36 J	0.14 J	0.11 J	0.065 J
Methoxychlor	ug/kg	31000	0.27 J	0.27 B	0.077 B	0.22 B	0.37 J	0.1 B	0.13 J
Toxaphene	ug/kg	440	220 U	220 U	230 U	230 U	250 U	190 U	190 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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Data Qualifiers:

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01	OWSB01-SS	OWSB02-SS	OWSB03-SS	PKSB03042226-CW
Aroclor-1016	ug/kg	390	47 U	41 U	39 U	46 U	49 U	42 U	39 U
Aroclor-1221	ug/kg	140	47 U	41 U	39 U	46 U	49 U	42 U	39 U
Aroclor-1232	ug/kg	140	47 U	41 U	39 U	46 U	49 U	42 U	39 U
Aroclor-1242	ug/kg	220	47 U	41 U	39 U	46 U	49 U	42 U	39 U
Aroclor-1248	ug/kg	220	47 U	41 U	39 U	46 U	49 U	42 U	39 U
Aroclor-1254	ug/kg	220	71	41 U	39 U	46 U	14 J	42 U	39 U
Aroclor-1260	ug/kg	220	47 U	41 U	39 U	46 U	49 U	42 U	4.4 J
Aroclor-1262	ug/kg		47 U	41 U	39 U	46 U	49 U	42 U	39 U
Aroclor-1268	ug/kg		47 U	41 U	39 U	46 U	49 U	42 U	39 U
4,4'-DDD	ug/kg	2000	1.5 J	0.8 J	1.4 J	0.24 J	0.11 J	0.14 J	0.056 J
4,4'-DDE	ug/kg	1400	0.52 J	0.26 J	0.82 J	0.11 J	0.35 J	0.37 J	0.057 J
4,4'-DDT	ug/kg	1700	7.5	0.92 J	2.2 J	0.74 J	1.3 J	1.5 J	0.13 J
Aldrin	ug/kg	29	0.37 J	0.019 J	0.02 J	0.062 J	0.027 J	0.015 J	2 U
alpha-BHC	ug/kg	77	2.6 U	0.035 J	0.039 J	2.4 U	0.042 J	0.035 J	0.019 B
alpha-Chlordane	ug/kg		1.5 J	1.1 J	0.52 J	0.13 J	0.17 J	0.11 J	2 U
beta-BHC	ug/kg	270	0.14 B	0.13 B	0.12 B	0.14 B	0.17 B	0.18 B	0.18 B
delta-BHC	ug/kg		0.072 B	0.075 B	0.11 J	2.4 U	0.058 B	0.061 B	0.014 J
Dieldrin	ug/kg	30	0.87 J	1.5 J	1.7 J	0.078 J	0.5 J	0.54 J	0.07 J
EndosulfanI	ug/kg		0.37 J	0.067 J	0.074 J	0.067 J	0.057 J	0.026 J	0.024 J
EndosulfanII	ug/kg		1.1 J	0.18 J	0.11 J	0.21 J	0.15 J	0.23 J	0.042 J
Endosulfansulfate	ug/kg		0.11 J	0.077 J	0.11 J	0.075 J	0.14 J	0.038 J	0.075 J
Endrin	ug/kg	1800	0.15 J	0.075 J	0.029 J	0.028 J	0.027 J	0.029 J	0.46 J
Endrinaldehyde	ug/kg		0.43 J	0.32 J	0.074 J	0.13 J	0.19 J	0.18 J	0.048 J
Endrinketone	ug/kg		0.32 J	4.1 J	4.7 J	0.034 J	0.22 J	0.22 J	1.2 J
gamma-BHC(Lindane)	ug/kg	520	0.099 J	2.2 U	2.1 U	2.4 U	0.047 J	0.056 J	0.047 B
gamma-Chlordane	ug/kg		0.9 J	0.69 J	1 J	0.11 J	0.26 J	0.13 J	0.068 J
Heptachlor	ug/kg	110	0.12 B	0.091 B	0.097 B	2.4 U	0.097 B	0.11 B	0.041 J
Heptachlorepoxide	ug/kg	53	0.26 J	0.16 J	0.15 J	0.053 J	0.11 J	0.055 J	0.021 J
Methoxychlor	ug/kg	31000	0.25 B	0.24 B	0.33 B	0.1 B	0.12 B	0.26 B	0.21 B
Toxaphene	ug/kg	440	260 U	220 U	210 U	240 U	240 U	230 U	200 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
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Data Qualifiers:

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U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW	PKSB06192940-NS	PKSB06192940-WA
Aroclor-1016	ug/kg	390	37 U	37 U	37 U	40 U	40 U
Aroclor-1221	ug/kg	140	37 U	37 U	37 U	40 U	40 U
Aroclor-1232	ug/kg	140	37 U	37 U	37 U	40 U	40 U
Aroclor-1242	ug/kg	220	37 U	37 U	37 U	40 U	40 U
Aroclor-1248	ug/kg	220	37 U	37 U	37 U	40 U	40 U
Aroclor-1254	ug/kg	220	37 U	37 U	37 U	40 U	40 U
Aroclor-1260	ug/kg	220	16 J	28 J	6.5 J	40 U	1.9 J
Aroclor-1262	ug/kg		37 U	37 U	37 U	40 U	40 U
Aroclor-1268	ug/kg		37 U	37 U	37 U	40 U	40 U
4,4'-DDD	ug/kg	2000	2.3 J	0.52 J	0.053 J	4 U	4.3 U
4,4'-DDE	ug/kg	1400	0.33 J	0.6 J	0.17 J	4 U	1.3 J
4,4'-DDT	ug/kg	1700	0.29 J	1.2 J	0.23 J	4 U	0.91 J
Aldrin	ug/kg	29	0.057 J	0.036 J	0.018 J	0.042 J	0.046 J
alpha-BHC	ug/kg	77	2.2 U	0.023 B	2 U	2.1 U	0.022 J
alpha-Chlordane	ug/kg		0.11 J	0.022 B	0.21 J	2.1 U	2.2 U
beta-BHC	ug/kg	270	0.086 B	0.08 B	0.057 B	0.045 B	0.071 B
delta-BHC	ug/kg		0.034 J	1.9 U	0.047 J	2.1 U	2.2 U
Dieldrin	ug/kg	30	0.18 J	1.7 J	0.14 J	4 U	0.68 J
EndosulfanI	ug/kg		0.05 J	0.08 J	0.019 J	2.1 U	0.12 J
EndosulfanII	ug/kg		0.22 J	1.5 J	0.23 J	4 U	0.68 J
Endosulfansulfate	ug/kg		0.42 J	0.42 J	0.026 J	0.067 J	0.16 J
Endrin	ug/kg	1800	0.073 J	0.083 J	0.048 B	4 U	0.91 J
Endrinaldehyde	ug/kg		0.065 J	0.95 J	0.094 J	4 U	0.37 J
Endrinketone	ug/kg		0.14 J	0.92 J	0.063 J	0.18 J	16
gamma-BHC(Lindane)	ug/kg	520	0.021 B	0.076 B	2 U	0.1 B	2.2 U
gamma-Chlordane	ug/kg		0.16 J	0.22 J	0.15 J	2.1 U	0.036 J
Heptachlor	ug/kg	110	2.2 U	0.44 J	0.15 B	0.031 B	0.44 J
Heptachlorepoxide	ug/kg	53	0.048 J	0.12 J	0.028 B	2.1 U	0.081 B
Methoxychlor	ug/kg	31000	0.3 B	0.3 B	0.5 J	21 U	2.9 J
Toxaphene	ug/kg	440	220 U	190 U	200 U	210 U	220 U

Notes:

ug/L - microgram per kilogram

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB08101215-CW	PKSB08101215-NS	PKSB08101215-WA	PKSB13303335-CW	PKSB13303335-NS
Aroclor-1016	ug/kg	390	38 U	40 U	58 U	43 U	49 U
Aroclor-1221	ug/kg	140	38 U	40 U	58 U	43 U	49 U
Aroclor-1232	ug/kg	140	38 U	40 U	58 U	43 U	49 U
Aroclor-1242	ug/kg	220	38 U	40 U	58 U	43 U	49 U
Aroclor-1248	ug/kg	220	38 U	40 U	58 U	43 U	49 U
Aroclor-1254	ug/kg	220	38 U	40 U	58 U	43 U	49 U
Aroclor-1260	ug/kg	220	16 J	40 U	58 U	43 U	49 U
Aroclor-1262	ug/kg		38 U	40 U	58 U	43 U	49 U
Aroclor-1268	ug/kg		38 U	40 U	58 U	43 U	49 U
4,4'-DDD	ug/kg	2000	0.24 J	3.8 U	0.59 J	4.3 U	6.9
4,4'-DDE	ug/kg	1400	0.41 J	3.8 U	8.7	4.3 U	1.5 J
4,4'-DDT	ug/kg	1700	1.3 J	3.8 U	38	0.27 J	0.28 J
Aldrin	ug/kg	29	2 U	2 U	3 U	2.2 U	2.4 U
alpha-BHC	ug/kg	77	2 U	2 U	3 U	2.2 U	2.4 U
alpha-Chlordane	ug/kg		2 U	2 U	1.1 J	2.2 U	0.26 J
beta-BHC	ug/kg	270	0.37 J	2 U	3 U	2.2 U	2.4 U
delta-BHC	ug/kg		2 U	2 U	3 U	2.2 U	2.4 U
Dieldrin	ug/kg	30	0.24 J	3.8 U	14	0.44 J	4.7 U
EndosulfanI	ug/kg		2 U	2 U	3 U	2.2 U	2.4 U
EndosulfanII	ug/kg		0.47 J	3.8 U	1.8 J	4.3 U	4.7 U
Endosulfansulfate	ug/kg		3.9 U	3.8 U	0.95 J	4.3 U	4.7 U
Endrin	ug/kg	1800	0.2 J	3.8 U	2 J	4.3 U	4.7 U
Endrinaldehyde	ug/kg		0.23 J	3.8 U	1.7 J	4.3 U	4.7 U
Endrinketone	ug/kg		2.5 J	3.8 U	2 J	0.29 J	4.7 U
gamma-BHC(Lindane)	ug/kg	520	2 U	2 U	0.5 J	0.67 J	2.4 U
gamma-Chlordane	ug/kg		2 U	2 U	1.4 J	2.2 U	0.33 J
Heptachlor	ug/kg	110	0.35 J	2 U	0.96 J	2.2 U	2.4 U
Heptachlorepoxide	ug/kg	53	2 U	2 U	3 U	2.2 U	2.4 U
Methoxychlor	ug/kg	31000	0.63 B	1.7 B	0.73 B	2.6 B	9.4 B
Toxaphene	ug/kg	440	200 U	200 U	300 U	220 U	240 U

Notes:

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U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB13303335-WA	PKSB15-SS	PKSB19-SS	PKSB30D-SS	PKSB30-SS	PKSB38444851-CW	PKSB38444851-NS
Aroclor-1016	ug/kg	390	39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1221	ug/kg	140	39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1232	ug/kg	140	39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1242	ug/kg	220	39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1248	ug/kg	220	39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1254	ug/kg	220	39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1260	ug/kg	220	39 U	49 U	13 J	43 U	42 U	42 U	38 U
Aroclor-1262	ug/kg		39 U	49 U	49 U	43 U	42 U	42 U	38 U
Aroclor-1268	ug/kg		39 U	49 U	49 U	43 U	42 U	42 U	38 U
4,4'-DDD	ug/kg	2000	1 J	5.3 U	0.9 J	4.2 U	4.3 U	4.4 U	0.26 J
4,4'-DDE	ug/kg	1400	1.6 J	5.3 U	0.22 J	4.2 U	4.3 U	4.4 U	0.42 J
4,4'-DDT	ug/kg	1700	0.23 J	5.3 U	0.71 J	4.2 U	0.22 J	4.4 U	3.6 U
Aldrin	ug/kg	29	1.9 U	2.7 U	0.092 J	2.2 U	2.2 U	2.2 U	1.8 U
alpha-BHC	ug/kg	77	1.9 U	2.7 U	0.025 J	2.2 U	2.2 U	0.023 J	1.8 U
alpha-Chlordane	ug/kg		0.3 J	2.7 U	2.8 U	2.2 U	2.2 U	2.2 U	1.8 U
beta-BHC	ug/kg	270	1.9 U	0.27 J	0.12 B	2.2 U	0.67 J	0.13 B	0.056 B
delta-BHC	ug/kg		1.9 U	2.7 U	2.8 U	2.2 U	2.2 U	2.2 U	1.8 U
Dieldrin	ug/kg	30	0.81 J	0.32 J	0.33 J	4.2 U	4.3 U	4.4 U	3.6 U
EndosulfanI	ug/kg		1.9 U	2.7 U	2.8 U	2.2 U	2.2 U	2.2 U	1.8 U
EndosulfanII	ug/kg		1.5 J	5.3 U	0.1 J	4.2 U	4.3 U	0.16 J	0.021 J
Endosulfansulfate	ug/kg		3.6 U	5.3 U	0.38 J	4.2 U	4.3 U	0.1 J	3.6 U
Endrin	ug/kg	1800	1.7 J	0.25 J	0.74 J	4.2 U	4.3 U	0.086 B	3.6 U
Endrinaldehyde	ug/kg		1.2 J	5.3 U	0.54 J	4.2 U	4.3 U	4.4 U	3.6 U
Endrinketone	ug/kg		1.2 J	0.31 J	1 J	0.26 J	0.22 J	0.41 J	3.6 U
gamma-BHC(Lindane)	ug/kg	520	1.9 U	2.7 U	0.15 B	2.2 U	2.2 U	0.036 B	0.039 B
gamma-Chlordane	ug/kg		1.9 U	2.7 U	0.24 J	0.27 J	2.2 U	0.025 J	0.02 J
Heptachlor	ug/kg	110	0.95 J	2.7 U	0.15 B	2.2 U	2.2 U	0.08 B	0.041 B
Heptachlorepoxide	ug/kg	53	1.9 U	2.7 U	0.06 B	2.2 U	2.2 U	2.2 U	1.8 U
Methoxychlor	ug/kg	31000	1.7 B	2.3 B	28 U	3.5 B	1.5 B	22 U	0.11 B
Toxaphene	ug/kg	440	190 U	270 U	280 U	220 U	220 U	220 U	180 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	PKSB38444851-WA	PKSB38-SS	PKSB45-17_3	PKSB52-CW	PKSB52-NS	PKSB52-WA	RVSB011920-CW
Aroclor-1016	ug/kg	390	42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1221	ug/kg	140	42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1232	ug/kg	140	42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1242	ug/kg	220	42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1248	ug/kg	220	42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1254	ug/kg	220	42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1260	ug/kg	220	42 U	33 U	5000 U	2.6 J	41 U	41 J	45 U
Aroclor-1262	ug/kg		42 U	33 U	5000 U	28 U	41 U	47 U	45 U
Aroclor-1268	ug/kg		42 U	33 U	5000 U	28 U	41 U	47 U	45 U
4,4'-DDD	ug/kg	2000	0.043 J	3.6 U	1.2 J	0.44 J	4.1 U	0.5 J	0.89 J
4,4'-DDE	ug/kg	1400	0.065 J	0.1 J	28 J	3.3 U	4.1 U	1 J	0.4 J
4,4'-DDT	ug/kg	1700	0.071 J	3.6 U	3.3 J	0.23 J	4.1 U	4.4 J	1.7 J
Aldrin	ug/kg	29	0.046 J	1.9 U	3.8 J	1.7 U	2.1 U	2.4 U	0.06 J
alpha-BHC	ug/kg	77	0.032 J	0.013 J	4.2 J	1.7 U	2.1 U	2.4 U	2.3 U
alpha-Chlordane	ug/kg		0.081 B	1.9 U	51 U	1.7 U	2.1 U	2.4 U	0.3 J
beta-BHC	ug/kg	270	0.052 B	0.066 B	49 J	1.7 U	2.1 U	2.4 U	0.29 B
delta-BHC	ug/kg		2.2 U	1.9 U	11 J	1.7 U	2.1 U	2.4 U	2.3 U
Dieldrin	ug/kg	30	0.079 B	3.6 U	11 J	3.3 U	4.1 U	0.33 J	0.11 J
EndosulfanI	ug/kg		0.097 J	1.9 U	43 J	1.7 U	2.1 U	2.4 U	0.048 J
EndosulfanII	ug/kg		0.16 J	3.6 U	5.4 J	3.3 U	4.1 U	0.94 J	0.086 J
Endosulfansulfate	ug/kg		0.3 J	3.6 U	54 J	3.3 U	4.1 U	0.48 J	0.051 J
Endrin	ug/kg	1800	0.056 B	3.6 U	4.1 J	0.073 J	4.1 U	0.3 J	0.53 J
Endrinaldehyde	ug/kg		0.27 J	0.097 J	10 J	3.3 U	4.1 U	1.4 J	0.25 J
Endrinketone	ug/kg		0.29 J	3.6 U	11 J	0.4 J	4.1 U	0.68 J	1.8 J
gamma-BHC(Lindane)	ug/kg	520	2.2 U	1.9 U	14 J	1.7 U	2.1 U	2.4 U	2.3 U
gamma-Chlordane	ug/kg		0.1 J	0.019 J	0.76 J	1.7 U	2.1 U	2.4 U	0.26 J
Heptachlor	ug/kg	110	0.31 J	1.9 U	13 J	1.7 U	2.1 U	2.4 U	0.11 B
Heptachlorepoxide	ug/kg	53	0.024 B	1.9 U	3.6 J	1.7 U	2.1 U	2.4 U	0.22 J
Methoxychlor	ug/kg	31000	0.23 B	19 U	40 J	17 U	21 U	0.44 J	0.16 B
Toxaphene	ug/kg	440	220 U	190 U	5100 U	170 U	210 U	240 U	230 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
CK – Creek
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Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB011920-NS	RVSB020304-CW	RVSB020304-NS	RVSB020304-WA	RVSB04-SS	RVSB05060708-NS
Aroclor-1016	ug/kg	390	40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1221	ug/kg	140	40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1232	ug/kg	140	40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1242	ug/kg	220	40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1248	ug/kg	220	40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1254	ug/kg	220	40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1260	ug/kg	220	40 U	5.7 J	40 U	40 U	5.7 J	39 U
Aroclor-1262	ug/kg		40 U	51 U	40 U	40 U	41 U	39 U
Aroclor-1268	ug/kg		40 U	51 U	40 U	40 U	41 U	39 U
4,4'-DDD	ug/kg	2000	4 U	0.13 J	4 UJ	0.11 J	0.67 J	0.024 J
4,4'-DDE	ug/kg	1400	4 U	0.73 J	4 UJ	0.36 J	5.8 J	0.045 J
4,4'-DDT	ug/kg	1700	4 U	1.6 J	4 UJ	0.37 J	6.9 J	3.9 UJ
Aldrin	ug/kg	29	2.1 U	2.6 UJ	2.1 UJ	2 UJ	2.1 U	2 UJ
alpha-BHC	ug/kg	77	2.1 U	2.6 UJ	2.1 UJ	0.014 J	0.028 J	0.016 J
alpha-Chlordane	ug/kg		2.1 U	2.6 UJ	2.1 UJ	0.074 J	0.4 J	2 UJ
beta-BHC	ug/kg	270	0.07 B	0.17 B	0.055 J	0.083 J	0.1 J	0.046 J
delta-BHC	ug/kg		0.015 B	0.0053 J	0.078 J	0.073 J	0.04 J	0.021 J
Dieldrin	ug/kg	30	4 U	0.071 J	0.018 J	0.14 J	1.1 J	0.065 J
EndosulfanI	ug/kg		2.1 U	2.6 UJ	2.1 UJ	2 UJ	2.1 UJ	2 UJ
EndosulfanII	ug/kg		4 U	0.47 J	4 UJ	0.36 J	0.75 J	0.044 J
Endosulfansulfate	ug/kg		4 U	0.053 J	0.043 J	0.11 J	0.18 J	3.9 UJ
Endrin	ug/kg	1800	4 U	0.2 J	4 UJ	0.045 J	0.51 J	3.9 UJ
Endrinaldehyde	ug/kg		0.024 J	0.078 J	0.11 J	3.9 UJ	0.14 J	3.9 UJ
Endrinketone	ug/kg		4 U	1 J	4 UJ	0.56 J	2.2 J	0.24 J
gamma-BHC(Lindane)	ug/kg	520	2.1 U	0.13 J	2.1 UJ	0.26 J	0.27 J	2 UJ
gamma-Chlordane	ug/kg		2.1 U	0.026 J	2.1 UJ	0.045 J	0.17 J	0.056 J
Heptachlor	ug/kg	110	0.04 B	0.072 B	0.085 J	0.048 J	0.081 J	0.057 J
Heptachlorepoxide	ug/kg	53	2.1 U	0.025 J	0.034 J	0.054 J	0.074 J	0.042 J
Methoxychlor	ug/kg	31000	21 U	0.13 B	21 UJ	0.1 J	0.28 J	0.13 J
Toxaphene	ug/kg	440	210 U	260 UJ	210 UJ	200 UJ	210 UJ	200 UJ

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB05060708-WA	RVSB050607-CW	RVSB08-SS	RVSB09101112-CW	RVSB091011-WA	RVSB1112-NS	RVSB12-SS
Aroclor-1016	ug/kg	390	140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1221	ug/kg	140	140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1232	ug/kg	140	140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1242	ug/kg	220	140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1248	ug/kg	220	140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1254	ug/kg	220	140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1260	ug/kg	220	140 U	3.6 J	8.1 J	42 U	45 U	40 U	53 U
Aroclor-1262	ug/kg		140 U	43 U	51 U	42 U	45 U	40 U	53 U
Aroclor-1268	ug/kg		140 U	43 U	51 U	42 U	45 U	40 U	53 U
4,4'-DDD	ug/kg	2000	0.1 J	0.38 J	0.14 J	0.23 B	0.089 J	3.7 U	0.08 B
4,4'-DDE	ug/kg	1400	0.24 J	1.8 J	0.8 J	0.15 J	0.065 J	3.7 U	0.2 J
4,4'-DDT	ug/kg	1700	0.33 J	1.2 J	21 J	0.38 J	0.053 J	3.7 U	0.86 J
Aldrin	ug/kg	29	7.1 UJ	0.033 J	0.061 J	0.028 J	2.3 U	1.9 U	2.6 U
alpha-BHC	ug/kg	77	0.047 J	0.016 J	0.092 J	0.027 J	2.3 U	1.9 U	0.07 J
alpha-Chlordane	ug/kg		7.1 UJ	0.089 J	2.7 UJ	2.3 U	2.3 U	1.9 U	0.09 J
beta-BHC	ug/kg	270	7.1 UJ	0.068 J	0.21 J	0.16 B	0.1 B	0.11 B	0.31 B
delta-BHC	ug/kg		0.15 J	0.034 J	0.029 J	0.02 B	0.018 B	1.9 U	0.019 B
Dieldrin	ug/kg	30	14 UJ	0.7 J	0.13 J	0.13 J	0.04 J	3.7 U	0.51 J
EndosulfanI	ug/kg		7.1 UJ	2.2 UJ	2.7 UJ	2.3 U	2.3 U	1.9 U	2.6 U
EndosulfanII	ug/kg		0.36 J	0.2 J	0.33 J	0.19 J	0.13 J	3.7 U	0.68 J
Endosulfansulfate	ug/kg		0.063 J	0.07 J	0.038 J	4.5 U	0.066 J	3.7 U	0.17 J
Endrin	ug/kg	1800	0.067 J	0.076 J	0.067 J	0.052 J	0.043 J	3.7 U	0.05 J
Endrinaldehyde	ug/kg		14 UJ	0.058 J	0.18 J	4.5 U	4.4 U	3.7 U	0.13 J
Endrinketone	ug/kg		0.57 J	0.42 J	1.1 J	0.77 J	0.043 J	3.7 U	0.19 J
gamma-BHC(Lindane)	ug/kg	520	7.1 UJ	0.061 J	0.12 J	2.3 U	0.16 J	1.9 U	2.6 U
gamma-Chlordane	ug/kg		7.1 UJ	0.16 J	0.075 J	0.098 B	0.026 B	0.024 B	0.2 B
Heptachlor	ug/kg	110	0.11 J	0.17 J	0.07 J	0.094 B	0.074 B	0.062 B	0.097 B
Heptachlorepoxide	ug/kg	53	0.057 J	2.2 UJ	0.043 J	0.046 J	2.3 U	1.9 U	0.033 J
Methoxychlor	ug/kg	31000	0.52 J	0.54 J	0.22 J	0.14 B	0.10 B	0.23 B	0.19 B
Toxaphene	ug/kg	440	710 UJ	220 UJ	270 UJ	230 U	230 U	190 U	260 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

AP – Asbestos Pile
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Data Qualifiers:

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U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB15161718-CW	RVSB15161718-NS	RVSB15161718-WA	RVSB17-SS	RVSB19-SS	RVSB21222324-CW
Aroclor-1016	ug/kg	390	43 U	41 U	38 U	53 U	100 U	38 U
Aroclor-1221	ug/kg	140	43 U	41 U	38 U	53 U	100 U	38 U
Aroclor-1232	ug/kg	140	43 U	41 U	38 U	53 U	100 U	38 U
Aroclor-1242	ug/kg	220	43 U	41 U	38 U	53 U	100 U	38 U
Aroclor-1248	ug/kg	220	43 U	41 U	38 U	53 U	100 U	55
Aroclor-1254	ug/kg	220	43 U	41 U	38 U	53 U	100 U	25 J
Aroclor-1260	ug/kg	220	7.9 J	41 U	4.4 J	5.1 J	100 U	38 U
Aroclor-1262	ug/kg		43 U	41 U	38 U	53 U	100 U	38 U
Aroclor-1268	ug/kg		43 U	41 U	38 U	53 U	100 U	38 U
4,4'-DDD	ug/kg	2000	1.1 J	3.8 U	0.17 J	0.1 J	0.65 B	2.6 J
4,4'-DDE	ug/kg	1400	9.9	3.8 U	0.34 J	0.063 J	0.23 J	3.1 J
4,4'-DDT	ug/kg	1700	29	3.8 U	0.1 J	1.1 J	0.95 J	3.3 J
Aldrin	ug/kg	29	0.034 J	2 U	1.9 U	2.7 U	0.084 J	0.17 J
alpha-BHC	ug/kg	77	0.023 J	2 U	1.9 U	0.022 J	0.093 J	2 U
alpha-Chlordane	ug/kg		0.2 J	2 U	1.9 U	0.19 J	0.38 J	0.53 J
beta-BHC	ug/kg	270	0.19 B	0.12 B	0.095 B	0.27 B	0.35 B	0.15 B
delta-BHC	ug/kg		0.092 J	2 U	0.058 J	0.16 J	0.11 B	0.027 J
Dieldrin	ug/kg	30	0.056 J	3.8 U	0.23 J	0.24 J	0.34 J	1.1 J
EndosulfanI	ug/kg		0.09 J	0.036 J	0.058 J	0.64 J	0.16 J	0.19 J
EndosulfanII	ug/kg		0.042 J	0.038 J	0.15 J	0.57 J	1.3 J	0.21 J
Endosulfansulfate	ug/kg		0.054 J	3.8 U	0.055 J	0.11 J	0.44 J	0.033 J
Endrin	ug/kg	1800	0.025 J	3.8 U	0.067 J	0.32 J	0.15 J	0.03 J
Endrinaldehyde	ug/kg		0.97 J	3.8 U	0.098 J	1.1 J	0.44 J	0.23 J
Endrinketone	ug/kg		0.7 J	0.034 J	0.52 J	0.34 J	0.29 J	0.35 J
gamma-BHC(Lindane)	ug/kg	520	0.42 J	2 U	0.035 J	0.05 J	5 U	0.13 J
gamma-Chlordane	ug/kg		0.34 J	2 U	0.058 J	0.25 J	0.22 B	0.49 J
Heptachlor	ug/kg	110	0.15 J	0.031 J	0.027 J	0.12 J	0.16 B	0.058 B
Heptachlorepoxide	ug/kg	53	0.041 J	2 U	0.035 J	0.04 J	0.29 J	0.048 J
Methoxychlor	ug/kg	31000	0.28 B	0.13 B	0.22 B	1 J	0.29 B	0.12 B
Toxaphene	ug/kg	440	220 U	200 U	190 U	270 U	500 U	200 U

Notes:

ug/L - microgram per kilogram

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Data Qualifiers:

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSB21222324-WA	RVSB24-SS	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01
Aroclor-1016	ug/kg	390	49 U	38 U	51 U	160 U	44 U	190 U	120 U
Aroclor-1221	ug/kg	140	49 U	38 U	51 U	160 U	44 U	190 U	120 U
Aroclor-1232	ug/kg	140	49 U	38 U	51 U	160 U	44 U	190 U	120 U
Aroclor-1242	ug/kg	220	49 U	38 U	51 U	160 U	44 U	190 U	120 U
Aroclor-1248	ug/kg	220	49 U	120	51 U	160 U	44 U	190 U	120 U
Aroclor-1254	ug/kg	220	49 U	140	51 U	160 U	44 U	190 U	120 U
Aroclor-1260	ug/kg	220	49 U	38 U	51 U	160 U	44 U	190 U	120 U
Aroclor-1262	ug/kg		49 U	38 U	51 U	160 U	44 U	190 U	120 U
Aroclor-1268	ug/kg		49 U	38 U	51 U	160 U	44 U	190 U	120 U
4,4'-DDD	ug/kg	2000	0.35 J	0.9 J	0.13 B	0.27 B	4.6 U	20 U	0.53 B
4,4'-DDE	ug/kg	1400	36	3.8 J	0.069 J	0.3 J	0.03 J	0.45 J	0.64 J
4,4'-DDT	ug/kg	1700	14	4.1 J	5.2 U	0.34 B	4.6 U	0.35 B	0.58 B
Aldrin	ug/kg	29	2.6 U	1.2 J	0.036 B	8.1 U	0.035 B	10 U	7.1 U
alpha-BHC	ug/kg	77	2.6 U	0.032 J	0.035 J	0.073 J	2.3 U	0.18 J	0.13 J
alpha-Chlordane	ug/kg		0.043 J	1.5 J	0.036 J	0.041 J	0.083 J	10 U	7.1 U
beta-BHC	ug/kg	270	0.11 B	0.56 J	0.15 B	0.47 B	0.14 B	0.58 B	0.33 B
delta-BHC	ug/kg		0.027 J	0.024 J	0.036 B	0.14 B	2.3 U	0.13 B	0.15 B
Dieldrin	ug/kg	30	0.068 J	1.7 J	0.039 J	0.33 J	0.048 J	0.26 J	0.29 J
EndosulfanI	ug/kg		0.021 J	0.97 J	0.037 J	0.13 J	0.043 J	10 U	0.12 J
EndosulfanII	ug/kg		0.1 J	0.41 J	0.058 J	0.4 J	4.6 U	20 U	0.1 J
Endosulfansulfate	ug/kg		0.11 J	0.059 J	5.2 U	0.19 B	4.6 U	20 U	0.15 B
Endrin	ug/kg	1800	0.77 J	0.098 J	5.2 U	0.26 J	4.6 U	20 U	0.19 J
Endrinaldehyde	ug/kg		0.089 J	0.09 J	0.026 J	16 U	0.098 J	20 U	0.17 J
Endrinketone	ug/kg		0.26 J	0.5 J	0.057 J	0.17 J	4.6 U	0.19 J	0.22 J
gamma-BHC(Lindane)	ug/kg	520	2.6 U	0.12 J	2.7 U	0.16 J	2.3 U	0.27 J	0.17 J
gamma-Chlordane	ug/kg		0.084 J	0.94 J	0.053 B	0.17 B	0.05 B	0.27 B	0.17 B
Heptachlor	ug/kg	110	0.17 B	0.064 B	0.059 B	0.28 B	0.042 B	0.28 B	0.22 B
Heptachlorepoxide	ug/kg	53	0.021 J	0.057 J	2.7 U	8.1 U	2.3 U	0.21 J	0.14 J
Methoxychlor	ug/kg	31000	1.2 B	0.11 B	0.28 B	0.22 B	0.098 B	1.4 B	0.79 B
Toxaphene	ug/kg	440	260 U	210 U	270 U	810 U	230 U	1000 U	710 U

