

INTERIM ACTION CONFIRMATIONAL
GROUNDWATER MONITORING
WORK PLAN

Kimberly-Clark Worldwide Site Upland Area
Everett, Washington

Prepared for: Kimberly-Clark Worldwide, Inc.

Project No. 110207 • June 12, 2014 Final





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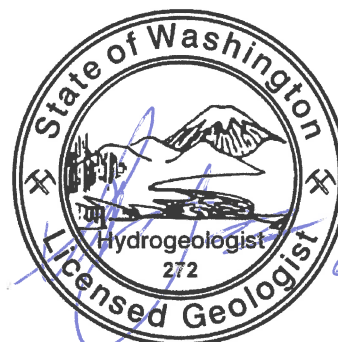
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Aspect Consulting, LLC

A handwritten signature in black ink, appearing to read "Brett Carp".

Brett Carp
Environmental Scientist
bcarp@aspectconsulting.com



Steve J. Germiot

Steve Germiot, LHG
Sr. Associate Hydrogeologist
sgermiot@aspectconsulting.com

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Acronyms

Aspect	Aspect Consulting, LLC
AST	above-ground storage tank
BA	Boiler Area
BTEX	benzene, toluene, ethylbenzene, and xylenes
COC	contaminant of concern
CN	Clark Nickerson mill
cPAH	carcinogenic polycyclic aromatic hydrocarbon
DAST	REC2-MW-5 Area, located near Diesel AST
Ecology	Washington State Department of Ecology
EIM	Environmental Information Management
EPH	extractable petroleum hydrocarbons
ESA	Environmental Site Assessment
FS	Feasibility Study
GF	General Fill
IA	interim action
IACL	interim action cleanup level
K-C	Kimberly-Clark Worldwide Inc.
LLC	limited liability company
mg/kg	milligrams/kilograms
mg/L	milligrams per liter
MTCA	Model Toxics Control Act
NAPL	non-aqueous phase liquid
NRU	Naval Reserve Parcel UST Area
NRS	Naval Reserve Parcel South Area
Order	Agreed Order No. DE 9476
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
pH	negative log of the hydrogen ion concentration in solution
PQL	practical quantitation limit
RCD	Rail Car Dumper Area
REC	recognized environmental condition
RI	Remedial Investigation

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RI/FS	Remedial Investigation/Feasibility Study
SAP	Sampling and Analysis Plan
SHB	Small Hydraulic Barker
Site	K-C Worldwide Site
SVOC	semivolatile organic compound
TCLP	toxicity characteristic leaching procedure
TEE	terrestrial ecological evaluation
TEQ	toxic equivalent quotient/concentration
TPH	total petroleum hydrocarbons
TSS	total suspended solids
µg/L	micrograms per liter
U.S.	United States
Upland Area	Upland Area of the Kimberly-Clark Worldwide Site
UST	underground storage tank
VI	vapor intrusion
VOC	volatile organic compound
WAC	Washington Administrative Code
Work Plan	Interim Action Confirmational Groundwater Monitoring Work Plan

1 Introduction

Aspect Consulting, LLC (Aspect) has prepared this Confirmational Groundwater Monitoring Work Plan (Work Plan), on behalf of Kimberly-Clark Worldwide, Inc. (K-C), to guide post-Interim Action (i.e., “opportunistic cleanup”) confirmational groundwater monitoring activities on the Upland Area of the Kimberly-Clark Worldwide Site (herein referred to as the Upland Area) (Figure 1). The *Interim Action Plan* (Aspect, 2012), included as Exhibit C to Agreed Order No. ED 9476 (Order), was prepared to guide opportunistic cleanup activities conducted in conjunction with facility demolition, and prior to redevelopment, within the Upland Area.

As described in the Interim Action Plan, the Upland Area opportunistic cleanup actions involved excavation and off-Site disposal of contaminated soil, with concurrent dewatering to facilitate soil removal and handling. In addition, separate-phase petroleum identified in the groundwater during excavation activities was collected, characterized, and sent off Site for proper disposal.

The Interim Action Plan outlines the opportunistic cleanup’s compliance monitoring program, which, in accordance with Chapter 173-340-410 of the Washington Administrative Code (WAC), includes protection monitoring for on-site cleanup worker health and safety, performance monitoring (excavation verification soil sampling and analysis) to confirm meeting interim action cleanup levels (IACLs) for soil, and confirmational monitoring (groundwater sampling and analysis) to confirm long-term effectiveness of the interim cleanup. The Interim Action Plan allows confirmational groundwater monitoring to be initiated once the opportunistic soil removal is conducted. This Work Plan describes the post-construction groundwater confirmational monitoring activities. The long-term groundwater monitoring described herein only applies to the interim action areas described in Section 3. Final long-term groundwater compliance monitoring requirements will be based on the comprehensive Remedial Investigation/Feasibility Study (RI/FS) and the Cleanup Action Plan for the Site.

1.1 Interim Action Soil Cleanup Levels

The 2012 Interim Action Plan dictated that the interim action would, to the extent practicable, remove soil containing contaminant concentrations above soil IACLs. At the time of the Interim Action Plan and the beginning of the interim action, the soil IACLs were defined based on unrestricted land use because the future land use was not determined. The Interim Action Plan allowed for a change to industrial-use IACLs if it became known that the Upland Area would remain in an industrial land use consistent with the Model Toxics Control Act (MTCA; Chapter 173-340 WAC).

The unrestricted soil IACLs accounted for soil human direct contact, contact with terrestrial ecological receptors, and soil leaching to groundwater (groundwater protection). Site groundwater is not potable and the groundwater cleanup levels are therefore based on discharge to marine surface water and, for volatile organic compounds (VOCs) only, vapor intrusion. The MTCA-default soil concentrations based on groundwater protection of the marine surface water environment are intentionally conservative, applying the groundwater cleanup levels and default assumptions of MTCA

(three-phase partitioning model in WAC 173-340-747(4)), but not fully accounting for contaminant attenuation occurring between a soil location and a location where a receptor could be exposed to groundwater. Soil concentrations protective of groundwater are commonly more stringent than those protective of direct contact, particularly for metals.

Consistent with the RI/FS Work Plan (Aspect, 2013b), IACLs based on direct contact were applied for those contaminants for which empirical evidence (based on pre-RI groundwater data) appeared to indicate that current soil concentrations are protective of groundwater. The empirical demonstration that soil concentrations are protective of groundwater will be fully evaluated based on all of the RI data. This evaluation may result in changes to the soil screening levels identified in the RI/FS Work Plan (i.e., whether they should be based on direct contact or groundwater protection) if exceedances in groundwater are identified for compounds that had no exceedances based solely on the pre-RI groundwater data. As a result, some residual concentrations of chemicals in soil in the IA areas, which have been reported herein as meeting IACLs based only on the direct contact pathway, may actually be above screening levels identified for the RI/FS if it is shown that soil is not protective of groundwater. Ultimately, the groundwater monitoring proposed in this Monitoring Plan, including the final long-term groundwater compliance monitoring requirements discussed in Section 1, may demonstrate whether residual soil concentrations in the interim action areas are protective of groundwater, in accordance with MTCA (WAC 173-340-747).

Contractor mobilization and interim action preparatory work at the Site began on August 19, 2013; excavation of soil began on September 12, 2013. In late September 2013, shortly after the interim action excavation program began, K-C contracted to sell the property to a maritime ship-building company, with a planned water-dependent industrial redevelopment consistent with City zoning and meeting MTCA requirements to qualify as an industrial property. In light of the anticipated future use as an industrial shipyard with no public access, K-C communicated to Ecology on October 7, 2013 requesting use industrial based IACLs. Ecology agreed at that time that the Upland Area would qualify for industrial cleanup levels based on the anticipated future use as an industrial shipyard with no public access. From that point forward, the interim actions were conducted applying industrial-use IACLs. It was expected that the planned industrial use would have qualified for an exclusion from a terrestrial ecological evaluation in accordance with WAC 173-340-7491(1)(b), so MTCA ecological indicator soil concentrations were not considered in the IACLs applied.

Following completion of the interim action excavation work, but prior to finalizing this Groundwater Monitoring Plan, the maritime ship building company terminated the contract to acquire the property. As long as the future use is uncertain, the forthcoming Upland Area RI/FS will proceed with evaluation relative to unrestricted cleanup levels, including incorporation of terrestrial ecological soil indicator concentrations as appropriate. This will result in changes to the soil screening levels identified in the RI/FS Work Plan and, as a result, some residual concentrations of chemicals in soil in the interim action areas that have been reported herein as meeting IACLs may actually be above screening levels identified for the RI/FS.

Since the majority of the interim action work was conducted considering industrial IACLs (beginning in October 2013), those IACLs are presented and discussed in this Monitoring Plan.

All of the interim action data representing in-place soil (i.e., representing current conditions) will be incorporated into the Upland Area RI/FS. Therefore, the interim action data will be evaluated relative to unrestricted cleanup levels as part of the RI/FS.

Note that a more detailed report documenting the interim actions will be produced in accordance with the requirements of the Agreed Order. Interim action activities including how the contaminated media was managed, the lateral and vertical limits of excavations, the volume of contaminated soil removed from each excavation, groundwater management and dewatering volumes for the project, and all sampling results including pre-excavation characterization of site media, post-excavation compliance monitoring, and characterization of environmental media for waste disposal purposes will be presented in the interim action report.

2 Confirmational Monitoring Overview

The goal for post-construction confirmational groundwater monitoring is to verify whether the completed interim action soil cleanup activities are protective of groundwater (eliminated sources of leachable contaminants). Installation, development, and survey of new groundwater monitoring wells, and the subsequent groundwater sampling and analysis for the confirmational monitoring program will be completed in accordance with the Sampling and Analysis Plan (SAP) for the Remedial Investigation/Feasibility Study Work Plan (Aspect, 2013b).

The confirmational groundwater monitoring will initially be conducted on a quarterly basis for one year to assess potential seasonal variability in groundwater quality. Measured analyte concentrations well below groundwater IACLs for the monitoring period could demonstrate compliance for that analyte at that well. A report of results from the initial four quarters of monitoring will be submitted to Ecology for review and determination of whether IACLs have been met for the specific interim action cleanup areas. If Ecology determines that the data do not adequately demonstrate compliance with cleanup standards for specific areas, additional confirmational monitoring will be conducted for those areas as agreed to with Ecology.

3 Confirmational Groundwater Monitoring Locations and Analytes by Area

This section describes the proposed post-construction groundwater monitoring well locations and chemical analyses, organized by the following interim soil cleanup areas:

- BA-MW-6 Area;
- Boiler/Baghouse Area;
- Bunker C ASTs Area;
- CN-B-2 Area;
- GF-11 Area;
- Heavy Duty Shop Sump Area;
- Hydraulic Barker Vault Area;
- Naval Reserve Parcel UST Area;
- Naval Reserve Parcel South Area;
- REC2-MW-5 Area (near Diesel AST);
- Rail Car Dumper Area;
- SHB-MW-1 Area;
- UST 29/Latex Spill Area;
- UST 70 Area; and
- USTs 71, 72, 73 Area.

Figure 1 depicts the locations of the Upland Area interim action excavations and proposed confirmational monitoring wells.

Figure 1 also depicts the interpreted water table elevation contours from the November 2013 RI water level measurement event. The groundwater flow directions across the Upland Area are generally toward the west, with discharge to the East Waterway, as expected, with localized flow direction variations from northwest to southwest. However, the November 2013 water level data also demonstrate a pronounced east-west-trending groundwater mound within the footprint of the former Log Pond, as depicted on Figure 1. Observations from during mill demolition and the interim action indicate that the former Log Pond footprint remains generally surrounded by its former timber bulkhead structure. In addition, Scott Paper's 1977 drawing C-6911, entitled "Log Pond Fill", depicts a northeast-southwest-trending "intermediate berm" traversing the former Log Pond just west of the peak of the measured water table mound (also shown on Figure 1). The intermediate berm was likely installed during filling of the former Log Pond. The water level data indicate that the subsurface structures represent restrictions to local

groundwater flow, resulting in the observed water table mounding. Subsequent to the November 2013 water level measurements, a small area on the south side of the timber bulkhead was breached at the time of the adjacent SHB-MW-1 area interim action excavation, which may allow the mound to dissipate; this can be assessed from water level measurements collected during the interim action confirmational groundwater monitoring program.

Chemical analyses for confirmational groundwater monitoring in each area were determined based on the contaminants of concern (COCs) that identified the area for interim soil cleanup and the results of the excavation verification soil sampling and analysis. Appendix A includes the excavation verification soil sample analytical data¹ for each interim action area. The groundwater chemical analyses for each area are provided in Table 1. In addition, field parameters (temperature, pH, specific electrical conductance, dissolved oxygen, oxidation reduction potential, and turbidity) will be measured for each groundwater sample, consistent with the SAP.

The monitoring well locations and chemical analyses for each interim action soil cleanup area are described below. Figures 2 through 16 show, for each interim action area, the soil excavation area, verification soil sample locations, and monitoring well locations for confirmational groundwater monitoring. The general groundwater flow direction for the area, based on RI water level data, is also depicted on each figure.

3.1 BA-MW-6 Area

Oil-range total petroleum hydrocarbons (TPH) were the COCs targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 2.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs identified for industrial use and groundwater protection (Table A-1 in Appendix A).

Monitoring well BA-MW-6, the exploration where the elevated oil-range TPH was detected, was decommissioned prior to interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring well BA6-MW-101 completed on the downgradient edge of the small excavation, as depicted on Figure 2. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of diesel- and oil-range TPH and PAHs.

3.2 Boiler/Baghouse Area

Lead was the COC targeted in the interim action for this area, although soil concentrations of arsenic, copper, mercury, nickel and zinc also exceeded MTCA-default soil IACLs based on groundwater leaching to protect the marine environment. The Boiler/Baghouse area overlaps with petroleum impacts from the adjacent UST 71 interim action area; groundwater monitoring for petroleum-related compounds in that area are

¹ The verification soil data in Appendix A are considered draft since some of the more recent data have not yet been validated.

addressed under the UST 71 monitoring (refer to Section 3.15). The interim action excavation area, and excavation verification soil samples are depicted on Figure 3.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial worker direct contact. However, residual soil concentrations of copper, mercury, and zinc within the excavated area exceed their respective soil IACLs based on groundwater leaching to protect the marine environment (Table A-2 in Appendix A).

Confirmational groundwater monitoring for this area will be completed at new monitoring wells BBH-MW-101, BBH-MW-102, BBH-MW-103, and BBH-MW-104, as depicted on Figure 3. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of arsenic, copper, lead, mercury, and zinc.

3.3 Bunker C ASTs Area

Oil-range TPH (Bunker C fuel oil) and polycyclic aromatic hydrocarbons (PAHs) were the COCs targeted in the interim action for this area. During the process of decommissioning and removing the Bunker C oil and caustic ASTs in the mid-1990s, Scott Paper conducted an independent cleanup of petroleum-contaminated shallow soils within the AST area (Scott Paper, 1995b); that letter documents that the Bunker C oil tank being decommissioned did not have a bottom in it. A geomembrane separating the cleanup's import fill from the underlying soil was observed during the interim action excavation. In addition to the Bunker C fuel storage, gasoline ASTs were present in the northwestern portion of the area², as indicated on Figure 4. The interim action excavation area and excavation verification soil samples are depicted on Figure 4.

The interim action successfully removed more than 9,000 tons of petroleum-contaminated material from this area, including removing a few hundred feet of an 11-foot wide, 2-foot-thick monolithic concrete footer³ (see Figure 4) to access underlying petroleum-saturated soils that were not removed during the mid-1990s independent cleanup. The footer/foundation was wider in its northwest corner, where gasoline ASTs were also present. Removal of the massive footer and gasoline AST area determined the configuration of the excavation's western edge (Figure 4).

The south and east ends of the excavation were advanced as close as feasible to the edges of the Warehouse structure. Petroleum-contaminated soil exists beneath the northern portion of the Warehouse, as is documented by sidewall verification soil samples collected along the interim action excavation's southern edge (e.g., BAST-S007-3.5; Table A-3 in Appendix A). RI sampling and analysis beneath the Warehouse shows that there is residual petroleum in soils (e.g., data presented in Aspect, 2014a). Petroleum-contaminated soil beneath the Warehouse was not targeted for removal during the interim action since the Warehouse is planned for future use. Risk-based soil cleanup levels along with concentrations protective of groundwater will be calculated for the residual petroleum, using area-specific volatile petroleum hydrocarbon (VPH)/extractable

² Based on available aerial photographs, four gasoline ASTs were present in this area from the 1940s through 1960s, and one was present in the 1970s and 1980s.

³ Footer for the secondary containment wall surrounding on three sides the most recent configuration of the tank farm.

petroleum hydrocarbon (EPH) data collected during the interim action and RI. Indoor air and sub-slab vapor sampling is also being conducted as part of the RI to assess vapor intrusion risk posed by the subsurface soils (Aspect, 2014b). Using the collective information, the appropriate cleanup action for residual petroleum-contaminated soil beneath the Warehouse will be determined during completion of the Upland Area Remedial Investigation/Feasibility Study.

Following the interim action soil removal, residual soil concentrations of gasoline-range TPH, diesel- and oil-range TPH, total cPAH (TEQ⁴), copper, and mercury at one or more sample locations within the excavated area exceed their respective soil IACLs based on groundwater protection (Table A-3 in Appendix A).

Monitoring wells MW-3, MW-4, and UST68-MW-6 were decommissioned prior to interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring wells BCT-MW-101 through BCT-MW-108, as depicted on Figure 4. Wells BC-MW-101 through BCT-MW-104 are completed along the northern edge of the Warehouse to assess whether petroleum hydrocarbons are migrating in groundwater from petroleum-contaminated soils beneath the Warehouse. This information will be used to decide whether a subsurface barrier wall along the Warehouse's northern side is warranted to prevent recontamination of the clean excavation backfill north of the Warehouse, as agreed to with Ecology (email communication from Andy Kallus, Ecology, to Steve Germiot, Aspect Consulting, February 10, 2014) following review and discussion of design information for a potential subsurface barrier (Aspect, 2014a).

The initial four rounds of confirmational groundwater samples for this area will be submitted for laboratory analysis of:

- Gasoline-range TPH;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX);
- Diesel- and Oil-range TPH;
- PAHs; and
- Copper, lead, and mercury.

3.4 CN-B-2 Area

Oil-range TPH was the COC targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 5.

Following the interim action soil removal, residual soil concentrations of total cPAH, arsenic, copper, and lead in one or more sample locations within the excavated area exceed their respective soil IACLs based on groundwater leaching to protect the marine environment (Table A-4 in Appendix A).

⁴ Total toxicity equivalence, calculated using toxicity equivalency factor in accordance with WAC 173-340-708(8)(e) and assuming non-detected values are present at ½ the analytical reporting limit.

Confirmational groundwater monitoring for this area will be completed at new monitoring wells CN-MW-101 through CN-MW-104 as depicted on Figure 5. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Diesel- and oil-range TPH;
- PAHs; and
- Arsenic, copper, and lead.

3.5 GF-11 Area

Lead was the COC targeted in the interim action for this area. The toxicity characteristic leachability procedure (TCLP)-leachable concentration of lead caused the lead-contaminated soils from this area to designate as characteristic hazardous waste, and required treatment to meet universal treatment standards prior to land disposal in a Subtitle C landfill. The soils from this area were excavated and transported to Chemical Waste Management's Subtitle C facility in Arlington, Oregon, for chemical stabilization followed by Subtitle C land disposal within 90 days of generation.

The interim action excavation area, and excavation verification soil samples are depicted on Figure 6. Figure 6 also depicts locations of characterization samples collected (from test pits TP-1 through TP-6) to better define COC extent prior to excavation.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial worker direct contact. However, residual soil concentrations of copper and mercury within the excavated area exceed soil IACLs based on groundwater leaching to protect the marine environment (Table A-5 in Appendix A).

Confirmational groundwater monitoring for this area will be completed at new monitoring well GF11-MW-101, as depicted on Figure 6. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of copper, lead, and mercury.