Notes:

ug/L - microgram per kilogram

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Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD05-RI-01	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01
Aroclor-1016	ug/kg	390	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1221	ug/kg	140	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1232	ug/kg	140	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1242	ug/kg	220	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1248	ug/kg	220	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1254	ug/kg	220	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1260	ug/kg	220	130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1262	ug/kg		130 U	87 U	280 U	420 U	360 U	300 U	330 U
Aroclor-1268	ug/kg		130 U	87 U	280 U	420 U	360 U	300 U	330 U
4,4'-DDD	ug/kg	2000	0.49 B	1.4 J	28 U	43 U	0.63 B	0.47 B	0.54 B
4,4'-DDE	ug/kg	1400	0.66 J	0.95 J	0.37 J	1.1 J	0.95 J	1.4 J	2 J
4,4'-DDT	ug/kg	1700	0.45 B	0.39 B	28 U	0.36 B	38 U	0.93 B	0.88 B
Aldrin	ug/kg	29	6.8 U	0.16 B	14 U	22 U	20 U	0.22 B	0.26 B
alpha-BHC	ug/kg	77	0.11 J	4.7 U	0.14 J	0.34 J	0.33 J	0.52 J	0.39 J
alpha-Chlordane	ug/kg		0.27 J	0.83 J	14 U	22 U	20 U	0.38 J	0.2 J
beta-BHC	ug/kg	270	0.3 B	0.15 B	0.27 B	1.5 B	1.2 B	0.5 B	0.53 B
delta-BHC	ug/kg		0.14 B	0.11 B	0.14 B	0.28 B	0.21 B	0.12 B	0.13 B
Dieldrin	ug/kg	30	0.3 J	0.19 J	0.32 J	43 U	0.5 J	0.32 J	0.31 J
EndosulfanI	ug/kg		0.12 J	4.7 U	0.17 J	22 U	20 U	16 U	0.33 J
EndosulfanII	ug/kg		0.29 J	0.33 J	28 U	0.56 J	0.52 J	0.67 J	0.26 J
Endosulfansulfate	ug/kg		13 U	0.12 B	28 U	43 U	0.57 B	30 U	0.32 B
Endrin	ug/kg	1800	0.12 J	1.3 J	28 U	43 U	38 U	0.18 J	0.53 J
Endrinaldehyde	ug/kg		13 U	0.58 J	28 U	43 U	38 U	0.45 J	0.21 J
Endrinketone	ug/kg		0.13 J	3.5 J	28 U	0.37 J	0.36 J	0.46 J	0.21 J
gamma-BHC(Lindane)	ug/kg	520	6.8 U	0.26 J	0.19 J	0.44 J	0.32 J	0.27 J	0.28 J
gamma-Chlordane	ug/kg		0.17 B	0.6 J	0.21 B	0.51 B	0.51 B	0.74 B	0.85 B
Heptachlor	ug/kg	110	0.24 B	0.23 B	0.22 B	0.9 B	0.38 B	0.27 B	0.27 B
Heptachlorepoxide	ug/kg	53	0.15 J	4.7 U	14 U	0.29 J	0.49 J	0.4 J	0.3 J
Methoxychlor	ug/kg	31000	0.64 B	0.44 B	1.8 B	12 J	1.7 B	2 B	2.3 B
Toxaphene	ug/kg	440	680 U	470 U	1400 U	2200 U	2000 U	1600 U	1700 U

Notes:

ug/L - microgram per kilogram

Blank cells indicate analyte not analyzed for

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CK – Creek
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SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

J - Analyte present. Reported value may not be accurate or precise.

B - Analyte not detected substantially above the level reported in laboratory or field blanks.

U - Analyte not detected

Table C-6
Aroclors and Pesticides Results in Soil and Sediment

Analyte	Result Unit	RSL (ug/kg)	RVSD12-RI-01	RVSD13-RI-01	RVSD14-RI-01	RVSD15-RI-01
Aroclor-1016	ug/kg	390	280 U	72 U	320 U	420 U
Aroclor-1221	ug/kg	140	280 U	72 U	320 U	420 U
Aroclor-1232	ug/kg	140	280 U	72 U	320 U	420 U
Aroclor-1242	ug/kg	220	280 U	72 U	320 U	420 U
Aroclor-1248	ug/kg	220	280 U	72 U	320 U	420 U
Aroclor-1254	ug/kg	220	280 U	72 U	320 U	420 U
Aroclor-1260	ug/kg	220	280 U	72 U	320 U	420 U
Aroclor-1262	ug/kg		280 U	72 U	320 U	420 U
Aroclor-1268	ug/kg		280 U	72 U	320 U	420 U
4,4'-DDD	ug/kg	2000	0.17 B	0.4 J	0.42 B	1.4 B
4,4'-DDE	ug/kg	1400	0.83 J	0.27 J	1.3 J	2.6 J
4,4'-DDT	ug/kg	1700	0.11 B	0.098 B	0.62 B	1.8 B
Aldrin	ug/kg	29	15 U	0.22 B	0.39 B	0.3 B
alpha-BHC	ug/kg	77	0.25 J	0.16 J	0.45 J	0.63 J
alpha-Chlordane	ug/kg		15 U	0.087 J	17 U	0.23 J
beta-BHC	ug/kg	270	0.91 B	0.12 B	1.2 B	1 B
delta-BHC	ug/kg		0.18 B	0.063 B	0.22 B	0.31 B
Dieldrin	ug/kg	30	1.1 J	0.33 J	0.57 J	0.43 J
EndosulfanI	ug/kg		0.22 J	0.11 J	0.33 J	22 U
EndosulfanII	ug/kg		28 U	0.13 J	0.6 J	1.4 J
Endosulfansulfate	ug/kg		0.15 B	0.091 B	33 U	0.51 B
Endrin	ug/kg	1800	0.56 J	0.27 J	0.14 J	0.64 J
Endrinaldehyde	ug/kg		28 U	0.09 J	33 U	43 U
Endrinketone	ug/kg		0.23 J	0.24 J	0.23 J	0.24 J
gamma-BHC(Lindane)	ug/kg	520	0.25 J	0.13 J	0.33 J	0.52 J
gamma-Chlordane	ug/kg		0.43 B	0.18 B	0.84 B	1.3 B
Heptachlor	ug/kg	110	0.31 B	0.14 B	0.51 B	0.88 B
Heptachlorepoxide	ug/kg	53	0.17 J	0.25 J	0.18 J	0.31 J
Methoxychlor	ug/kg	31000	1.6 B	0.58 B	0.98 B	3.9 B
Toxaphene	ug/kg	440	1500 U	380 U	1700 U	2200 U

Notes:

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Data Qualifiers:

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U - Analyte not detected

Table C-7
Metals Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	APPZ01-RI-01	APPZ02-RI-01	APPZ03-RI-01	APSB12-RI-01	APSB18-RI-01	CKSW01-RI-01	CKSW02-RI-01
ALUMINUM	UG/L	37000	200 U	1340	7380	256 B	134 B	200 U	200 U
ANTIMONY	UG/L	15	60 U	60 U	60 U	60 U	60 U	60 U	60 U
ARSENIC	UG/L	0.45	6.3 J	22.7	28.9	10 U	10 U	10 U	10 U
BARIUM	UG/L	7300	317	924	1810	164 J	262	107 J	113 J
BERYLLIUM	UG/L	73	5 U	5 U	10.3	5 U	5 U	5 U	5 U
CADMIUM	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U
CADMIUM	UG/L	18	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CALCIUM	UG/L		729000	472000	146000	673000	756000	53000	53800
CHROMIUM	UG/L		10 U	8.2 J	25.3	29.8	10 U	10 U	4.4 J
COBALT	UG/L	11	50 U	50 U	42.2 J	50 U	50 U	50 U	50 U
COPPER	UG/L	1500	25 U	25 U	33.3	26.5	11.7 J	25 U	25 U
CYANIDE	UG/L	730	4.9 J	10 UL	10 UL	10 U	10 U	4.6 J	10 U
IRON	UG/L	26000	19800	27800	87300	100 U	92.4 J	161 B	138 B
LEAD	UG/L		5.7 J	5.5 J	69.6	7.3 J	6.3 J	3 J	10 U
MAGNESIUM	UG/L		179000	17100	23500	2130 J	47600	17800	17700
MANGANESE	UG/L	880	1180	7210	11500	7.7 J	844	34.4	36.6
MERCURY	UG/L	0.57	0.087 B	0.071 B	0.064 B	0.046 J	0.2 U	0.2 U	0.2 U
NICKEL	UG/L	730	11.5 J	22.1 J	51.6	40 U	40.3	40 U	40 U
POTASSIUM	UG/L		60900	24100	18300	11300	8040	4110 J	4280 J
SELENIUM	UG/L	180	35 U	35 U	35 U	35 U	35 U	35 U	35 U
SILVER	UG/L	180	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SODIUM	UG/L		11800	8830	31100	10600	11700	121000	126000
THALLIUM	UG/L		25 U	25 U	25 U	25 U	25 U	25 U	25 U
VANADIUM	UG/L	2.6	50 U	50 U	134	50 U	50 U	50 U	50 U
ZINC	UG/L	11000	1280	84	128	60 U	60 U	60 U	60 U

Notes:

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U - Analyte not detected

Table C-7
Metals Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	CKSW03-RI-01	CKSW04-RI-01	CKSW05-RI-01	CKSW06-RI-01	CKSW07-RI-01	CKSW08D-RI-01
ALUMINUM	UG/L	37000	200 U	200 U	212	200 U	179 J	134 J
ANTIMONY	UG/L	15	60 U	60 U	60 U	60 U	60 U	60 U
ARSENIC	UG/L	0.45	10 U	10 U	10 U	10 U	10 U	10 U
BARIUM	UG/L	7300	136 J	107 J	121 J	179 J	113 J	115 J
BERYLLIUM	UG/L	73	5 U	5 U	5 U	5 U	5 U	5 U
CADMIUM	UG/L		5 U	5 U	5 U	5 U	5 U	5 U
CADMIUM	UG/L	18	5 U	5 U	5 U	5 U	5 U	5 U
CALCIUM	UG/L		32300	52100	54000	52700	50800	50800
CHROMIUM	UG/L		10 U	10 U	10 U	3.3 J	10 U	10 U
COBALT	UG/L	11	50 U	50 U	50 U	50 U	50 U	50 U
COPPER	UG/L	1500	25 U	25 U	25 U	25 U	25 U	25 U
CYANIDE	UG/L	730	10 U	10 U	10 U	10 U	10 U	10 U
IRON	UG/L	26000	114 B	161 B	1050	77.4 B	318 B	230 B
LEAD	UG/L		10 U	10 U	6.3 J	2.8 J	10 U	10 U
MAGNESIUM	UG/L		12200	17400	17300	15700	16900	16900
MANGANESE	UG/L	880	13.6 J	36.9	334	41.2	44.1	41.2
MERCURY	UG/L	0.57	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	UG/L	730	40 U	40 U	40 U	40 U	40 U	40 U
POTASSIUM	UG/L		2170 J	4080 J	3970 J	2760 J	4080 J	4070 J
SELENIUM	UG/L	180	35 U	35 U	35 U	35 U	35 U	35 U
SILVER	UG/L	180	10 U	10 U	10 U	10 U	10 U	10 U
SODIUM	UG/L		40700	122000	112000	64100	118000	118000
THALLIUM	UG/L		25 U	25 U	25 U	25 U	25 U	25 U
VANADIUM	UG/L	2.6	50 U	50 U	50 U	50 U	50 U	50 U
ZINC	UG/L	11000	60 U	60 U	60 U	60 U	60 U	60 U

Notes:

ug/L - microgram per liter

Blank cells indicate analyte not analyzed for

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Table C-7
Metals Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	CKSW08-RI-01	FB-091119	FB-100120	PKPZ01-RI-01	PKPZ02D-RI-01	PKPZ02-RI-01	PKPZ03-RI-01
ALUMINUM	UG/L	37000	118 J	145 J	200 U	6760	10500	8250	3760
ANTIMONY	UG/L	15	60 U	60 U	60 U	60 U	60 U	60 U	60 U
ARSENIC	UG/L	0.45	10 U	10 U	10 U	4.1 J	15.2	17.2	12.2
BARIUM	UG/L	7300	111 J	200 U	200 U	1600	2430	2820	154 J
BERYLLIUM	UG/L	73	5 U	5 U	5 U	8.8	16.9	18.2	5 U
CADMIUM	UG/L		5 U	5 U	5 U	2.9 J	5 U	5 U	5 U
CADMIUM	UG/L	18	5 U	5 U	5 U	2.9 J	5 U	5 U	5 U
CALCIUM	UG/L		48200	5000 U	5000 U	97200	61300	79900	34700
CHROMIUM	UG/L		10 U	10 U	10 U	15.7	28	26.9	14
COBALT	UG/L	11	50 U	50 U	50 U	92	62.6	72.5	50 U
COPPER	UG/L	1500	25 U	25 U	25 U	158	25 U	25 U	25 U
CYANIDE	UG/L	730	10 U	10 U	10 U	7.9 J	10 UL	10 UL	10 UL
IRON	UG/L	26000	214 B	100 U	100 U	5320	85600	111000	8710
LEAD	UG/L		10 U	10 U	10 U	512	29.4	17.1	26.8
MAGNESIUM	UG/L		16000	5000 U	5000 U	25400	7770	9360	2550 J
MANGANESE	UG/L	880	39.9	15 U	15 U	5150	3750	5670	148
MERCURY	UG/L	0.57	0.2 U	0.2 U	0.2 U	0.067 B	0.069 B	0.069 B	0.069 B
NICKEL	UG/L	730	40 U	40 U	40 U	51.3	41.5	39.4 J	18.5 J
POTASSIUM	UG/L		3920 J	5000 U	5000 U	41300	60000	65900	49200
SELENIUM	UG/L	180	35 U	35 U	35 U	35 U	35 U	35 U	35 U
SILVER	UG/L	180	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SODIUM	UG/L		114000	5000 U	5000 U	18900	56700	59900	18400
THALLIUM	UG/L		25 U	25 U	25 U	25 U	25 U	25 U	25 U
VANADIUM	UG/L	2.6	50 U	50 U	50 U	53.3	203	189	25.4 J
ZINC	UG/L	11000	60 U	60 U	60 U	900	117	118	91.8