3.6 Heavy Duty Shop Sump

Oil-range TPH was the inferred COC targeted in the interim action for this area, based on oily material observed in the sump structure during the Phase 1 Environmental Site Assessment (Recognized Environmental Condition [REC] 3 in AECOM, 2011). The contents of the sump structure were removed and properly disposed of during demolition of Shop structure. The interim action excavation area, and excavation verification soil samples are depicted on Figure 7.

No visual or olfactory evidence of contamination was observed during the subsequent interim action excavation of the sump structure and immediately surrounding sub-slab soils. The lack of contamination was confirmed by the verification soil samples collected from the sump removal excavation, which contained no detectable TPH and no concentrations of metals, semivolatile organic compounds (SVOCs) including PAHs, or

PCBs⁵ above soil IACLs (Table A-6 in Appendix A). The sample of stockpiled overburden also contained no concentrations greater than IACLs, and it was therefore used as backfill in the excavation.

Contamination of this area was inferred in the Phase 1 ESA but was not confirmed by the interim action field screening or analytical data. Therefore, no confirmational groundwater monitoring is proposed for this area.

3.7 Hydraulic Barker Vault

Oil-range TPH was the COC targeted in the interim action for this area based on observed oily material in a small subsurface vault encountered during mill demolition. The interim action excavation area and excavation verification soil samples are depicted on Figure 8.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial use including groundwater protection (Table A-7 in Appendix A).

Confirmational groundwater monitoring for this area will be completed at new monitoring well HBV-MW-101, as depicted on Figure 8. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of diesel- and oil-range TPH and PAHs.

3.8 Naval Reserve Parcel UST Area

Diesel-range and gasoline range TPH, left in place following the Navy's removal of gasoline and diesel USTs (Foster Wheeler, 1998), was the COC targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 9.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial use including groundwater protection, with the exception of one sample containing 0.53 mg/kg total cPAH (TEQ) concentration marginally exceeding the 0.4 mg/kg IACL based on groundwater leaching for marine protection (Table A-8 in Appendix A).

Confirmational groundwater monitoring for this area will be completed at existing monitoring well NRP-MW-2, and new monitoring wells NRU-MW-101 and NRU-MW-102, as depicted on Figure 9. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Gasoline-range TPH;
- BTEX;
- Diesel- and Oil-range TPH; and
- PAHs.

⁵ Total PCBs were calculated assuming non-detected aroclors are present at ½ the analytical reporting limit.

3.9 Naval Reserve Parcel South Area

Gasoline-range and oil-range TPH were the COCs targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 10.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial use including groundwater protection (Table A-9 in Appendix A).

Monitoring well NRP-MW-1 was decommissioned during the interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring wells NRS-MW-101 and NRS-MW-102, as depicted on Figure 10. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Gasoline-range TPH;
- BTEX;
- Diesel- and Oil-range TPH; and
- PAHs.

3.10 Rail Car Dumper

Oil-range TPH was the COC targeted in the interim action for this area, based on oil staining observed on the structure (REC 4) during the Phase 1 ESA (AECOM, 2011). The interim action excavation area and excavation verification soil samples are depicted on Figure 11.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial use including groundwater protection (Table A-10 in Appendix A).

Confirmational groundwater monitoring for this area will be completed at new monitoring well RCD-MW-101, as depicted on Figure 11. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Diesel- and Oil-range TPH;
- PAHs; and
- Arsenic, copper, mercury, and nickel.

3.11 REC2-MW-5 Area (near Diesel AST)

Oil-range TPH was the COC targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 12.

Following the interim action soil removal, contaminant concentrations within the excavated area meet soil IACLs based on industrial worker direct contact, and petroleum

concentrations met IACLs. However, residual soil concentrations of copper and mercury within the excavated area exceed the soil IACLs based on groundwater leaching to protect the marine environment (Table A-11 in Appendix A). During overexcavation, the northern sidewall was sloughing and covered the excavation bottom represented by verification samples DAST-B04, DAST-B06, and DAST-B07.

Monitoring well REC2-MW-5 was decommissioned during the interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring well DAST-MW-101, as depicted on Figure 12. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Diesel- and Oil-range TPH;
- PAHs; and
- Copper and mercury.

3.12 SHB-MW-1 Area

Gasoline-range TPH, oil-range TPH and copper were the COCs targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 13.

Following the interim action soil removal, contaminant concentrations within the excavated area meet soil IACLs based on industrial worker direct contact, and petroleum concentrations met IACLs. However, residual soil concentrations of copper and mercury within the excavated area exceed the soil IACL based on groundwater leaching to protect the marine environment (Table A-12 in Appendix A).

Monitoring well SHB-MW-1 was decommissioned during the interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring well SHB-MW-101 and SHB-MW-102, as depicted on Figure 13. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Gasoline-range TPH;
- Diesel- and oil-range TPH;
- PAHs; and
- Copper and mercury.

3.13 UST 29/Latex Spill Area

Total xylenes were the COC targeted in the interim action for this area. While the latex product spilled in this area contained trace concentrations of formaldehyde, vinyl acetate, and 1,4-dioxane, those compounds were not detected at concentrations greater than analytical reporting limits in soil or groundwater during the Phase 2 ESA (Aspect, 2013a). The interim action excavation area and excavation verification soil samples are depicted on Figure 14.

Following the interim action soil removal, contaminant concentrations within the excavated area meet soil IACLS based on industrial use including groundwater protection (Table A-13 in Appendix A).

Monitoring wells UST29-MW-1 and REC6-MW-1 were decommissioned during the interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring wells UST29-MW-101 through UST29-MW-103, as depicted on Figure 14. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Gasoline-range TPH;
- BTEX;
- Diesel- and Oil-range TPH; and
- PAHs.

3.14 UST 70

Diesel-range TPH was the COC targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 15.

Following the interim action soil removal, contaminant concentrations within the excavated area meet soil IACLS based on industrial use including groundwater protection (Table A-14 in Appendix A).

Monitoring well UST70-MW-1 was decommissioned during the interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at existing monitoring well UST70-MW-2 and new monitoring wells UST70-MW-101 and UST70-MW-102, as depicted on Figure 15. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Diesel- and oil-range TPH;
- PAHs; and
- Arsenic, copper, nickel, and zinc.

3.15 USTs 71, 72, 73

Oil-range TPH (Bunker C oil) was the COC targeted in the interim action for this area. The interim action excavation area and excavation verification soil samples are depicted on Figure 16.

Following the interim action soil removal, residual soil contaminant concentrations within the excavated area meet soil IACLs based on industrial direct contact. However, residual soil concentrations of Bunker C-range TPH, total cPAH (TEQ), copper, and mercury within the excavated area exceed the soil IACLs based on groundwater protection. Small quantities of Bunker C-contaminated soil were left in place beneath monolithic foundation elements, since it was deemed impracticable to remove the foundations. EPH data were collected for those soils, and the data will be assessed as part of the RI/FS (Table A-15 in Appendix A).

Monitoring wells UST71-MW-1 and Boiler-MW-1 were decommissioned during the interim action excavation of this area.

Confirmational groundwater monitoring for this area will be completed at new monitoring wells UST71-MW-101 through UST71-MW-104, as depicted on Figure 16. The initial four rounds of confirmational groundwater samples will be submitted for laboratory analysis of:

- Diesel- and oil-range TPH;
- PAHs; and
- Copper and mercury.

4 Reporting

As previously noted, the results of the interim action confirmational groundwater monitoring activities will be submitted to Ecology and evaluated following completion of four consecutive quarters of monitoring to determine if IACLs have been met. If Ecology determines that the data do not adequately demonstrate compliance with IACLs for specific areas, additional confirmational monitoring will be conducted for those areas as agreed to with Ecology. Additional groundwater monitoring requirements for the IA areas will be incorporated into the future long-term groundwater monitoring plan for the Site. Additional results from subsequent groundwater monitoring would be summarized and presented to Ecology in accordance with the future long-term groundwater monitoring plan for the Site. Data generated during the confirmational monitoring will be submitted to Ecology's Environmental Information Management (EIM) database. The available results from the confirmational groundwater monitoring (and from the interim action overall) will also be incorporated into the draft RI report at the time it is prepared.

In addition, details regarding the completed interim action soil removal will be presented in the forthcoming Interim Action Report, and all of the interim action soil data representing in-place soil will be incorporated into the Upland Area RI/FS.

References

- AECOM, 2011, Phase I Environmental Site Assessment, Everett Pulp and Paper Mill, Everett Washington, April 2011.
- Aspect, 2012, Interim Action Plan, Kimberly-Clark Worldwide Site Upland Area, Everett, Washington, September 20, 2012, Exhibit C to Agreed Order No. DE 9476.
- Aspect, 2013a, Data Report for Phase 2 Environmental Site Assessment, Kimberly-Clark Worldwide Site Upland Area, Everett, Washington, March 15, 2013.
- Aspect, 2013b, Work Plan for Remedial Investigation/Feasibility Study, Kimberly-Clark Worldwide Site Upland Area, Everett, Washington, November 22, 2013.
- Aspect, 2014a, Design Information for Subsurface Barrier Wall Adjacent to Warehouse, K-C Worldwide Site Upland Area Interim Action, Everett Washington, January 24, 2014.
- Aspect, 2014b, RI/FS Work Plan Addendum for Warehouse Vapor Intrusion Assessment, K-C Worldwide Site Upland Area RI/FS, February 18, 2014.
- Ecology, 1995, Guidance on Sampling and Data Analysis Methods, Publication No. 94-59, January 1995.
- Foster Wheeler, 1998, Independent Remedial Action Closure Report, Old Naval Reserve Center, Everett, Washington, December 16, 1998.
- K-C, 1997, Letter from Richard Abrams to Norm Peck (Ecology) regarding soil sampling in Bunker C fuel oil AST area, June 2, 1997.
- Scott Paper Company, 1995, Letter from Dick Abrams to Mark Dirkx (Ecology) regarding status of voluntary cleanup of contaminated soil in Bunker C fuel oil tank farm, November 10, 1995.

TABLES

Table 1 - Analytes for Interim Action Groundwater Confirmation Monitoring

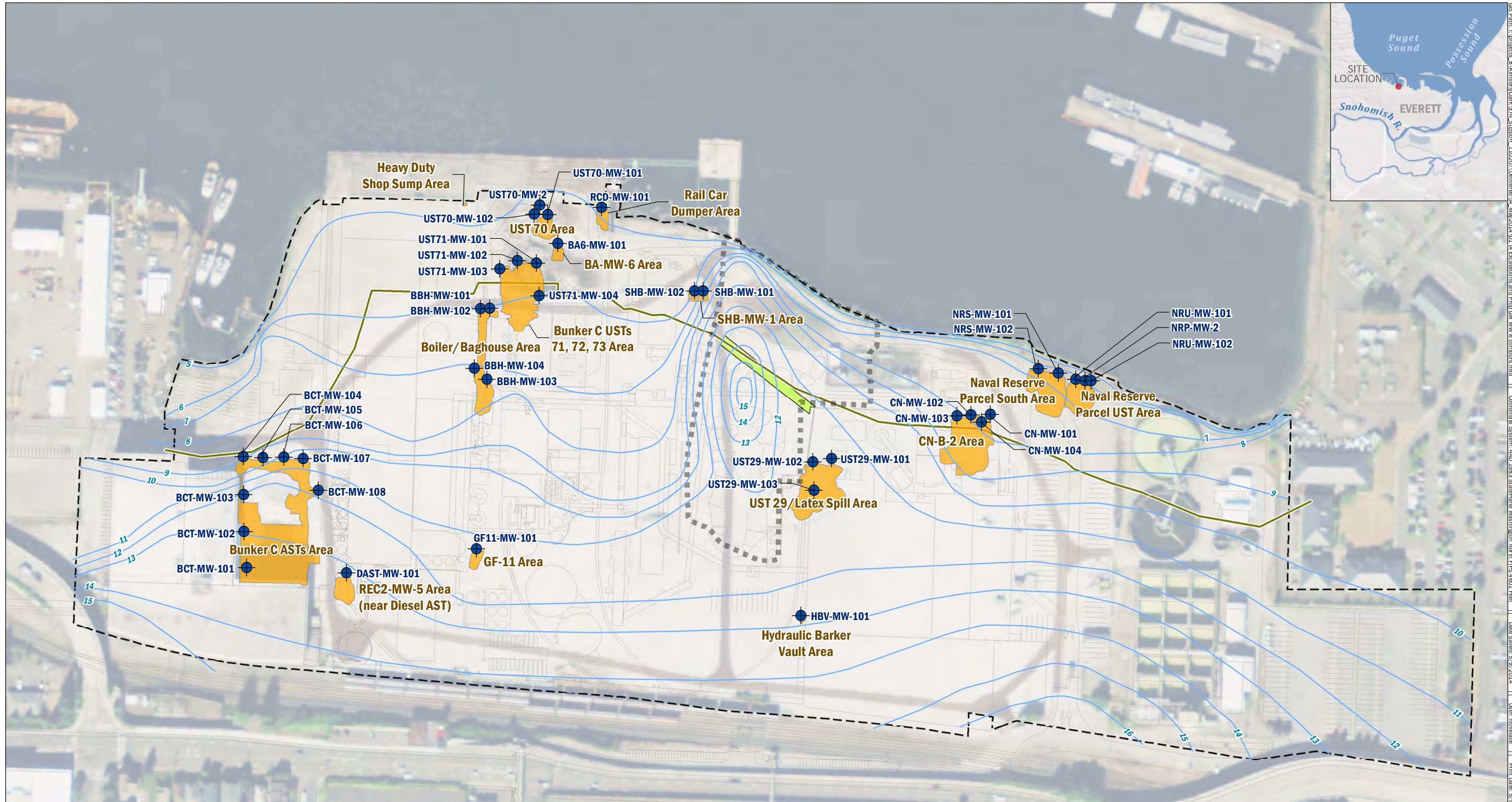
K-C Worldwide Site Upland Area 110207








Analytes	Interim Action Area													
	BA-MW-6 Area	Boiler/ Baghouse Area	Bunker C ASTs and pipeline	CN-B-2 Area	GF-11	Hydraulic Barker Vault	Naval Reserve UST Area	Naval Reserve South Area	Rail Car Dumper	REC2-MW-5 Area (Near Diesel AST)	SHB-MW-1 Area	UST 29/Latex spill	UST 70	UST 71, 72, 73
Total Petroleum Hydrocarbons (TPH)														
Gasoline-Range (NWTPH-G) + BTEX			X				X	X			X	X		
Diesel-/Oil- Range (NWTPH-Dx w/ silica gel)	X		X	X		X	X	X	X	X	X	X	X	X
Polycyclic Aromatic Hydrocarbons (PAHs)	X		X	X		X	X	X	X	X	X	X	X	X
Metals														
Arsenic		X		X					X				X	
Copper		X	X	X	X				X	X	X		X	X
Lead		X	X	X	X									
Mercury		X	X		X				X	X	X			
Nickel									X				X	
Zinc		X											X	X

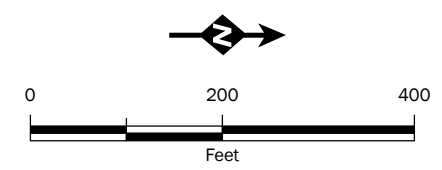
Notes:

Dissolved metals (filtered sample) will be analyzed for samples with exceedances of total metals (unfiltered sample).

FIGURES




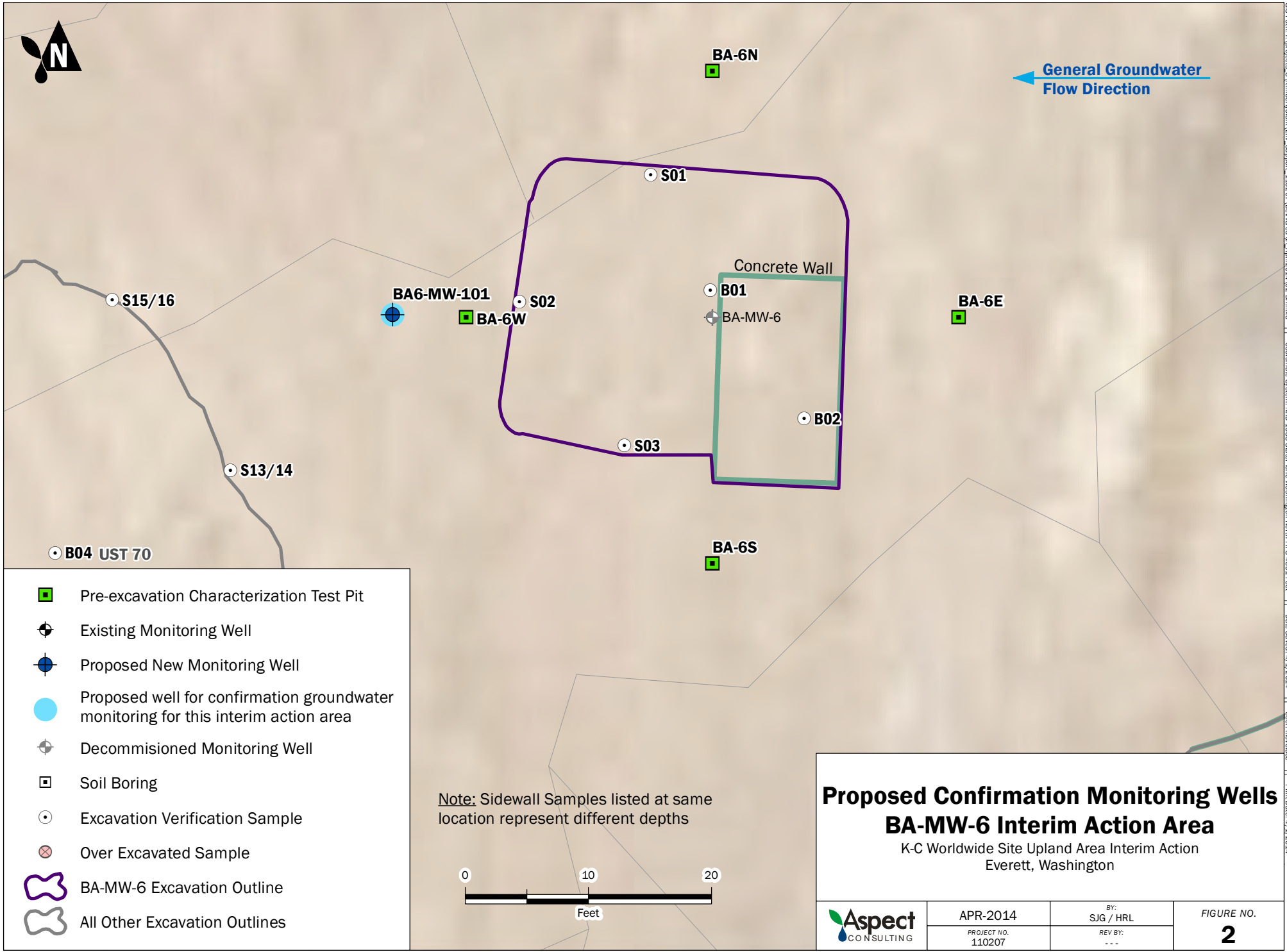
-  Proposed New Monitoring Well
-  Interim Action Areas
-  Water Table Elevation Contours (Nov 2013)
-  Upland Area Boundary
-  Intermediate Berm (from Scott Paper drawing C-6911)
-  200-Foot Shoreline Buffer
-  Former Log Pond



Interim Action Excavations and Proposed Confirmation Groundwater Monitoring Wells

K-C Worldwide Site Upland Area
Everett, Washington

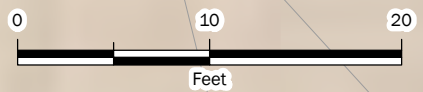
	MAY-2014	BY: SJK / HRL	FIGURE NO. 1
	PROJECT NO. 110207-004-06	REV BY: ---	



← General Groundwater Flow Direction

- Pre-excavation Characterization Test Pit
- Existing Monitoring Well
- Proposed New Monitoring Well
- Proposed well for confirmation groundwater monitoring for this interim action area
- Decommissioned Monitoring Well
- Soil Boring
- Excavation Verification Sample
- Over Excavated Sample
- BA-MW-6 Excavation Outline
- All Other Excavation Outlines