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Table C-7
Metals Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	RB-091123	RB-091207	RB-100115	RB1-100120	RB2-100120	RVSW01-RI-01	RVSW02-RI-01
ALUMINUM	UG/L	37000	200 U	200 U	200 U	200 U	200 U	170 B	110 B
ANTIMONY	UG/L	15	60 U	60 U	60 U	60 U	60 U	60 U	60 U
ARSENIC	UG/L	0.45	10 U	10 U	10 U	10 U	10 U	10 U	3.7 J
BARIUM	UG/L	7300	200 U	200 U	200 U	200 U	200 U	72.7 J	69.1 J
BERYLLIUM	UG/L	73	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CADMIUM	UG/L		5 U	5 U	5 U	5 U	5 U	5 U	5 U
CADMIUM	UG/L	18	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CALCIUM	UG/L		5000 U	5000 U	5000 U	5000 U	5000 U	35600	34400
CHROMIUM	UG/L		10 U	10 U	10 U	10 U	10 U	10 U	10 U
COBALT	UG/L	11	50 U	50 U	50 U	50 U	50 U	50 U	50 U
COPPER	UG/L	1500	25 U	25 U	25 U	25 U	25 U	25 U	25 U
CYANIDE	UG/L	730	10 U	10 U	10 U	10 U	10 U	10 U	10 U
IRON	UG/L	26000	141	100 U	100 U	100 U	100 U	78.2 B	82.2 B
LEAD	UG/L		10 U	10 U	10 U	10 U	10 U	10 U	3.6 J
MAGNESIUM	UG/L		5000 U	5000 U	5000 U	5000 U	5000 U	5850	5670
MANGANESE	UG/L	880	6.6 J	15 U	15 U	15 U	15 U	47.4	42.9
MERCURY	UG/L	0.57	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	UG/L	730	40 U	40 U	40 U	40 U	40 U	40 U	40 U
POTASSIUM	UG/L		5000 U	5000 U	5000 U	5000 U	5000 U	10500	9960
SELENIUM	UG/L	180	35 U	35 U	35 U	35 U	35 U	35 U	35 U
SILVER	UG/L	180	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SODIUM	UG/L		5000 U	5000 U	5000 U	5000 U	5000 U	7280	7080
THALLIUM	UG/L		25 U	25 U	25 U	25 U	25 U	25 U	25 U
VANADIUM	UG/L	2.6	50 U	50 U	50 U	50 U	50 U	50 U	50 U
ZINC	UG/L	11000	60 U	60 U	60 U	60 U	60 U	60 U	60 U

Notes:

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Table C-7
Metals Results in Surface Water and Groundwater

Analyte	Result Unit	RSL (ug/L)	RVSW03D-RI-01	RVSW03-RI-01	RVSW04-RI-01	RVSW05-RI-01
ALUMINUM	UG/L	37000	1470	3520	107 B	187 B
ANTIMONY	UG/L	15	60 U	60 U	60 U	60 U
ARSENIC	UG/L	0.45	4.5 J	5.1 J	10 U	10 U
BARIUM	UG/L	7300	230	297	72.7 J	74.8 J
BERYLLIUM	UG/L	73	5 U	5 U	5 U	5 U
CADMIUM	UG/L		5 U	5 U	5 U	5 U
CADMIUM	UG/L	18	5 U	5 U	5 U	5 U
CALCIUM	UG/L		41000	43200	36000	36700
CHROMIUM	UG/L		5.8 J	10.4	10 U	10 U
COBALT	UG/L	11	50 U	50 U	50 U	50 U
COPPER	UG/L	1500	15.5 J	23.2 J	25 U	25 U
CYANIDE	UG/L	730	10 U	10 U	10 U	10 U
IRON	UG/L	26000	1840	3930	81 B	87.9 B
LEAD	UG/L		27.9	54.4	3.6 J	4.3 J
MAGNESIUM	UG/L		6930	7680	5940	5980
MANGANESE	UG/L	880	206	311	42.5	40.2
MERCURY	UG/L	0.57	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	UG/L	730	40 U	40 U	40 U	40 U
POTASSIUM	UG/L		11100	11000	10500	10700
SELENIUM	UG/L	180	35 U	35 U	35 U	35 U
SILVER	UG/L	180	10 U	10 U	10 U	10 U
SODIUM	UG/L		7560	7220	7380	7430
THALLIUM	UG/L		25 U	25 U	25 U	25 U
VANADIUM	UG/L	2.6	50 U	22.3 J	50 U	50 U
ZINC	UG/L	11000	86	176	60 U	60 U

Notes:

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	APSB01020304-CW	APSB01020304-NS	APSB01020304-WA	APSB02-SS	APSB08131617-NS
ALUMINUM	MG/KG	7700	7490	9400	7750	9300	14200
ANTIMONY	MG/KG	3.1	7.2 U	8.3 U	9.9 U	6.8 U	21.8 U
ARSENIC	MG/KG	0.39	4.9	1.6	9	3.8	3.6 U
BARIUM	MG/KG	1500	89.2	124	108	111	51.9 J
BERYLLIUM	MG/KG	16	0.53 J	0.86	0.34 J	0.76	1.8 U
CADMIUM	MG/KG		0.29 J	0.69 U	2.3	0.38 J	1.8 U
CADMIUM	MG/KG	7	0.29 J	0.69 U	2.3	0.38 J	1.8 U
CALCIUM	MG/KG		15100	33200	87900	22300	180000
CHROMIUM	MG/KG		19.5	27.8	30.4	28.8	115
COBALT	MG/KG	2.3	8.3	9.7	6.1 J	12.2	20.7
COPPER	MG/KG	310	24.6	24.1	42.6	30.5	32.4
CYANIDE	MG/KG	160	3 U	3.4 U	4.2 U	2.9 U	9.1 U
IRON	MG/KG	5500	14200 J	14000 J	21100 J	22500 J	12000
LEAD	MG/KG	40	94.5	111	52.9	40.7	13.1 K
MAGNESIUM	MG/KG		7520	5640	6750	12700	57300
MANGANESE	MG/KG	180	339 J	237 J	285 J	488 J	314
MERCURY	MG/KG	0.56	0.11 U	0.04 J	0.074 J	0.054 J	0.37 U
NICKEL	MG/KG	150	17.7	24.3	37.3	23.8	315
POTASSIUM	MG/KG		1000	1440	720 J	2720	1813 U
SELENIUM	MG/KG	39	4.2 U	4.8 U	5.8 U	4 U	12.7 U
SILVER	MG/KG	39	1.2 U	1.4 U	1.6 U	1.1 U	3.6 U
SODIUM	MG/KG		600 U	690 U	822 U	208 J	1813 U
THALLIUM	MG/KG		3 U	3.4 U	4.1 U	2.8 U	9.1 U
VANADIUM	MG/KG	0.55	25.1	21.3	16.1	37.5	19.1
ZINC	MG/KG	2300	72.5	64.2	52.3	109	36.5

Notes:

mg/kg - milligram per kilogram

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	APSB08131617-WA	APSB09101112-CW	APSB09101112-NS	APSB09101112-WA	APSB10-SS	APSB13-SS
ALUMINUM	MG/KG	7700	8550	9850	12700	14900	13500	14800
ANTIMONY	MG/KG	3.1	8 U	7.7 U	7.8 U	16.2 U	6.8 U	12.6 U
ARSENIC	MG/KG	0.39	1.1 J	3.5	3.8	2.9	3.5	3.1
BARIUM	MG/KG	1500	177	69.9	142	95.7	68.8	77.3
BERYLLIUM	MG/KG	16	0.58 J	0.61 J	0.76	0.43 J	0.31 J	1.1 U
CADMIUM	MG/KG		0.67 U	0.23 J	0.65 U	1.4 U	0.57 U	1.5
CADMIUM	MG/KG	7	0.67 U	0.23 J	0.65 U	1.4 U	0.57 U	1.5
CALCIUM	MG/KG		20000	16600	19800	176000	4090	130000
CHROMIUM	MG/KG		12.4	20.9	27.9	42.9	13.3	44.9
COBALT	MG/KG	2.3	6.1 J	8.4	10.9	12.1 J	5.4 J	13.7
COPPER	MG/KG	310	29.1	15.7	31.4	105	9.6	35.7
CYANIDE	MG/KG	160	3.4 U	3.2 U	3.3 U	6.8 U	2.8 U	5.4 U
IRON	MG/KG	5500	8150	14800 J	19300 J	13200 J	12800 J	11300 J
LEAD	MG/KG	40	16.7 K	57	33	27.6	14.9	47.5
MAGNESIUM	MG/KG		2570	6320	9430	23700	2870	37000
MANGANESE	MG/KG	180	231	489 J	409 J	288 J	167 J	335 J
MERCURY	MG/KG	0.56	0.14 U	0.084 J	0.056 J	0.26 U	0.037 J	0.13 J
NICKEL	MG/KG	150	15.5	19	49	113	8.8	153
POTASSIUM	MG/KG		771	588 J	1420	1350 U	618	1180
SELENIUM	MG/KG	39	4.7 U	4.5 U	4.6 U	9.5 U	4 U	7.4 U
SILVER	MG/KG	39	1.3 U	1.3 U	1.3 U	2.7 U	1.1 U	2.1 U
SODIUM	MG/KG		668 U	641 U	215 J	1350 U	566 U	1053 U
THALLIUM	MG/KG		3.3 U	3.2 U	3.3 U	6.8 U	2.8 U	5.3 U
VANADIUM	MG/KG	0.55	14.7	28.2	29.4	22.4	22.3	23
ZINC	MG/KG	2300	23.4	51.8	53.1	53.7	25.1	124

Notes:

mg/kg - milligram per kilogram

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	APSB15212325D-NS	APSB15212325-NS	APSB15212325-WA	APSB20-21	APSB21-SS	APSB24262728-NS
ALUMINUM	MG/KG	7700	11900	10500	11100	17600	13200	8350
ANTIMONY	MG/KG	3.1	7.4 U	7.4 U	18.5 U	29.7 U	13.2 U	7.9 U
ARSENIC	MG/KG	0.39	2.9	2.4	1.2 J	5 U	2.3	2.7
BARIUM	MG/KG	1500	141	155	114	101	94.3	102
BERYLLIUM	MG/KG	16	0.51 J	0.46 J	1.5 U	2.5 U	1.1 U	0.64 J
CADMIUM	MG/KG		0.62 U	0.61 U	0.87 J	2.5 U	2.3	0.66 U
CADMIUM	MG/KG	7	0.62 U	0.61 U	0.87 J	2.5 U	2.3	0.66 U
CALCIUM	MG/KG		14400	17900	164000	249000	125000	15400
CHROMIUM	MG/KG		18.7	17.3	144	65.1	57.3	23
COBALT	MG/KG	2.3	12.1	14.6	26.2	17 J	15.6	10.4
COPPER	MG/KG	310	14.1	15.2	39.8	311	80.5	14.2
CYANIDE	MG/KG	160	3.1 U	3.1 U	7.7 U	12.5 U	5.4 U	3.2 U
IRON	MG/KG	5500	17200 J	14900 J	14900 J	22100 J	11500 J	13800 J
LEAD	MG/KG	40	7.7	7.2	21.5	34.3	58.9	13.3
MAGNESIUM	MG/KG		2620	3590	71000	38600	41100	7070
MANGANESE	MG/KG	180	424 J	426 J	334 J	307 J	328 J	466 J
MERCURY	MG/KG	0.56	0.13 U	0.12 U	0.076 J	0.5 U	0.23	0.04 J
NICKEL	MG/KG	150	14.4	21.8	388	214	189	71
POTASSIUM	MG/KG		1250	1050	1542 U	2475 U	506 J	779
SELENIUM	MG/KG	39	4.3 U	4.3 U	10.8 U	17.3 U	7.7 U	4.6 U
SILVER	MG/KG	39	1.2 U	1.2 U	3.1 U	5 U	2.2 U	1.3 U
SODIUM	MG/KG		617 U	613 U	1542 U	2475 U	1098 U	656 U
THALLIUM	MG/KG		3.1 U	3.1 U	7.7 U	12.4 U	5.5 U	3.3 U
VANADIUM	MG/KG	0.55	28.3	22	17.9	21.3 J	24.6	19.3
ZINC	MG/KG	2300	27.6	21.9	63.6	150	176	30.4

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	APSB24262728-WA	APSB24-SS	APSB303132-CW	APSB303132-WA	APSB3132-NS	APSB32D-SS
ALUMINUM	MG/KG	7700	10600	5480	9730	10300	6590	9390
ANTIMONY	MG/KG	3.1	8.6 U	10.1 U	15.2 U	13.4 U	7.8 U	18.4 U
ARSENIC	MG/KG	0.39	2.1	4.1	4.2	3.5	2.3	4.6
BARIUM	MG/KG	1500	165	45.3	106	129	116	109
BERYLLIUM	MG/KG	16	0.33 J	0.33 J	1.3 U	1.1 U	0.59 J	1.5 U
CADMIUM	MG/KG		0.72 U	0.54 J	2.5	1.1 U	0.65 U	1.7
CADMIUM	MG/KG	7	0.72 U	0.54 J	2.5	1.1 U	0.65 U	1.7
CALCIUM	MG/KG		211000	26400	73500	255000	38200	54100
CHROMIUM	MG/KG		34.4	54.1	110	46.6	13.4	134
COBALT	MG/KG	2.3	11.1	11.9	19.2	8.5 J	7.7	22.2
COPPER	MG/KG	310	47.2	21.6	75.5	163	23.2	82.6
CYANIDE	MG/KG	160	3.7 U	4.2 U	6.4 U	5.5 U	3.2 U	7.7 U
IRON	MG/KG	5500	13200 J	11800 J	13300	9310	9720	14300
LEAD	MG/KG	40	112	41.3	171	47.4	10.4	206
MAGNESIUM	MG/KG		23700	24300	49800	19300	4390	60100
MANGANESE	MG/KG	180	252 J	217 J	399	184	388	427
MERCURY	MG/KG	0.56	0.068 J	0.1 J	0.39 B	0.094 B	0.13 U	0.33 B
NICKEL	MG/KG	150	109	145	315	129	27.7	371
POTASSIUM	MG/KG		1010	584 J	1150 J	537 J	626 J	1220 J
SELENIUM	MG/KG	39	5 U	5.9 U	8.8 U	7.8 U	4.5 U	10.8 U
SILVER	MG/KG	39	1.4 U	1.7 U	2.5 U	2.2 U	1.3 U	3.1 U
SODIUM	MG/KG		320 J	839 U	1263 U	1116 U	648 U	1537 U
THALLIUM	MG/KG		3.6 U	4.2 U	6.3 U	5.6 U	3.2 U	7.7 U
VANADIUM	MG/KG	0.55	14.6	19	28.4	11.2	10.1	32.4
ZINC	MG/KG	2300	43.7	71.8	255	95.8	22.1	285

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	APSB32-SS	CKFP01-D	CKFP01-S	CKFP02-D	CKFP02-S	CKFP03-D	CKFP03-S	CKFP04-D	CKFP04-S
ALUMINUM	MG/KG	7700	8100	4160	3580	11100	6830	7760	7090	7590	6670
ANTIMONY	MG/KG	3.1	16.2 U	7.1 U	6.8 U	10.5 U	10.4 U	8 U	9.3 U	7.4 U	8 U
ARSENIC	MG/KG	0.39	3.8	2.4	2.1	4.2	3.6	3	2.8	2.3	2.2
BARIUM	MG/KG	1500	93.5	158	86.5	211	159	129	131	110	81.2
BERYLLIUM	MG/KG	16	1.3 U	0.57 J	0.45 J	0.64 J	0.71 J	0.73	0.65 J	0.71	0.66 J
CADMIUM	MG/KG		1.4	0.39 J	0.31 J	0.8 J	0.82 J	0.49 J	0.47 J	0.38 J	0.27 J
CADMIUM	MG/KG	7	1.4	0.39 J	0.31 J	0.8 J	0.82 J	0.49 J	0.47 J	0.38 J	0.27 J
CALCIUM	MG/KG		46000	8870	8760	76700	6460	4720	5900	3910	15300
CHROMIUM	MG/KG		124	10.6	10	21.5	19	23.1	17	19.2	15.7
COBALT	MG/KG	2.3	20.5	5.3 J	5.2 J	8.3 J	7.9 J	7.8	6.3 J	6.8	5.5 J
COPPER	MG/KG	310	71.5	23.6	15.8	50.5	35.4	26.9	26.9	22	25.5
CYANIDE	MG/KG	160	6.9 U	2.9 U	2.8 U	4.3 U	4.4 U	3.4 U	3.9 U	3.1 U	3.3 U
IRON	MG/KG	5500	12800	12300	11900	13200	13500	16300	13500	15000	14200
LEAD	MG/KG	40	167	62.1	69.1	240	178	82.6	58.6	55.2	36.9
MAGNESIUM	MG/KG		56300	4890	4540	10700	3070	3420	2820	3830	5730
MANGANESE	MG/KG	180	373	533	353	435	543	516	537	267	385
MERCURY	MG/KG	0.56	0.34 B	0.054 B	0.073 B	0.33 B	0.35 B	0.15 B	0.1 B	0.12 B	0.056 B
NICKEL	MG/KG	150	345	10.4	8.6	57.7	16.9	16.6	15	18.7	11.4
POTASSIUM	MG/KG		1210 J	779	676	926	990	781	587 J	682	1640
SELENIUM	MG/KG	39	9.4 U	4.2 U	4 U	6.1 U	6.1 U	4.6 U	5.4 U	4.3 U	4.7 U
SILVER	MG/KG	39	2.7 U	1.2 U	1.1 U	1.7 U	1.7 U	1.3 U	1.6 U	1.2 U	1.3 U
SODIUM	MG/KG		1348 U	595 U	566 U	872 U	865 U	664 U	778 U	620 U	670 U
THALLIUM	MG/KG		6.7 U	3 U	2.8 U	4.4 U	4.3 U	3.3 U	3.9 U	3.1 U	3.3 U
VANADIUM	MG/KG	0.55	28.2	14	13.2	22	23.1	23.6	20.8	23.6	21.6
ZINC	MG/KG	2300	231	121	111	213	199	123	115	101	74.1

Notes:

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	CKFP05-D	CKFP05D-D	CKFP05-S	CKFP06-D	CKFP07-D	CKFP07-S	CKFP08-D	CKFP08-S	CKSB01-WA
ALUMINUM	MG/KG	7700	8530	7790	7770	4980	6600	5670	6350	6930	1930
ANTIMONY	MG/KG	3.1	7.5 U	7.4 U	7.6 U	7.2 U	7.4 U	8 U	8 U	7.8 U	10.2 U
ARSENIC	MG/KG	0.39	5.7	4.1	4.1	4.8	3.1	2.9	4.1	3.8	3
BARIUM	MG/KG	1500	146	124	120	126	99	101	117	120	28.2 J
BERYLLIUM	MG/KG	16	0.86	0.66	0.68	0.43 J	0.94	0.69	0.67	0.74	0.85 U
CADMIUM	MG/KG		0.43 J	0.48 J	0.44 J	0.56 J	0.5 J	0.41 J	0.42 J	0.35 J	0.85 U
CADMIUM	MG/KG	7	0.43 J	0.48 J	0.44 J	0.56 J	0.5 J	0.41 J	0.42 J	0.35 J	0.85 U
CALCIUM	MG/KG		3080 J	1500 J	1760 J	3530 J	2340	2400	2890 J	2890 J	289000
CHROMIUM	MG/KG		28.5	31	27	15.3	22.2	23.1	19	18.4	1.4 J
COBALT	MG/KG	2.3	10.8	8.5	8.8	5 J	7.6	7.8	8.1	8.1	8.5 U
COPPER	MG/KG	310	30.1 J	24.3 J	25 J	24 J	27.4	24.1	21.6 J	20.7 J	29.5
CYANIDE	MG/KG	160	3.1 U	3.1 U	3.2 U	3 U	3.1 U	3.3 U	3.3 U	3.3 U	4.3 U
IRON	MG/KG	5500	20600	16300	16900	14300	13700	13300	14700	16200	2150
LEAD	MG/KG	40	43.4 K	50.4 K	53.8 K	141 K	120	55.6	74.5 K	101 K	85.4
MAGNESIUM	MG/KG		3470 J	2020 J	2190 J	2960 J	2310	1930	2510 J	2670 J	9080
MANGANESE	MG/KG	180	700	555	574	566	638	508	524	561	222
MERCURY	MG/KG	0.56	0.13	0.2	0.29	0.091 J	0.21 B	0.18 B	0.16	0.14	0.15 B
NICKEL	MG/KG	150	17.6	14.1	14.1	13.4	11.7	11.8	13.9	13.2	3.1 J
POTASSIUM	MG/KG		682	561 J	664	480 J	788	691	538 J	781	849 U
SELENIUM	MG/KG	39	4.3 U	4.3 U	4.5 U	4.2 U	4.3 U	4.7 U	4.6 U	4.6 U	2 J
SILVER	MG/KG	39	1.2 UL	1.2 UL	1.3 UL	1.2 UL	1.2 U	1.3 U	1.3 UL	1.3 UL	1.7 U
SODIUM	MG/KG		621 U	620 U	637 U	600 U	617 U	667 U	664 U	650 U	849 U
THALLIUM	MG/KG		3.1 U	3.1 U	3.2 U	3 U	3.1 U	3.3 U	3.3 U	3.3 U	4.2 U
VANADIUM	MG/KG	0.55	30.9	24.9	24.9	15.4	25.1	20.4	21.3	22.4	6 J
ZINC	MG/KG	2300	94.4	90.5	95.2	127	128	92.6	95.4	87.5	26.9

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	CKSD01-RI-01	CKSD02-RI-01	CKSD03-RI-01	CKSD04-RI-01	CKSD05-RI-01	CKSD06-RI-01	CKSD07-RI-01
ALUMINUM	MG/KG	7700	5730	6190	3020	3250	4210	3710	6260
ANTIMONY	MG/KG	3.1	6.7 U	7.5 U	7.9 U	7.7 U	8.4 U	8 U	7.3 U
ARSENIC	MG/KG	0.39	3.1	4.3	1.7	2.6	3	1.9	6.5
BARIUM	MG/KG	1500	78.5	122	84.4	47.7	59.3	66.8	216
BERYLLIUM	MG/KG	16	0.82	1	0.25 J	0.33 J	0.54 J	0.47 J	0.92
CADMIUM	MG/KG		0.56 U	0.63 U	0.66 U	0.64 U	0.7 U	0.22 J	0.32 J
CADMIUM	MG/KG	7	0.56 U	0.63 U	0.66 U	0.64 U	0.7 U	0.22 J	0.32 J
CALCIUM	MG/KG		1240 J	3140 J	5140 J	3630 J	1130 J	6150 J	1840 J
CHROMIUM	MG/KG		17.6	18.9	6.3	8.4	13.7	10.6	25.2
COBALT	MG/KG	2.3	9.7	10.1	2.8 J	3.8 J	8.9	4.6 J	11.1
COPPER	MG/KG	310	15.3 J	15.4 J	18.2	9.1 J	10.2 J	18.1 J	25.4 J
CYANIDE	MG/KG	160	2.8 U	3.2 U	3.3 U	3.3 U	3.5 U	3.4 U	3.3 U
IRON	MG/KG	5500	18000	22100	6250	9340	14300	14800	21500
LEAD	MG/KG	40	11.4 K	13.1 K	24.2 K	16.7 K	13.5 K	41.6 K	27.6 K
MAGNESIUM	MG/KG		2880 J	4100 J	3380 J	2690 J	1620 J	4300 J	2830 J
MANGANESE	MG/KG	180	341	517	240	195	465	366	2010
MERCURY	MG/KG	0.56	0.036 J	0.039 J	0.13 U	0.038 J	0.13 U	0.13 U	0.079 J
NICKEL	MG/KG	150	14.1	15.9	5.2 J	6.5	7.6	9.6	16.2
POTASSIUM	MG/KG		1370	1510	332 J	549 J	553	867	1050
SELENIUM	MG/KG	39	3.9 U	4.4 U	4.6 U	4.5 U	4.9 U	4.7 U	4.3 U
SILVER	MG/KG	39	1.1 UL	1.3 UL	1.3 UL	1.3 UL	1.4 UL	1.3 UL	1.2 UL
SODIUM	MG/KG		559 U	626 U	661 U	640 U	701 U	665 U	608 U
THALLIUM	MG/KG		2.8 U	3.1 U	3.3 U	3.2 U	3.5 U	3.3 U	3 U
VANADIUM	MG/KG	0.55	21.4	25.1	8.6	11.3	18.9	13.1	26.5
ZINC	MG/KG	2300	73.9	86.8	49.2	51.4	46.4	153	86.8

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Analyte	Result Unit	RSL (mg/kg)	CKSD08-RI-01	CKSD09-RI-01	CKSD10-RI-01	CKSD12D-RI-01	CKSD12-RI-01	OWSB01-SS	OWSB02-SS
ALUMINUM	MG/KG	7700	4380	6210	4650	4250	3260	8170	8450
ANTIMONY	MG/KG	3.1	7.1 U	6.7 U	8.8 U	8 U	7.8 U	8.7 U	9.5 U
ARSENIC	MG/KG	0.39	2.9	4.6	3.1	2.7	2	3.8	4.6
BARIUM	MG/KG	1500	75.9	91.7	87.5	66.4	51.6	122	141
BERYLLIUM	MG/KG	16	0.5 J	1.1	0.43 J	0.46 J	0.36 J	0.77	0.7 J
CADMIUM	MG/KG		0.22 J	0.2 J	0.3 J	0.25 J	0.65 U	0.72 U	0.41 J
CADMIUM	MG/KG	7	0.22 J	0.2 J	0.3 J	0.25 J	0.65 U	0.72 U	0.41 J
CALCIUM	MG/KG		26000 J	3760 J	4640 J	3880 J	3970 J	2050 J	2620 J
CHROMIUM	MG/KG		12.2	20.3	13.3	11.4	9.7	17.6	24
COBALT	MG/KG	2.3	6.9	11.7	5.3 J	5.8 J	5.9 J	8.7	9.1
COPPER	MG/KG	310	14.6 J	15 J	20.4 J	16.4 J	10.1 J	18.4 J	23.6 J
CYANIDE	MG/KG	160	3 U	2.8 U	3.7 U	3.4 U	3.3 U	3.6 U	4 U
IRON	MG/KG	5500	18300	21200	10600	16700	10500	16000	15800
LEAD	MG/KG	40	26.1 K	27.5 K	53.2 K	26.9 K	18.4 K	23 K	42.5 K
MAGNESIUM	MG/KG		18300 J	4320 J	2820 J	3130 J	2720 J	1930 J	2080 J
MANGANESE	MG/KG	180	502	447	372	349	317	518	769
MERCURY	MG/KG	0.56	0.12 U	0.043 J	0.091 J	0.13 U	0.13 U	0.16	0.16
NICKEL	MG/KG	150	12.4	16	10.8	10.2	7.7	11.8	13.2
POTASSIUM	MG/KG		911	1080	469 J	761	606 J	649 J	600 J
SELENIUM	MG/KG	39	4.1 U	3.9 U	5.1 U	4.6 U	4.6 U	5.1 U	5.6 U
SILVER	MG/KG	39	1.2 UL	1.1 UL	1.5 UL	1.3 UL	1.3 UL	1.4 UL	1.6 UL
SODIUM	MG/KG		589 U	557 U	732 U	664 U	652 U	725 U	795 U
THALLIUM	MG/KG		2.9 U	2.8 U	3.7 U	3.3 U	3.3 U	3.6 U	4 U
VANADIUM	MG/KG	0.55	17.1	27.4	14.9	15.2	12.2	23.9	24.9
ZINC	MG/KG	2300	97.3	95.1	85.7	104	60.3	58.3	85.6

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B - Analyte not detected substantially above the level reported in laboratory or field blanks.