Note: Sidewall Samples listed at same location represent different depths



Proposed Confirmation Monitoring Wells			
BA-MW-6 Interim Action Area			
K-C Worldwide Site Upland Area Interim Action Everett, Washington			
	APR-2014	BY: SJG / HRL	FIGURE NO. 2
	PROJECT NO. 110207	REV BY: ---	

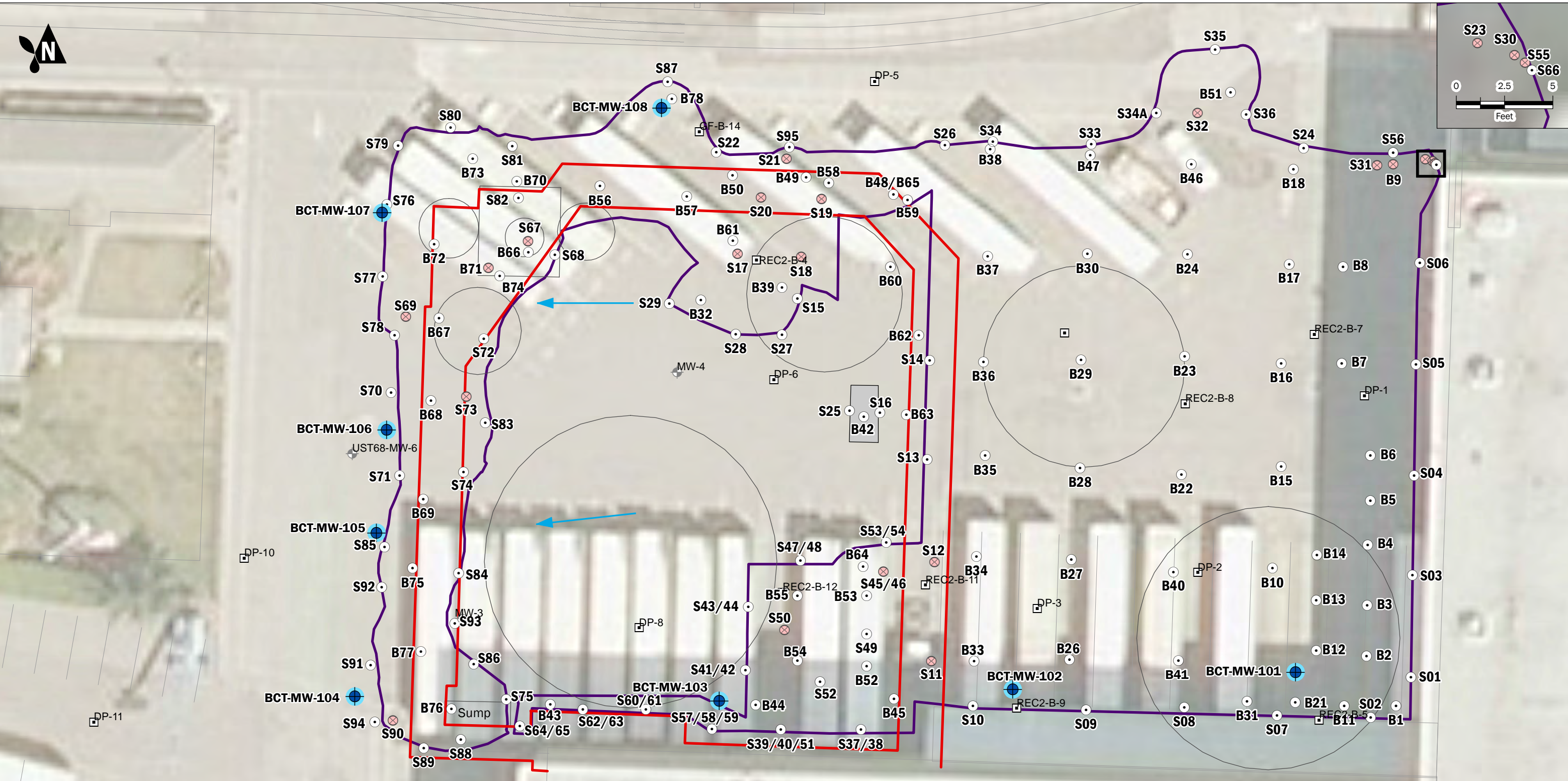


- Existing Monitoring Well
- Proposed New Monitoring Well
- Proposed well for confirmation groundwater monitoring for this interim action area
- Decommissioned Monitoring Well
- Soil Boring
- Excavation Verification Soil Sample
- Over Excavated Sample
- Boiler Baghouse Excavation Outline
- All Other Excavation Outlines

General Groundwater Flow Direction

Proposed Confirmation Monitoring Wells		
Boiler/Baghouse Interim Action Area		
K-C Worldwide Site Upland Area Interim Action Everett, Washington		
	JUN-2014 PROJECT NO. 110207	BY: SJG / HRL REV BY: RRH
		FIGURE NO. 3

PM-MW-1



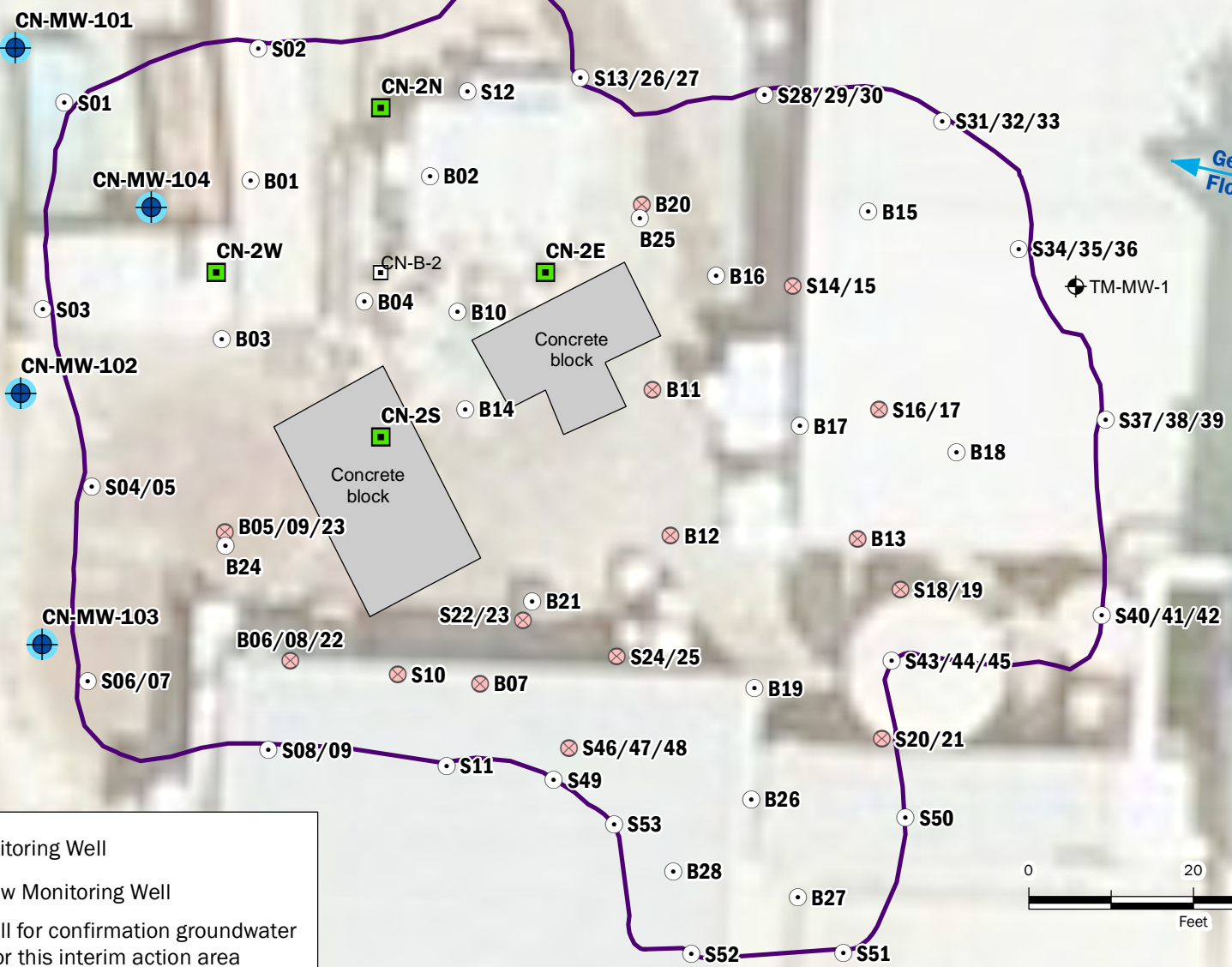
- General Groundwater Flow Direction
- Existing Monitoring Well
- comment, loc_type**
- Proposed New Monitoring Well
- comment, loc_type**
- Proposed New Monitoring Well *Proposed well for confirmation groundwater monitoring for this interim action area*
- Decommissioned Monitoring Well
- Soil Boring

- Note: Sidewall Samples listed at same location represent different depths
- Sidewall Excavation Verification Soil Sample
 - Over Excavated Sidewall Sample
 - Footer for Tank Enclosure Wall
 - Footer for Tank Enclosure Wall
 - Above-Ground Storage Tanks (composite of historical configurations)
 - Test Pit
 - Bunker C AST Excavation Extent

**Proposed Confirmation Monitoring Wells
Bunker C AST Interim Action Area**
K-C Worldwide Site Upland Area Interim Action
Everett, Washington

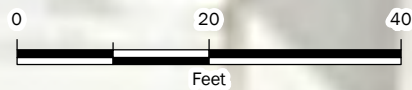
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	PROJECT NO. 110207	REV BY: ---	

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- Existing Monitoring Well
- Proposed New Monitoring Well
- Proposed well for confirmation groundwater monitoring for this interim action area
- Decommissioned Monitoring Well
- Soil Boring
- Pre-excavation Characterization Test Pit
- Excavation Verification Sample
- Over Excavated Verification Sample
- CN-B-2 Excavation Outline