L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

U - Analyte not detected

Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	OWSB03-SS	PKSB03042226-CW	PKSB03042226-NS	PKSB03042226-WA	PKSB06192940-CW
ALUMINUM	MG/KG	7700	6860	5770 J	6590 J	7980 J	7910 J
ANTIMONY	MG/KG	3.1	8.1 U	7.5 UL	6.8 UL	7.4 UL	7.7 UL
ARSENIC	MG/KG	0.39	3.7	4.2 L	2.7 L	3 L	4.2 L
BARIUM	MG/KG	1500	109	46.9	50.1	1210	135
BERYLLIUM	MG/KG	16	0.6 J	2.2	0.39 J	0.28 J	0.85
CADMIUM	MG/KG		0.32 J	0.6 J	0.57 UL	0.7 L	0.4 J
CADMIUM	MG/KG	7	0.32 J	0.6 J	0.57 UL	0.7 L	0.4 J
CALCIUM	MG/KG		1620 J	18600 J	1260 J	134000 J	61700 J
CHROMIUM	MG/KG		19.4	11.5	13	60.4	35.3
COBALT	MG/KG	2.3	8	22.8	4.7 J	15.7	14.3
COPPER	MG/KG	310	21.5 J	67.7 J	11 J	19.4 J	34.4 J
CYANIDE	MG/KG	160	3.4 U	3.1 U	2.9 U	3.1 U	3.3 U
IRON	MG/KG	5500	14500	24900 J	13400 J	7400 J	17300 J
LEAD	MG/KG	40	36.5 K	29.4	17.5	1290	126
MAGNESIUM	MG/KG		1850 J	11600 J	1580 J	33400 J	23500 J
MANGANESE	MG/KG	180	585	1180 J	97.4 J	169 J	510 J
MERCURY	MG/KG	0.56	0.23	0.1 J	0.087 J	0.12 U	0.34
NICKEL	MG/KG	150	11.6	24.8	9.2	188	81.1
POTASSIUM	MG/KG		723	555 J	890	702	1020
SELENIUM	MG/KG	39	4.7 U	4.4 U	4 U	4.3 U	4.5 U
SILVER	MG/KG	39	1.3 UL	1.2 UL	1.1 UL	1.2 UL	1.3 UL
SODIUM	MG/KG		674 U	624 U	566 U	375 J	221 J
THALLIUM	MG/KG		3.4 U	3.1 U	2.8 U	3.1 U	3.2 U
VANADIUM	MG/KG	0.55	21.9	27.7	20.1	10.8	25.3
ZINC	MG/KG	2300	75.3	86.8	41	2350	201

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not analyzed for

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Data Qualifiers:

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	PKSB06192940-NS	PKSB06192940-WA	PKSB08101215-CW	PKSB08101215-NS	PKSB08101215-WA
ALUMINUM	MG/KG	7700	8160 J	11800 J	1710 J	6040 J	9480 J
ANTIMONY	MG/KG	3.1	7.3 UL	8.3 UL	7.4 UL	7.9 UL	8.7 UL
ARSENIC	MG/KG	0.39	3.2 L	1.5 L	1.4 L	3.1 L	5.7 L
BARIUM	MG/KG	1500	56.9	163	20.2 J	96	213
BERYLLIUM	MG/KG	16	0.54 J	0.36 J	2	0.56 J	0.72
CADMIUM	MG/KG		0.61 UL	0.43 J	0.32 J	0.23 J	1.2 L
CADMIUM	MG/KG	7	0.61 UL	0.43 J	0.32 J	0.23 J	1.2 L
CALCIUM	MG/KG		1100 J	201000 J	3150 J	4140 J	124000 J
CHROMIUM	MG/KG		11.8	42.5	2.8	9.2	51.4
COBALT	MG/KG	2.3	10.7	10.9	23.1	4.5 J	12.5
COPPER	MG/KG	310	10.3 J	28 J	17.7 J	9.1 J	28.8 J
CYANIDE	MG/KG	160	3 U	3.5 U	3.1 U	3.3 U	3.5 U
IRON	MG/KG	5500	13700 J	11600 J	6480 J	7410 J	12900 J
LEAD	MG/KG	40	8	60.2	27.8	39.1	204
MAGNESIUM	MG/KG		1810 J	24400 J	1950 J	1610 J	21400 J
MANGANESE	MG/KG	180	383 J	208 J	569 J	120 J	375 J
MERCURY	MG/KG	0.56	0.12 U	0.058 J	0.093 J	0.092 J	0.79
NICKEL	MG/KG	150	8.9	124	37.8	8	115
POTASSIUM	MG/KG		769	746	614 U	581 J	504 J
SELENIUM	MG/KG	39	4.2 U	4.9 U	4.3 U	4.6 U	5.1 U
SILVER	MG/KG	39	1.2 UL	1.4 UL	1.2 UL	1.3 UL	1.4 UL
SODIUM	MG/KG		606 U	582 J	614 U	657 U	264 J
THALLIUM	MG/KG		3 U	3.5 U	3.1 U	3.3 U	3.6 U
VANADIUM	MG/KG	0.55	22.5	16.2	6 J	12.8	21.1
ZINC	MG/KG	2300	26.3	161	77.9	33.8	201

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not analyzed for

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	PKSB13303335-CW	PKSB13303335-NS	PKSB13303335-WA	PKSB15-SS	PKSB19-SS	PKSB30D-SS
ALUMINUM	MG/KG	7700	4820 J	6120 J	11200 J	3770 J	8260 J	6300 J
ANTIMONY	MG/KG	3.1	7.6 UL	8.5 UL	9.4 UL	7.9 UL	9.3 UL	8 UL
ARSENIC	MG/KG	0.39	3.2 L	4.7 L	2.1 L	2.8 L	5.8 L	6 L
BARIUM	MG/KG	1500	45.2	71.8	125	44.3	156	41.6
BERYLLIUM	MG/KG	16	3	0.39 J	0.43 J	2.4	1.3	1.2
CADMIUM	MG/KG		0.82 L	0.55 J	0.9 L	0.8 L	0.94 L	0.37 J
CADMIUM	MG/KG	7	0.82 L	0.55 J	0.9 L	0.8 L	0.94 L	0.37 J
CALCIUM	MG/KG		3510 J	6110 J	175000 J	23600 J	51100 J	30500 J
CHROMIUM	MG/KG		9.2	18.3	78.8	8.3	40.4	10.3
COBALT	MG/KG	2.3	25.7	5.9 J	13.3	22.9	16.1	13.2
COPPER	MG/KG	310	58.4 J	23.8 J	16.3 J	55.9 J	42.7 J	19.7 J
CYANIDE	MG/KG	160	3.2 U	3.5 U	4 U	3.3 U	3.9 U	3.4 U
IRON	MG/KG	5500	24400 J	16700 J	10700 J	16900 J	18900 J	17300 J
LEAD	MG/KG	40	19.3	54.1	28.2	29.2	164	17.3
MAGNESIUM	MG/KG		2040 J	2360 J	30900 J	15600 J	17400 J	20900 J
MANGANESE	MG/KG	180	1580 J	121 J	201 J	1370 J	655 J	919 J
MERCURY	MG/KG	0.56	0.15	0.095 J	0.2	0.15	1.1	0.035 J
NICKEL	MG/KG	150	30.7	16.6	172	32.5	99.8	17.6
POTASSIUM	MG/KG		253 J	759	838	399 J	420 J	644 J
SELENIUM	MG/KG	39	4.4 U	4.9 U	5.5 U	4.6 U	5.4 U	4.7 U
SILVER	MG/KG	39	1.3 UL	1.4 UL	1.6 UL	1.3 UL	1.6 UL	1.3 UL
SODIUM	MG/KG		630 U	704 U	783 U	662 U	778 U	670 U
THALLIUM	MG/KG		3.2 U	3.5 U	3.9 U	3.3 U	3.9 U	3.4 U
VANADIUM	MG/KG	0.55	22.7	18.7	20.1	16.6	23.9	19.6
ZINC	MG/KG	2300	101	98.2	53.1	81.5	241	77

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	PKSB30-SS	PKSB38444851-CW	PKSB38444851-NS	PKSB38444851-WA	PKSB38-SS	PKSB45-17_3
ALUMINUM	MG/KG	7700	6110 J	7780 J	6810 J	8900 J	8010 J	80.6
ANTIMONY	MG/KG	3.1	8.3 UL	7.1 UL	7.8 UL	11.7 UL	6.8 UL	5.9 U
ARSENIC	MG/KG	0.39	6.4 L	4.8 L	2.9 L	1.5 J	3.4 L	2
BARIUM	MG/KG	1500	37	112	100	76	131	140
BERYLLIUM	MG/KG	16	1.1	1.6	0.7	0.97 U	0.87	0.49 U
CADMIUM	MG/KG		0.36 J	0.36 J	0.38 J	0.97 UL	0.56 UL	0.17 J
CADMIUM	MG/KG	7	0.36 J	0.36 J	0.38 J	0.97 UL	0.56 UL	0.17 J
CALCIUM	MG/KG		46000 J	8080 J	2990 J	142000 J	2400 J	1080
CHROMIUM	MG/KG		9.8	14.8	17	143	14	2
COBALT	MG/KG	2.3	11.4	15.5	8.3	22.6	12	4.9 U
COPPER	MG/KG	310	17.9 J	33.5 J	11.5 J	30.1 J	20.6 J	112
CYANIDE	MG/KG	160	3.4 U	3 U	3.3 U	4.9 U	2.8 U	2.5 U
IRON	MG/KG	5500	16600 J	20000 J	13600 J	12300 J	15500 J	2630
LEAD	MG/KG	40	16.3	41.2	18.2	33.3	16.5	644 K
MAGNESIUM	MG/KG		31700 J	5080 J	2440 J	56600 J	3340 J	171 J
MANGANESE	MG/KG	180	724 J	922 J	335 J	289 J	755 J	20.5
MERCURY	MG/KG	0.56	0.04 J	0.041 J	0.13 U	0.19 U	0.11 U	0.095 U
NICKEL	MG/KG	150	11.8	21.8	13.9	357	16.5	17.1
POTASSIUM	MG/KG		642 J	571 J	866	1560	580	490 U
SELENIUM	MG/KG	39	4.8 U	4.1 U	4.6 U	6.8 U	3.9 U	3.4 U
SILVER	MG/KG	39	1.4 UL	1.2 UL	1.3 UL	1.9 UL	1.1 UL	0.98 U
SODIUM	MG/KG		688 U	592 U	651 U	338 J	563 U	490 U
THALLIUM	MG/KG		3.4 U	3 U	3.3 U	4.9 U	2.8 U	2.5 U
VANADIUM	MG/KG	0.55	19.6	24.1	21.4	12.5	21.2	4.9 U
ZINC	MG/KG	2300	57.9	109	335	78	51.7	29.4

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	PKSB52-CW	PKSB52-NS	PKSB52-WA	RVSB011920-CW	RVSB011920-NS	RVSB020304-CW
ALUMINUM	MG/KG	7700	5790	6900	13200	7570	6450	6740
ANTIMONY	MG/KG	3.1	7.1 U	7.9 U	8.3 U	9.4 U	7.1 U	10.3 U
ARSENIC	MG/KG	0.39	2.9	2.7	1.9	5.3	2.2	5.9
BARIUM	MG/KG	1500	55.7	139	139	71.4	122	119
BERYLLIUM	MG/KG	16	2.4	0.76	0.37 J	0.37 J	0.71	0.44 J
CADMIUM	MG/KG		0.33 J	0.66 U	0.38 J	0.51 J	0.59 U	0.77 J
CADMIUM	MG/KG	7	0.33 J	0.66 U	0.38 J	0.51 J	0.59 U	0.77 J
CALCIUM	MG/KG		10300	1090	173000	2610	891	34000
CHROMIUM	MG/KG		13.4	12.8	83.5	19.2	12.7	19.9
COBALT	MG/KG	2.3	17.8	7.1	13.4	4.2 J	5.6 J	6.9 J
COPPER	MG/KG	310	42.1	10.2	24.6	23.5	13.2	43.1
CYANIDE	MG/KG	160	2.9 U	3.4 U	3.5 U	4 UL	3 UL	4.2 U
IRON	MG/KG	5500	15900	7710	10300	18600	9930	14700
LEAD	MG/KG	40	32 K	9.5 K	190 K	80.4	7.5	148
MAGNESIUM	MG/KG		5340	1310	44000	1850	2190	5360
MANGANESE	MG/KG	180	893	165	257	117	187	388
MERCURY	MG/KG	0.56	0.16	0.059 B	0.5	0.052 B	0.12 U	0.19
NICKEL	MG/KG	150	26.3	8.4	177	8.6	10.4	36.3
POTASSIUM	MG/KG		1050	954	287 J	596 J	651	979
SELENIUM	MG/KG	39	4.1 U	4.6 U	1.4 J	5.5 U	4.1 U	6 U
SILVER	MG/KG	39	1.2 U	1.3 U	1.4 U	1.6 U	1.2 U	1.7 U
SODIUM	MG/KG		590 U	658 U	312 J	783 U	592 U	856 U
THALLIUM	MG/KG		2.9 U	3.3 U	3.5 U	3.9 U	3 U	4.3 U
VANADIUM	MG/KG	0.55	23.5	22.7	18.7	28.4	19.2	21.4
ZINC	MG/KG	2300	95.8	24.8	249	120	25.3	509

Notes:

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSB020304-NS	RVSB020304-WA	RVSB04-SS	RVSB05060708-NS	RVSB05060708-WA	RVSB050607-CW
ALUMINUM	MG/KG	7700	9300	9500	9840	6870	11800	10900
ANTIMONY	MG/KG	3.1	7.2 U	9.2 U	8.2 U	6.8 U	9.8 U	7.6 U
ARSENIC	MG/KG	0.39	3.6	10.7	6.3	3.9	2.8	6.2
BARIUM	MG/KG	1500	86.3	92.7	95	64	134	114
BERYLLIUM	MG/KG	16	0.63	0.96	0.65 J	0.56 J	0.33 J	0.74
CADMIUM	MG/KG		0.6 U	0.32 J	1.2	0.56 U	0.81 U	0.3 J
CADMIUM	MG/KG	7	0.6 U	0.32 J	1.2	0.56 U	0.81 U	0.3 J
CALCIUM	MG/KG		2710	41800	18100	2340	116000	10800
CHROMIUM	MG/KG		15.1	23.9	22.6	11	33.5	21.4
COBALT	MG/KG	2.3	7.7	11.5	11.1	6.3	13	10.3
COPPER	MG/KG	310	8.9	33.9	30.8	9	22.2	27.7
CYANIDE	MG/KG	160	3 U	3.9 U	3.4 U	2.9 U	4.1 U	3.1 U
IRON	MG/KG	5500	13900	12900	22500	9190	10100	19600
LEAD	MG/KG	40	13.1	50.3	86.4	11.3	16.9	46.8
MAGNESIUM	MG/KG		2110	6530	5840	1950	36400	4460
MANGANESE	MG/KG	180	498	298	719	367	220	499
MERCURY	MG/KG	0.56	0.11 U	0.069 J	0.13 J	0.046 J	0.16 U	0.13 U
NICKEL	MG/KG	150	9	40.7	31.7	12.4	138	18.6
POTASSIUM	MG/KG		610	1180	1110	338 J	442 J	1630
SELENIUM	MG/KG	39	4.2 U	5.4 U	4.8 U	4 U	5.7 U	4.4 U
SILVER	MG/KG	39	1.2 U	1.5 U	1.4 U	1.1 U	1.6 U	1.3 U
SODIUM	MG/KG		596 U	766 U	682 U	565 U	813 U	632 U
THALLIUM	MG/KG		3 U	3.8 U	3.4 U	2.8 U	4.1 U	3.2 U
VANADIUM	MG/KG	0.55	24.3	26	29.7	15.4	18.8	31.2
ZINC	MG/KG	2300	21.8	144	2440	18.9	24.2	69

Notes:

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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSB08-SS	RVSB09101112-CW	RVSB091011-WA	RVSB1112-NS	RVSB12-SS	RVSB15161718-CW
ALUMINUM	MG/KG	7700	5190	6760	11500	6120	7030	6900
ANTIMONY	MG/KG	3.1	10.3 U	7.4 U	8.2 U	7.3 U	8.3 U	7.7 U
ARSENIC	MG/KG	0.39	3.8	3.9	3	1.8	3.3	5.4
BARIUM	MG/KG	1500	68.4	138	108	81.9	87.3	89.3
BERYLLIUM	MG/KG	16	0.36 J	0.75	0.39 J	0.72	0.53 J	0.81
CADMIUM	MG/KG		0.59 J	0.62 U	0.68 U	0.61 U	0.38 J	0.35 J
CADMIUM	MG/KG	7	0.59 J	0.62 U	0.68 U	0.61 U	0.38 J	0.35 J
CALCIUM	MG/KG		23300	1880	109000	1920	17100	31200
CHROMIUM	MG/KG		13.8	12.6	27.7	9.6	11.6	14.3
COBALT	MG/KG	2.3	5.1 J	7.1	8.9	6.8	6.2 J	7.1
COPPER	MG/KG	310	24.1	13.1	20.2	9.9	19.8	25.4
CYANIDE	MG/KG	160	4.3 U	3.1 U	3.4 U	3.1 U	3.5 U	3.3 U
IRON	MG/KG	5500	9410	10000	11400	7230	9030	13400 J
LEAD	MG/KG	40	84.5	44.2	60.9	20.1	66.3	53
MAGNESIUM	MG/KG		4720	1980	13400	1650	3450	16900
MANGANESE	MG/KG	180	335	321	243	82.8	346	562 J
MERCURY	MG/KG	0.56	0.13 J	0.051 J	0.14 U	0.097 J	0.078 J	1.8
NICKEL	MG/KG	150	24.5	11.9	105	8	17.5	16.7
POTASSIUM	MG/KG		844 J	568 J	432 J	545 J	628 J	705
SELENIUM	MG/KG	39	6 U	4.3 U	4.8 U	4.3 U	4.8 U	4.5 U
SILVER	MG/KG	39	1.7 U	1.2 U	1.4 U	1.2 U	1.4 U	1.3 U
SODIUM	MG/KG		861 U	620 U	682 U	609 U	690 U	642 U
THALLIUM	MG/KG		4.3 U	3.1 U	3.4 U	3 U	3.5 U	3.2 U
VANADIUM	MG/KG	0.55	15.2	19.8	17.2	18	15.5	21.3
ZINC	MG/KG	2300	121	39.3	66.6	25.1	113	89.1

Notes:

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Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSB15161718-NS	RVSB15161718-WA	RVSB17-SS	RVSB19-SS	RVSB21222324-CW	RVSB21222324-WA
ALUMINUM	MG/KG	7700	10400	3890	7290	3220	8930	12200
ANTIMONY	MG/KG	3.1	7.7 U	7.5 U	8.7 U	18.6 U	7.5 U	3.6 J
ARSENIC	MG/KG	0.39	3.2	2.4	5.4	7.1	4.9	35.2
BARIUM	MG/KG	1500	193	82.3	100	86.5	80.7	108
BERYLLIUM	MG/KG	16	0.63 J	0.3 J	1.2	1.5 U	0.99	0.42 J
CADMIUM	MG/KG		0.64 U	0.62 U	0.51 J	1.4 J	0.22 J	2
CADMIUM	MG/KG	7	0.64 U	0.62 U	0.51 J	1.4 J	0.22 J	2
CALCIUM	MG/KG		2000	44600	11100	6170	3320	146000
CHROMIUM	MG/KG		18.7	18.2	13.1	25	17.1	28.7
COBALT	MG/KG	2.3	5 J	5.1 J	7.9	15.5 U	9.5	10.9
COPPER	MG/KG	310	9.5	26.1	23.4	63.2	18.1	358
CYANIDE	MG/KG	160	3.2 U	3.1 U	3.5 U	7.7 UL	3.1 U	3.6 U
IRON	MG/KG	5500	17700 J	5170 J	15200 J	13500	18500	28000
LEAD	MG/KG	40	12.9	22.7	81	153	19.6	216
MAGNESIUM	MG/KG		1540	4370	6030	1530 J	2560	16100
MANGANESE	MG/KG	180	538 J	84 J	890 J	108	643	296
MERCURY	MG/KG	0.56	0.13 U	0.12 U	5	0.19 J	0.06 B	0.15 B
NICKEL	MG/KG	150	7	26	12.9	12.6	10.6	81.3
POTASSIUM	MG/KG		652	882	722	937 J	1100	1090
SELENIUM	MG/KG	39	4.5 U	4.4 U	5.1 U	10.8 U	4.4 U	8
SILVER	MG/KG	39	1.3 U	1.2 U	1.4 U	3.1 U	1.3 U	1.5 U
SODIUM	MG/KG		645 U	623 U	722 U	1547 U	629 U	729 U
THALLIUM	MG/KG		3.2 U	3.1 U	3.6 U	7.7 U	3.1 U	3.6 U
VANADIUM	MG/KG	0.55	31.4	10.1	22.9	26.6	26.5	20.1
ZINC	MG/KG	2300	20.6	34.1	135	190	45.3	440

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not analyzed for

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AP – Asbestos Pile
CK – Creek
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U - Analyte not detected

Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSB24-SS	RVSD01-RI-01	RVSD02-RI-01	RVSD03-RI-01	RVSD04-RI-01	RVSD05D-RI-01	RVSD05-RI-01
ALUMINUM	MG/KG	7700	8350	3440	8560	1430	10200	6140	5490
ANTIMONY	MG/KG	3.1	7.4 U	7.8 U	24.2 U	7 U	36.8 U	22.6 U	16.6 U
ARSENIC	MG/KG	0.39	5.6	1.2 J	5.2	0.55 J	5.1 J	3.3 J	3.5
BARIUM	MG/KG	1500	74.9	29.2	114	10 J	110 J	89.8	73.4
BERYLLIUM	MG/KG	16	0.7	0.24 J	2 U	0.58 U	3.1 U	1.9 U	1.4 U
CADMIUM	MG/KG		0.25 J	0.65 U	2 U	0.58 U	3.1 U	1 J	0.79 J
CADMIUM	MG/KG	7	0.25 J	0.65 U	2 U	0.58 U	3.1 U	1 J	0.79 J
CALCIUM	MG/KG		3840	921	20800	465 J	9760	5060	4240
CHROMIUM	MG/KG		16.3	7.2	36.6	2.8	40.9	35.8	30.4
COBALT	MG/KG	2.3	9.5	2.6 J	11.1 J	5.8 U	30.6 U	7.5 J	6.6 J
COPPER	MG/KG	310	17.7	8.1	49.8	2.7 J	62	41	34.9
CYANIDE	MG/KG	160	3.1 U	3.3 U	10.2 U	3 U	15.5 U	9.6 U	7.1 U
IRON	MG/KG	5500	17100	5460	17400	1590	19500	15000	13200
LEAD	MG/KG	40	21.6	7.4	40.3	2.8	56.6	49.2	42
MAGNESIUM	MG/KG		2670	1080	11600	356 J	4780	2270	1940
MANGANESE	MG/KG	180	588	64.6	329	38.3	302	291	246
MERCURY	MG/KG	0.56	0.06 B	0.13 U	0.41 U	0.11 U	0.2 J	0.15 J	0.15 J
NICKEL	MG/KG	150	10.7	4.8 J	82.9	1.8 J	33.4	18.4	15.9
POTASSIUM	MG/KG		971	417 J	796 J	584 U	993 J	658 J	545 J
SELENIUM	MG/KG	39	4.3 U	4.6 U	14.1 U	4.1 U	21.4 U	13.2 U	9.7 U
SILVER	MG/KG	39	1.2 U	1.3 U	4 U	1.2 U	6.1 U	3.8 U	2.8 U
SODIUM	MG/KG		616 U	653 U	2021 U	584 U	3064 U	1882 U	1385 U
THALLIUM	MG/KG		3.1 U	3.3 U	10.1 U	2.9 U	15.3 U	9.4 U	6.9 U
VANADIUM	MG/KG	0.55	25.1	8.8	23.5	2.2 J	29.5 J	13.4 J	11.9 J
ZINC	MG/KG	2300	45.8	17.1	110	11.3	190	196	169

Notes:

mg/kg - milligram per kilogram

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CK – Creek
FP – Floodplain
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RV – Reservoir
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Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSD06-RI-01	RVSD07-RI-01	RVSD08-RI-01	RVSD09-RI-01	RVSD10-RI-01	RVSD11-RI-01	RVSD12-RI-01
ALUMINUM	MG/KG	7700	3730	10600	12700	10300	11800	12500	11400
ANTIMONY	MG/KG	3.1	10.9 U	33.3 U	51.2 U	41.5 U	52.6 U	63.9 U	54.5 U
ARSENIC	MG/KG	0.39	4	5.8	7.4 J	5.2 J	5.6 J	6.8 J	6.6 J
BARIUM	MG/KG	1500	55.7	131	161 J	132 J	161 J	173 J	171 J
BERYLLIUM	MG/KG	16	0.4 J	2.8 U	4.3 U	3.5 U	4.4 U	5.3 U	4.5 U
CADMIUM	MG/KG		0.3 J	2.8 U	2 J	1.5 J	1.6 J	1.9 J	1.6 J
CADMIUM	MG/KG	7	0.3 J	2.8 U	2 J	1.5 J	1.6 J	1.9 J	1.6 J
CALCIUM	MG/KG		5700	9710	9860	9290	10300	12700	21300
CHROMIUM	MG/KG		12.8	36.8	65.5	53.2	52.2	57	57.2
COBALT	MG/KG	2.3	5.5 J	10 J	42.6 U	34.6 U	43.8 U	53.2 U	45.4 U
COPPER	MG/KG	310	28.1	72.1	90.9	70.8	73.7	82	82.5
CYANIDE	MG/KG	160	4.5 U	14.5 U	21.3 U	17.1 U	21.5 U	26.9 U	22.9 U
IRON	MG/KG	5500	10800	18900	25600	22200	22200	24100	21400
LEAD	MG/KG	40	20.3	65.4	96	78.4	78.2	85.2	81.9
MAGNESIUM	MG/KG		3180	6810	3900 J	3490	3930 J	3910 J	6350
MANGANESE	MG/KG	180	542	334	323	292	303	326	389
MERCURY	MG/KG	0.56	0.12 J	0.16 J	0.25 J	0.28 J	0.3 J	0.36 J	0.88 U
NICKEL	MG/KG	150	13.1	42	34.1	30.1	29.4 J	32.3 J	39.8
POTASSIUM	MG/KG		320 J	895 J	4263 U	3462 U	4381 U	5323 U	4539 U
SELENIUM	MG/KG	39	6.4 U	19.5 U	29.8 U	24.2 U	30.7 U	37.3 U	31.8 U
SILVER	MG/KG	39	1.8 U	5.6 U	8.5 U	6.9 U	8.8 U	10.6 U	9.1 U
SODIUM	MG/KG		910 U	2779 U	4263 U	3462 U	4381 U	5323 U	4539 U
THALLIUM	MG/KG		4.6 U	13.9 U	21.3 U	17.3 U	21.9 U	26.6 U	22.7 U
VANADIUM	MG/KG	0.55	11.6	32	32 J	27.4 J	33.4 J	35 J	31.9 J
ZINC	MG/KG	2300	81.9	171	354	282	268	307	268

Notes:

mg/kg - milligram per kilogram

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CK – Creek
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Data Qualifiers:

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U - Analyte not detected

Table C-8
Metals Results in Soil and Sediment

Analyte	Result Unit	RSL (mg/kg)	RVSD13-RI-01	RVSD14-RI-01	RVSD15-RI-01
ALUMINUM	MG/KG	7700	3450	11500	11800
ANTIMONY	MG/KG	3.1	12.2 U	52.5 U	60.6 U
ARSENIC	MG/KG	0.39	2.2	6.3 J	7.6 J
BARIUM	MG/KG	1500	43.1	169 J	197 J
BERYLLIUM	MG/KG	16	1 U	4.4 U	5.1 U
CADMIUM	MG/KG		1 U	4.4 U	5.1 U
CADMIUM	MG/KG	7	1 U	4.4 U	5.1 U
CALCIUM	MG/KG		3860	11300	15900
CHROMIUM	MG/KG		7.5	42.4	50.1
COBALT	MG/KG	2.3	3.5 J	43.8 U	50.5 U
COPPER	MG/KG	310	9.3	66.4	77
CYANIDE	MG/KG	160	5.3 U	22.3 U	25.5 U
IRON	MG/KG	5500	5570	20100	22500
LEAD	MG/KG	40	10.5	67.4	81.4
MAGNESIUM	MG/KG		1850	4070 J	4890 J
MANGANESE	MG/KG	180	109	292	338
MERCURY	MG/KG	0.56	0.21 U	0.89 U	0.98 U
NICKEL	MG/KG	150	9.2	28.3 J	32.9 J
POTASSIUM	MG/KG		1014 U	4377 U	5054 U
SELENIUM	MG/KG	39	7.1 U	30.6 U	35.4 U
SILVER	MG/KG	39	2 U	8.8 U	10.1 U
SODIUM	MG/KG		1014 U	4377 U	5054 U
THALLIUM	MG/KG		5.1 U	21.9 U	25.3 U
VANADIUM	MG/KG	0.55	10.1 J	31.4 J	33.3 J
ZINC	MG/KG	2300	25	216	250

Notes:

mg/kg - milligram per kilogram

Blank cells indicate analyte not analyzed for

RSLs = EPA Region 3 Risk Based Concentration Values for Residential Tapwater, provided by ORNL (Updated December 2009).

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CK – Creek
FP – Floodplain
PK – Park
RV – Reservoir
SB – Soil Boring
PZ – Piezometer
SD – Sediment

Data Qualifiers:

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L - Analyte present. Reported value may be biased low. Actual value is expected to be higher.

U - Analyte not detected

Table C-9
Asbestos Results in Reservoir Soil

Analyte	Result Unit	Sample Location	RVSB011920-CW-2852	RVSB011920-NS-2853	RVSB020304-CW-2923	RVSB020304-NS-2924
Total Asbestos	%	Reservoir	0.1	0.1	12	U
Asbestos, chrysotile	%	Reservoir	0.1	-	12	-

Analyte	Result Unit	Sample Location	RVSB020304-WA-2925	RVSB04-SS-2926	RVSB05060708-NS-2928	RVSB05060708-WA-2929
Total Asbestos	%	Reservoir	15	0.4	0.4	12
Asbestos, chrysotile	%	Reservoir	15	0.4	0.4	12

Analyte	Result Unit	Sample Location	RVSB050607-CW-2927	RVSB08-SS-2930	RVSB09101112-CW-2889	RVSB091011-WA-2891
Total Asbestos	%	Reservoir	0.7	1.2	0.2	12
Asbestos, chrysotile	%	Reservoir	0.7	1.2	0.2	12

Analyte	Result Unit	Sample Location	RVSB1112-NS-2890	RVSB12-SS-2892	RVSB15161718-CW-2583	RVSB15161718-NS-2584
Total Asbestos	%	Reservoir	U	0.5	1.1	U
Asbestos, chrysotile	%	Reservoir	-	0.5	1.1	-

Analyte	Result Unit	Sample Location	RVSB15161718-WA-2585	RVSB17-SS-2586	RVSB19-SS-2862	RVSB21222324-CW-2959
Total Asbestos	%	Reservoir	12	U	0.1	U
Asbestos, chrysotile	%	Reservoir	12	-	0.1	-

Analyte	Result Unit	Sample Location	RVSB21222324-WA-2961	RVSB24-SS-2962	RVSB25-SS-3580	RVSB26-SS-3581
Total Asbestos	%	Reservoir	15	U	0.8	1.1
Asbestos, chrysotile	%	Reservoir	15	-	0.8	1.1

Analyte	Result Unit	Sample Location	RVSB27-SS-3582
Total Asbestos	%	Reservoir	0.1
Asbestos, chrysotile	%	Reservoir	-

Notes:
RV - Reservoir
SB - Soil Boring
"-" - No result
U - Not detected

Table C-10
Asbestos Results in Reservoir Sediment

Analyte	Result Unit	Sample Location	RVSD01-RI-01-2240	RVSD02-RI-01-2141	RVSD03-RI-01-2241	RVSD04-RI-01-2157
Total Asbestos	%	Reservoir	0.1	0.3	U	0.2
Asbestos, chrysotile	%	Reservoir	0.1	0.3	-	0.2

Analyte	Result Unit	Sample Location	RVSD05D-RI-01-2153	RVSD05-RI-01-2154	RVSD06-RI-01-2242	RVSD07-RI-01-2162
Total Asbestos	%	Reservoir	0.1	0.1	0.2	0.4
Asbestos, chrysotile	%	Reservoir	0.1	0.1	0.2	0.4

Analyte	Result Unit	Sample Location	RVSD07-RI-01-2163	RVSD08-RI-01-2243	RVSD09-RI-01-2156	RVSD10-RI-01-2165
Total Asbestos	%	Reservoir	0.5	0.1	0.2	0.2
Asbestos, chrysotile	%	Reservoir	0.5	0.1	0.2	0.2

Analyte	Result Unit	Sample Location	RVSD11-RI-01-2164	RVSD12-RI-01-2244	RVSD13-RI-01-2245	RVSD14-RI-01-2246
Total Asbestos	%	Reservoir	0.2 J	0.3	0.3	0.1
Asbestos, chrysotile	%	Reservoir	0.2 J	0.3	0.3	0.1

Analyte	Result Unit	Sample Location	RVSD15-RI-01-2247
Total Asbestos	%	Reservoir	0.1
Asbestos, chrysotile	%	Reservoir	0.1

Notes:

RV - Reservoir

SD - Sediment

"-" - No result

J - Analyte present. Reported value may not be accurate or precise.