Note: Sidewall Samples listed at same location represent different depths

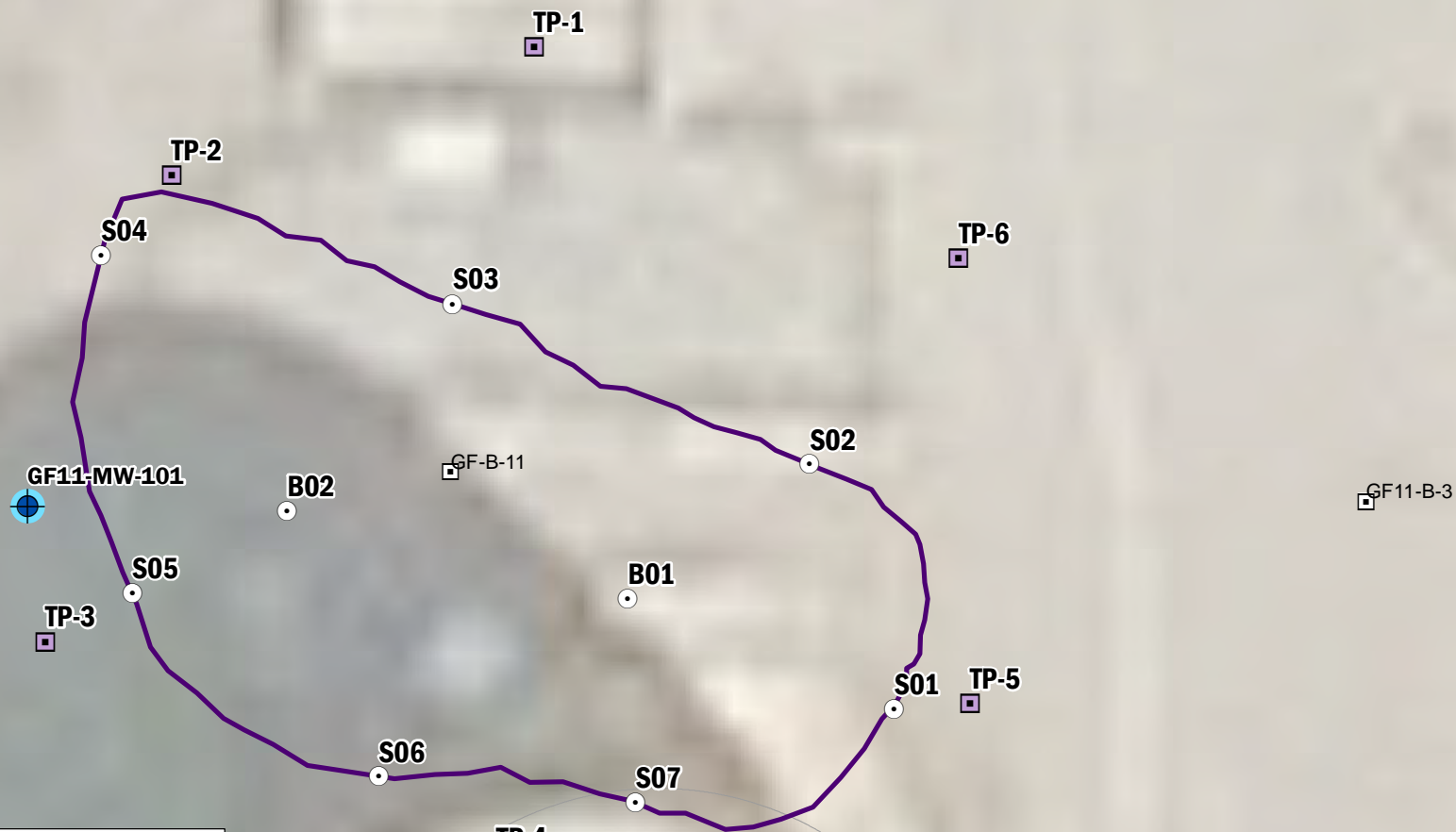










Proposed Confirmation Monitoring Wells CN-B-2 Area

K-C Worldwide Site Upland Area Interim Action
Everett, Washington

	MAY-2014	BY: SJG / HRL	FIGURE NO. 5
	PROJECT NO. 110207	REV BY: ---	


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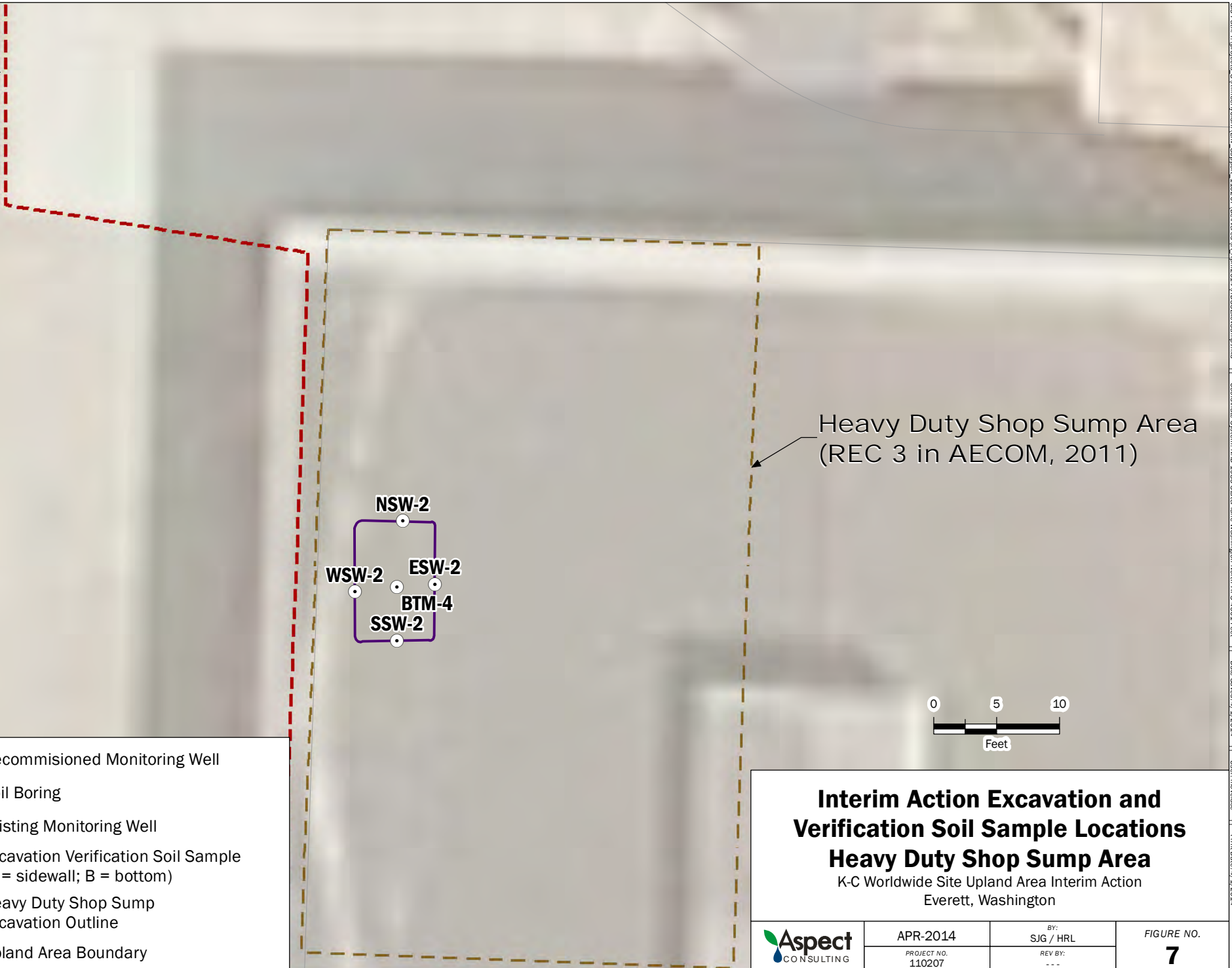
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-  Proposed Interim Action Confirmation Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommisioned Monitoring Well
-  Soil Boring
-  Excavation Verification Soil Sample (S = sidewall; B = bottom)
-  Pre-excitation Characterization Test Pit
-  GF Area 11 Excavation Extent



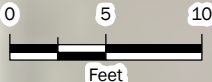
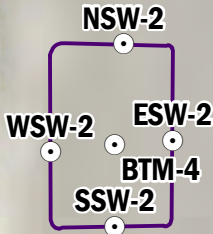
Proposed Confirmation Monitoring Wells
GF 11 Interim Action Area
 K-C Worldwide Site Upland Area Interim Action
 Everett, Washington







	MAY-2014	BY: SJG / HRL	FIGURE NO. 6
	PROJECT NO. 110207	REV BY: ---	

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Heavy Duty Shop Sump Area
(REC 3 in AECOM, 2011)



-  Decommissioned Monitoring Well
-  Soil Boring
-  Existing Monitoring Well
-  Excavation Verification Soil Sample
(S = sidewall; B = bottom)
-  Heavy Duty Shop Sump
Excavation Outline
-  Upland Area Boundary

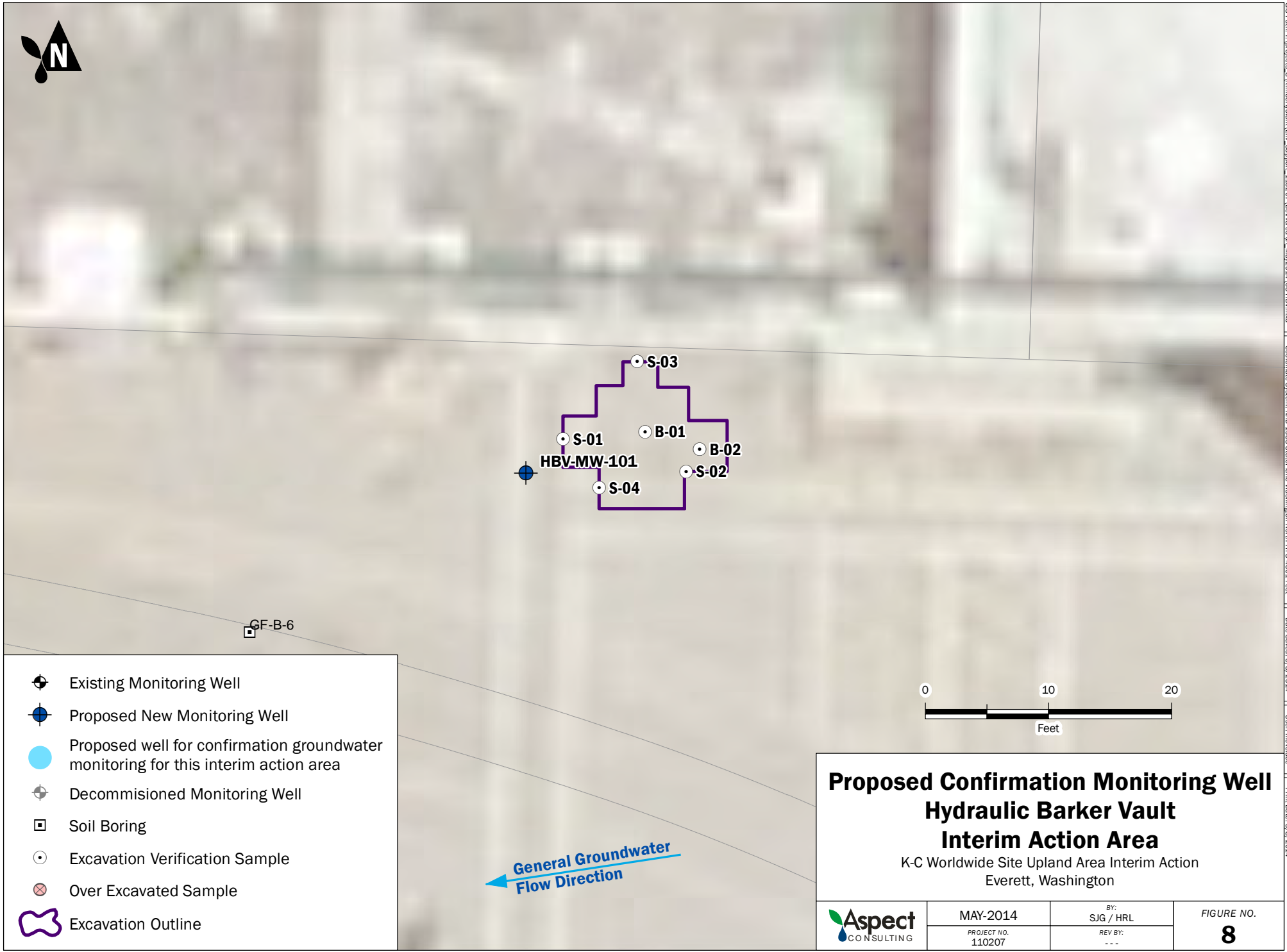
**Interim Action Excavation and
Verification Soil Sample Locations
Heavy Duty Shop Sump Area**
K-C Worldwide Site Upland Area Interim Action
Everett, Washington











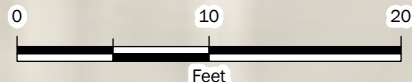
APR-2014
PROJECT NO.
110207

BY:
SJG / HRL
REV BY:


FIGURE NO.
7



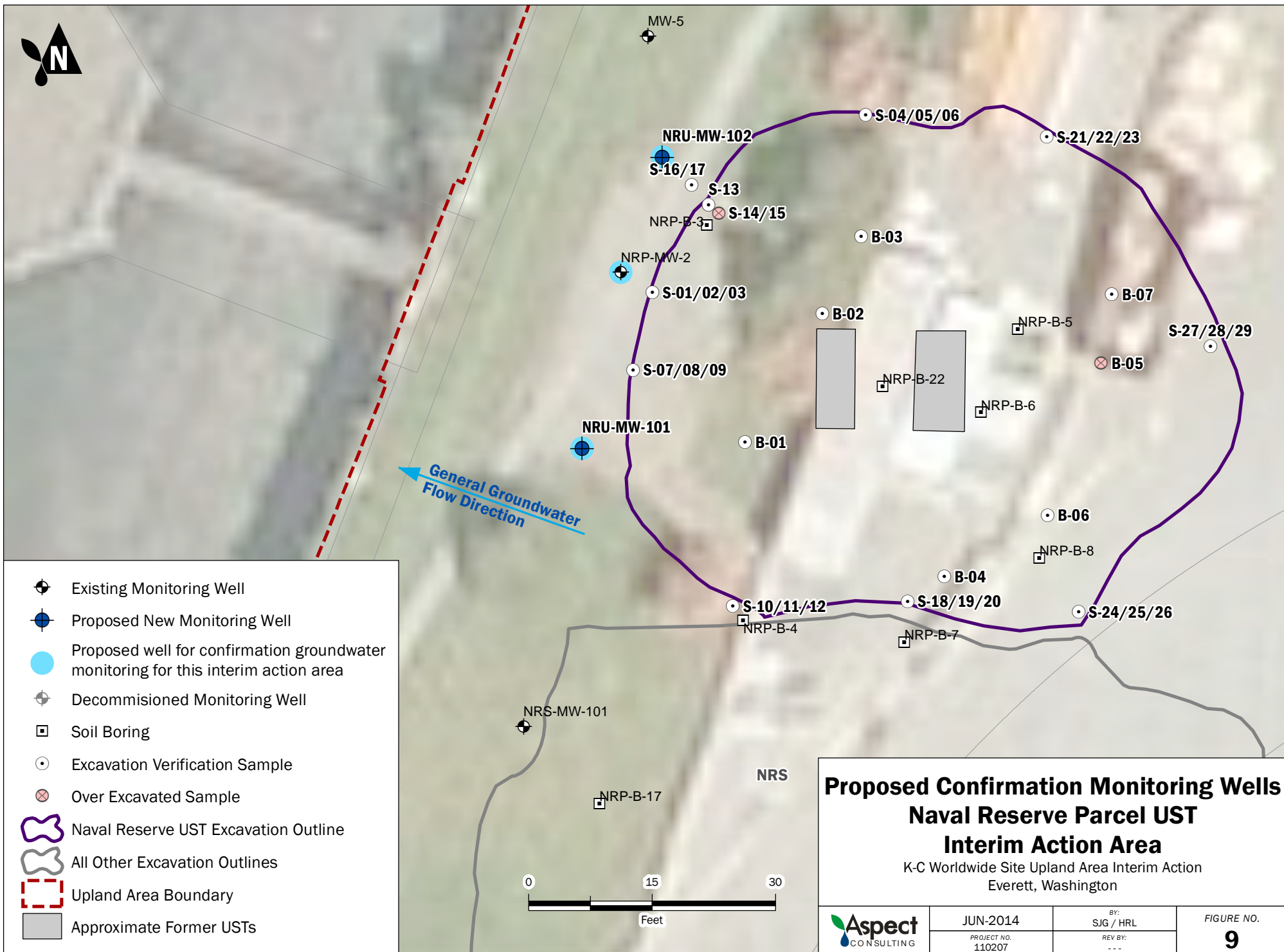
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-  Proposed New Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommissioned Monitoring Well
-  Soil Boring
-  Excavation Verification Sample
-  Over Excavated Sample
-  Excavation Outline














**Proposed Confirmation Monitoring Well
Hydraulic Barker Vault
Interim Action Area**
K-C Worldwide Site Upland Area Interim Action
Everett, Washington


	MAY-2014	BY: SJG / HRL	FIGURE NO. 8
	<small>PROJECT NO. 110207</small>	<small>REV BY: ---</small>	

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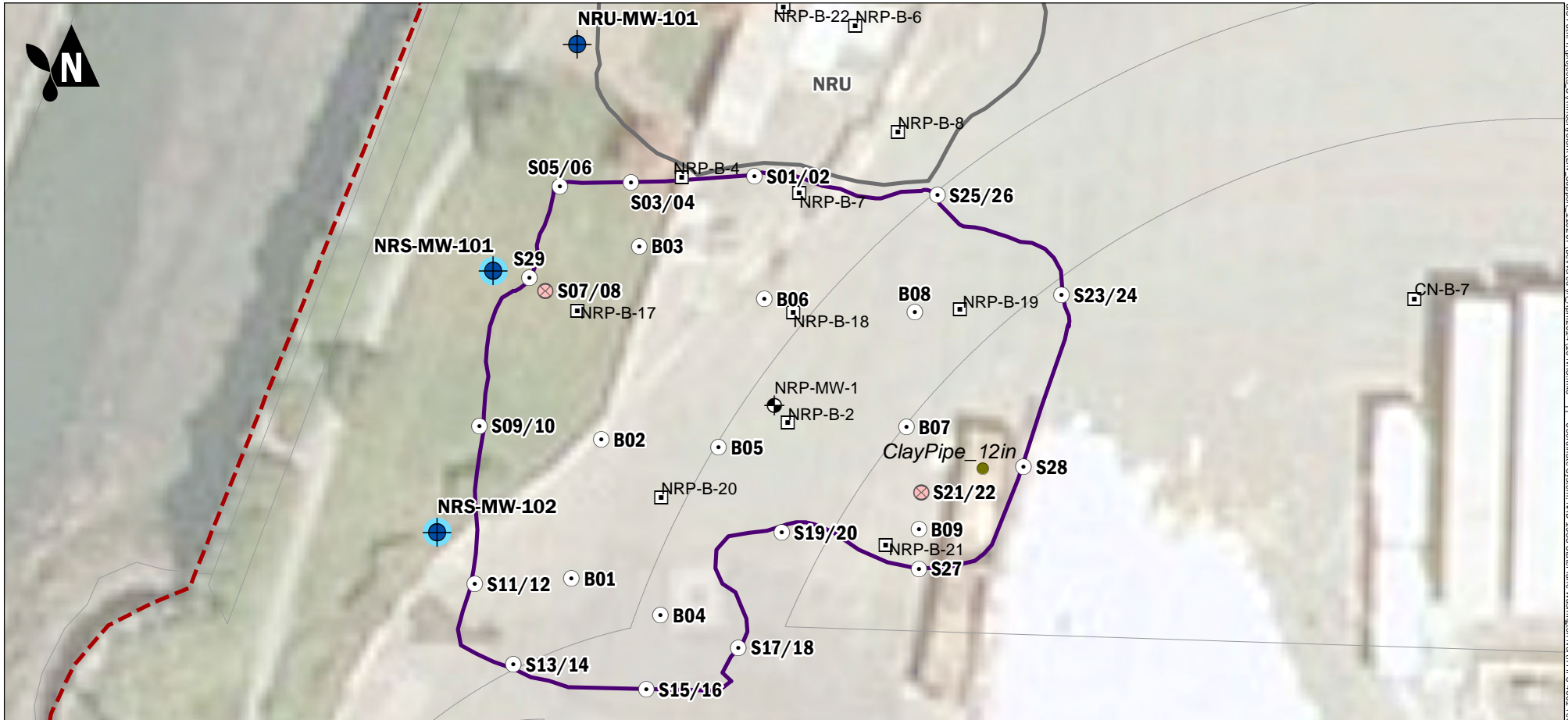