U - Not detected

Table C-11
Asbestos Results in Reservoir Surface Water

Analyte	Result Unit	Sample Location	RVSW01-RI-01-2018	RVSW01-RI-01-2019	RVSW02-RI-01-2020	RVSW02-RI-01-2021
Total Asbestos	MFL	Reservoir	U	1.9	U	U
Asbestos, chrysotile	MFL	Reservoir	-	1.9	-	-

Analyte	Result Unit	Sample Location	RVSW02-RI-01-2022	RVSW02-RI-01-2023	RVSW02-RI-01-2024	RVSW02-RI-01-2025
Total Asbestos	MFL	Reservoir	U	U	U	U
Asbestos, chrysotile	MFL	Reservoir	-	-	-	-

Analyte	Result Unit	Sample Location	RVSW03D-RI-01-2056	RVSW03D-RI-01-2057	RVSW03-RI-01-2058	RVSW03-RI-01-2059
Total Asbestos	MFL	Reservoir	160.33	57.01	42.76	1.78
Asbestos, chrysotile	MFL	Reservoir	160.33	57.01	42.76	1.78

Analyte	Result Unit	Sample Location	RVSW04-RI-01-2060	RVSW04-RI-01-2061	RVSW05-RI-01-2062	RVSW05-RI-01-2063
Total Asbestos	MFL	Reservoir	2.85	635.4	27.5	3.74
Asbestos, chrysotile	MFL	Reservoir	2.85	635.4	27.5	3.74

Notes:

RV - Reservoir

SW - Surface Water

"-" - No result

MFL - millions of fibers per liter

U - Not detected

Table C-12
Asbestos Results in Creek Sediment

Analyte	Result Unit	Sample Location	CKSD01-RI-01-3428	CKSD02-RI-01-3429	CKSD02-RI-01-3430	CKSD02-RI-01-3431
Total Asbestos	%	Creek	U	0.1	U	U
Asbestos, chrysotile	%	Creek	-	0.1	-	-
Crocidolite	%	Creek	-	-	-	-

Analyte	Result Unit	Sample Location	CKSD03-RI-01-3432	CKSD04-RI-01-3340	CKSD05-RI-01-3308	CKSD06-RI-01-3309
Total Asbestos	%	Creek	0.8	0.1	U	U
Asbestos, chrysotile	%	Creek	0.8	0.1	-	-
Crocidolite	%	Creek	-	-	-	-

Analyte	Result Unit	Sample Location	CKSD07-RI-01-3310	CKSD08-RI-01-3311	CKSD09-RI-01-3433	CKSD10-RI-01-3341
Total Asbestos	%	Creek	0.4	U	U	0.1
Asbestos, chrysotile	%	Creek	0.3	-	-	0.1
Crocidolite	%	Creek	0.1	-	-	-

Analyte	Result Unit	Sample Location	CKSD12D-RI-01-3312	CKSD12-RI-01-3313
Total Asbestos	%	Creek	0.1	0.1
Asbestos, chrysotile	%	Creek	0.1	0.1
Crocidolite	%	Creek	-	-

Notes:

CK - Creek

SD - Sediment

"-" - No result

U - Not detected

Table C-13
Asbestos Results in Creek Surface Water

Analyte	Result Unit	Sample Location	CKSW01-RI-01-3444	CKSW02-RI-01-3438	CKSW03-RI-01-3436	CKSW04-RI-01-3434
Total Asbestos	MFL	Creek	U	U	U	1.78
Asbestos, chrysotile	MFL	Creek	-	-	-	1.78

Analyte	Result Unit	Sample Location	CKSW05-RI-01-3314	CKSW05-RI-01-3315	CKSW06-RI-01-3316	CKSW06-RI-01-3317
Total Asbestos	MFL	Creek	29.99	12	U	U
Asbestos, chrysotile	MFL	Creek	29.99	12	-	-

Analyte	Result Unit	Sample Location	CKSW07-RI-01-3318	CKSW07-RI-01-3319	CKSW08D-RI-01-3320	CKSW08D-RI-01-3321
Total Asbestos	MFL	Creek	18.75	23.99	U	0.18
Asbestos, chrysotile	MFL	Creek	18.75	23.99	-	0.18

Analyte	Result Unit	Sample Location	CKSW08-RI-01-3322	CKSW08-RI-01-3323
Total Asbestos	MFL	Creek	0.18	0.18
Asbestos, chrysotile	MFL	Creek	0.18	0.18

Notes:
CK - Creek
SW - Surface Water
"-" - No result
U - Not detected

Table C-14
Asbestos Results in the Creek Soil Borings

Analyte	Result Unit	Sample Location	CKSB01-WA-3038
Asbestos	%	Creek	U

Notes:
CK - Creek
SB - Soil Borings
U - Not detected

Table C-15
Asbestos Results in the Park Piezometers

Analyte	Result Unit	Sample Location	PKPZ01-RI-01-2759	PKPZ01-RI-01-2760	PKPZ02D-RI01-2757	PKPZ02D-RI01-2758
Asbestos, chrysotile	MFL	Park	3384.81	6057.04	4547.02	2565.33

Analyte	Result Unit	Sample Location	PKPZ02-RI-01-2761	PKPZ02-RI-01-2762	PKPZ03-RI-01-2763	PKPZ03-RI-01-2764
Asbestos, chrysotile	MFL	Park	7838.52	1247.04	2076.7	1440.19

Notes:

MFL - millions of fibers per liter

PK - Park

PZ - Piezometer

Table C-16
Asbestos Results in Park Soil Borings

Analyte	Result Unit	Sample Location	PKSB03042226-CW-2314	PKSB03042226-NS-2315	PKSB03042226-WA-2316
Total Asbestos	%	Park	U	0.4	15
Asbestos, chrysotile	%	Park	-	0.4	15
Crocidolite	%	Park	-	-	-

Analyte	Result Unit	Sample Location	PKSB03-SS-2317	PKSB06192940-CW	PKSB06192940-NS
Total Asbestos	%	Park	U	12	0.1
Asbestos, chrysotile	%	Park	-	12	0.1
Crocidolite	%	Park	-	-	-

Analyte	Result Unit	Sample Location	PKSB06192940-WA	PKSB08101215-CW-2503	PKSB08101215-NS-2504
Total Asbestos	%	Park	15	12	0.1
Asbestos, chrysotile	%	Park	15	12	0.1
Crocidolite	%	Park	-	-	-

Analyte	Result Unit	Sample Location	PKSB08101215-WA-2505	PKSB13303335-CW-2393	PKSB13303335-NS-2394
Total Asbestos	%	Park	15.1	U	0.2
Asbestos, chrysotile	%	Park	15	-	0.2
Crocidolite	%	Park	0.1	-	-

Analyte	Result Unit	Sample Location	PKSB13303335-WA-2395	PKSB15-SS-2506	PKSB19-SS
Total Asbestos	%	Park	17	0.1	0.4
Asbestos, chrysotile	%	Park	17	0.1	0.4
Crocidolite	%	Park	-	-	-

Analyte	Result Unit	Sample Location	PKSB30D-SS-2396	PKSB30-SS-2397	PKSB30-SS-2398
Total Asbestos	%	Park	U	U	U
Asbestos, chrysotile	%	Park	-	-	-
Crocidolite	%	Park	-	-	-

Notes:
PK - Park
SB - Soil Boring
"-" - No result
U - Not detected

Table C-16
Asbestos Results in Park Soil Borings

Analyte	Result Unit	Sample Location	PKSB30-SS-2399	PKSB38444851-CW-2392	PKSB38444851-NS-2391
Total Asbestos	%	Park	U	0.1	0.2
Asbestos, chrysotile	%	Park	-	0.1	0.2
Crocidolite	%	Park	-	-	-

Analyte	Result Unit	Sample Location	PKSB38444851-WA-2390	PKSB38-SS-2389	PKSB52-CW-2748
Total Asbestos	%	Park	15	U	1.2
Asbestos, chrysotile	%	Park	15	-	1.2
Crocidolite	%	Park	-	-	-

Analyte	Result Unit	Sample Location	PKSB52-NS-2749	PKSB52-WA-2750	PKSB53-SS-3547
Total Asbestos	%	Park	0.1	12	0.5
Asbestos, chrysotile	%	Park	0.1	12	0.5
Crocidolite	%	Park	-	-	-

Notes:
PK - Park
SB - Soil Boring
"-" - No result
U - Not detected

Table C-17
Asbestos Results in the Asbestos Pile Piezometers and Soil Borings

Analyte	Result Unit	Sample Location	APPZ01-RI-01-2751	APPZ01-RI-01-2752	APPZ02-RI-01-2753	APPZ02-RI-01-2754
Asbestos, chrysotile	MFL	Asbestos Pile	4008.33	1211.41	19952.59	9441.85

Analyte	Result Unit	Sample Location	APPZ03-RI-01-2755	APPZ03-RI-01-2756	APSB12-RI-01-2642	APSB12-RI-01-2643
Asbestos, chrysotile	MFL	Asbestos Pile	19315.01	34204.44	24940.74	3078.4

Analyte	Result Unit	Sample Location	APSB18-R1-01-2551	APSB18-R1-01-2552
Asbestos, chrysotile	MFL	Asbestos Pile	1068888.89	U

Notes:
AP - Asbestos Pile
SB - Soil Boring
PZ - Piezometer
U - Not detected
MFL - millions of fibers per liter

Table C-18
Asbestos Results in Asbestos Pile Soil Borings

Analyte	Result Unit	Sample Location	APSB01020304-CW-2535	APSB01020304-NS-2536	APSB01020304-WA-2537
Asbestos	%	Asbestos Pile	-	-	-
Asbestos, chrysotile	%	Asbestos Pile	0.1	0.1	12

Analyte	Result Unit	Sample Location	APSB02-SS-2538	APSB08131617-NS-2721	APSB08131617-WA-2722
Asbestos	%	Asbestos Pile	-	-	-
Asbestos, chrysotile	%	Asbestos Pile	1.1	0.1	1.5

Analyte	Result Unit	Sample Location	APSB09101112-CW-2618	APSB09101112-NS-2619	APSB09101112-WA-2620
Asbestos	%	Asbestos Pile	-	-	-
Asbestos, chrysotile	%	Asbestos Pile	0.4	0.1	0.8

Analyte	Result Unit	Sample Location	APSB10-SS-2621	APSB13-SS-2720	APSB15212325D-NS-2677
Asbestos	%	Asbestos Pile	-	-	U
Asbestos, chrysotile	%	Asbestos Pile	0.1	1.3	-

Analyte	Result Unit	Sample Location	APSB15212325-NS-2676	APSB15212325-WA-2675	APSB20-21-2641
Asbestos	%	Asbestos Pile	U	-	-
Asbestos, chrysotile	%	Asbestos Pile	-	1.2	12

Analyte	Result Unit	Sample Location	APSB21-SS-2674	APSB24262728-NS-2701	APSB24262728-WA-2700
Asbestos	%	Asbestos Pile	-	-	-
Asbestos, chrysotile	%	Asbestos Pile	1.2	1.1	1.8

Analyte	Result Unit	Sample Location	APSB24-SS-2699	APSB303132-CW-2995	APSB303132-NS-2994
Total Asbestos	%	Asbestos Pile	1.1	15	12
Asbestos, chrysotile	%	Asbestos Pile	1.1	15	12

Notes:
AP - Asbestos Pile
SB - Soil Boring
"-" - No result
U - Not detected

Table C-18
Asbestos Results in Asbestos Pile Soil Borings

Analyte	Result Unit	Sample Location	APSB303132-WA-2993	APSB32D-SS-2992	APSB32-SS-2991
Total Asbestos	%	Asbestos Pile	20	12	15
Asbestos, chrysotile	%	Asbestos Pile	20	12	15

Analyte	Result Unit	Sample Location	APSB33-SS-3578	APSB34-SS-3579
Total Asbestos	%	Asbestos Pile	12	15
Asbestos, chrysotile	%	Asbestos Pile	12	15

Notes:

AP - Asbestos Pile

SB - Soil Boring

"-" - No result

U - Not detected

Table C-19
Asbestos Results in the Other Side of the Wissahickon Soil Borings

Analyte	Result Unit	Sample Location	OWSB01-SS-3180	OWSB02-SS-3181	OWSB03-SS-3182
Total Asbestos	%	Wissahickon	U	0.1	U
Asbestos, chrysotile	%	Wissahickon	-	0.1	-

Notes:
OW - Other Side of the Wissahickon
SB - Soil Boring
"-" - No result
U - Not detected

Table C-20
Asbestos Results in the Creek Floodplain

Analyte	Result Unit	Sample Location	CKFP01-D-3169	CKFP01-S-3170	CKFP02-D-3121	CKFP02-S-3122	CKFP03-D-3088
Total Asbestos	%	Floodplain	1.2	U	12	0.5	0.3
Asbestos, chrysotile	%	Floodplain	1.2	-	12	0.5	0.3

Analyte	Result Unit	Sample Location	CKFP03-S-3089	CKFP03-S-3090	CKFP03-S-3091	CKFP04-D-3098	CKFP04-S-3099
Total Asbestos	%	Floodplain	0.4	0.1	0.1	0.2	0.5
Asbestos, chrysotile	%	Floodplain	0.4	0.1	0.1	0.2	0.5

Analyte	Result Unit	Sample Location	CKFP05-D-3540	CKFP05D-D-3541	CKFP05-S-3544	CKFP06-D-3543	CKFP07-D-3123
Total Asbestos	%	Floodplain	0.1	0.3	0.1	1.3	0.2
Asbestos, chrysotile	%	Floodplain	0.1	0.3	0.1	1.3	0.2

Analyte	Result Unit	Sample Location	CKFP07-S-3124	CKFP08-D-3178	CKFP08-S-3179
Total Asbestos	%	Floodplain	0.1	0.2	0.1
Asbestos, chrysotile	%	Floodplain	0.1	0.2	0.1

Notes:
CK - Creek
FP - Floodplain
"-" - No result
U - Not detected