-  Existing Monitoring Well
-  Proposed New Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommissioned Monitoring Well
-  Soil Boring
-  Excavation Verification Sample
-  Over Excavated Sample
-  Naval Reserve UST Excavation Outline
-  All Other Excavation Outlines
-  Upland Area Boundary
-  Approximate Former USTs

Proposed Confirmation Monitoring Wells
Naval Reserve Parcel UST
Interim Action Area
 K-C Worldwide Site Upland Area Interim Action
 Everett, Washington

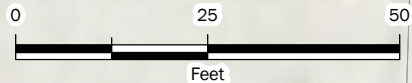
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-  Existing Monitoring Well
-  Proposed New Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommissioned Monitoring Well
-  Soil Boring
-  Excavation Verification Sample
-  Over Excavated Sample
-  All Other Excavation Outlines
-  Naval Reserve South Excavation Outline
-  Upland Area Boundary

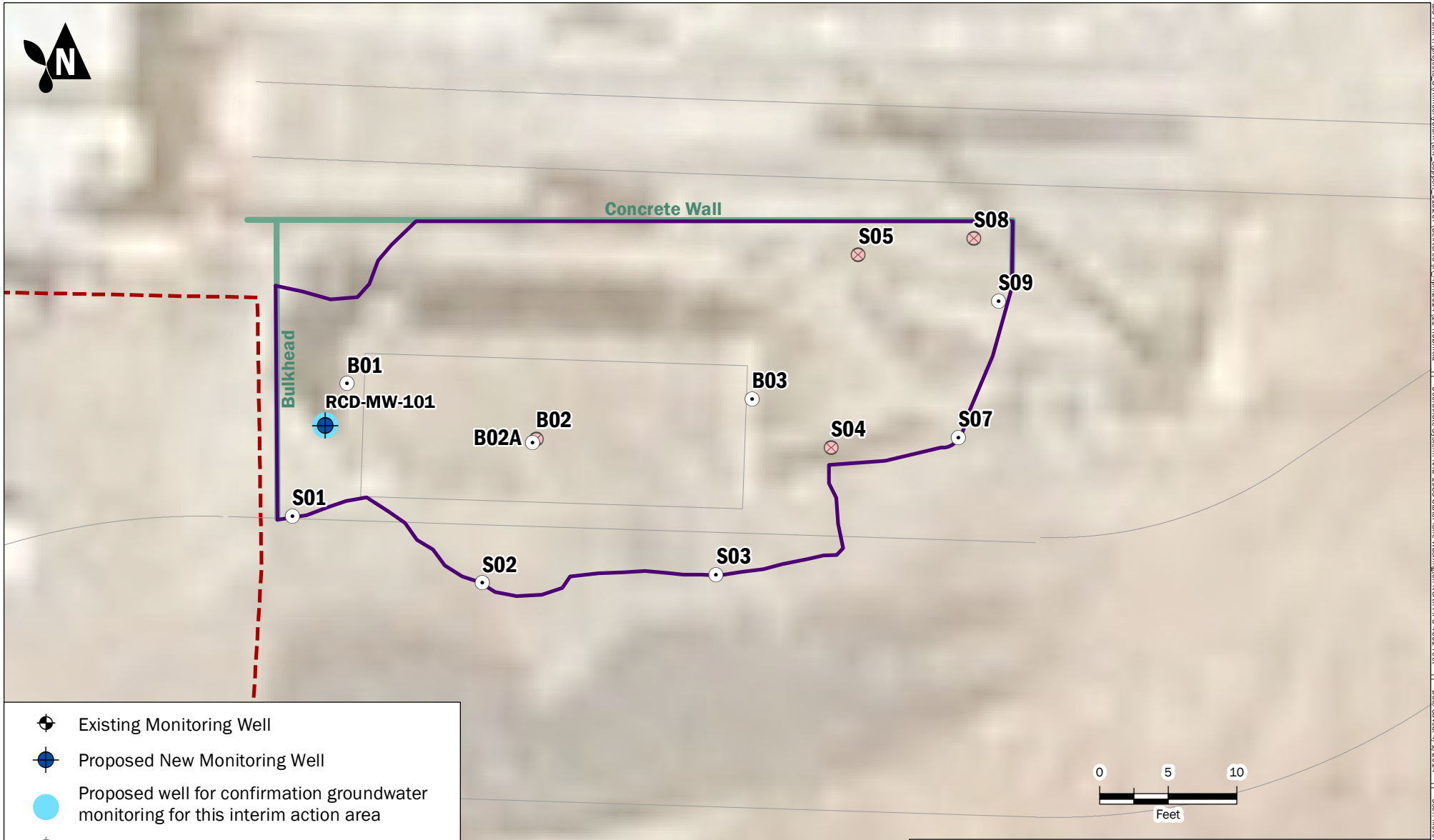
 General Groundwater Flow Direction













Proposed Confirmation Monitoring Wells Naval Reserve South Interim Action Area

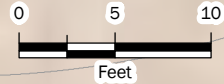
K-C Worldwide Site Upland Area Interim Action
Everett, Washington

	APR-2014	BY: SJG / HRL	FIGURE NO. 10
	PROJECT NO. 110207	REV BY: ---	




-  Existing Monitoring Well
-  Proposed New Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommissioned Monitoring Well
-  Soil Boring
-  Sidewall Excavation Verification Soil Sample
-  Over Excavated Sidewall Sample
-  Rail Car Dumper Excavation
-  Upland Area Boundary

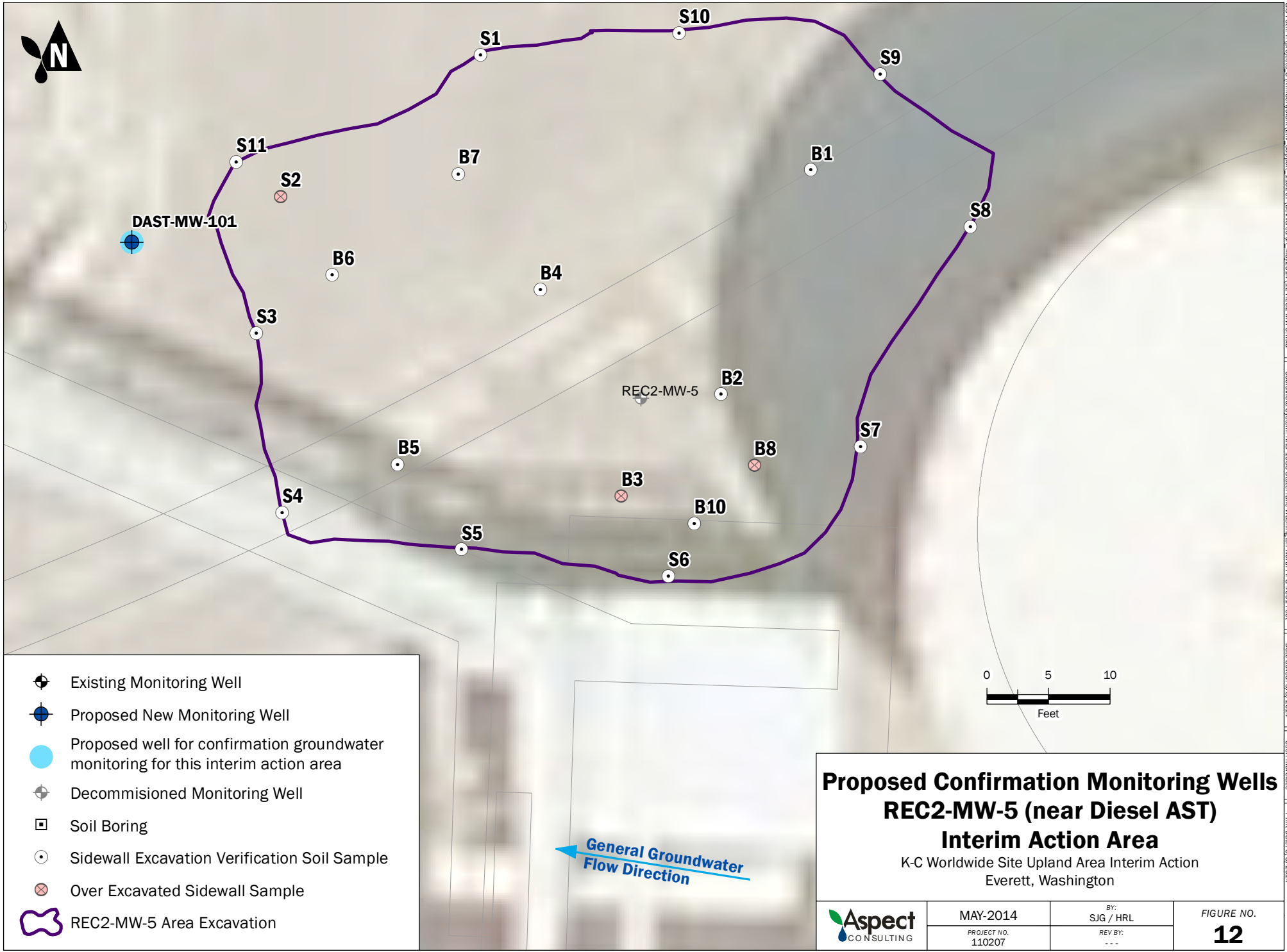
 **General Groundwater Flow Direction**

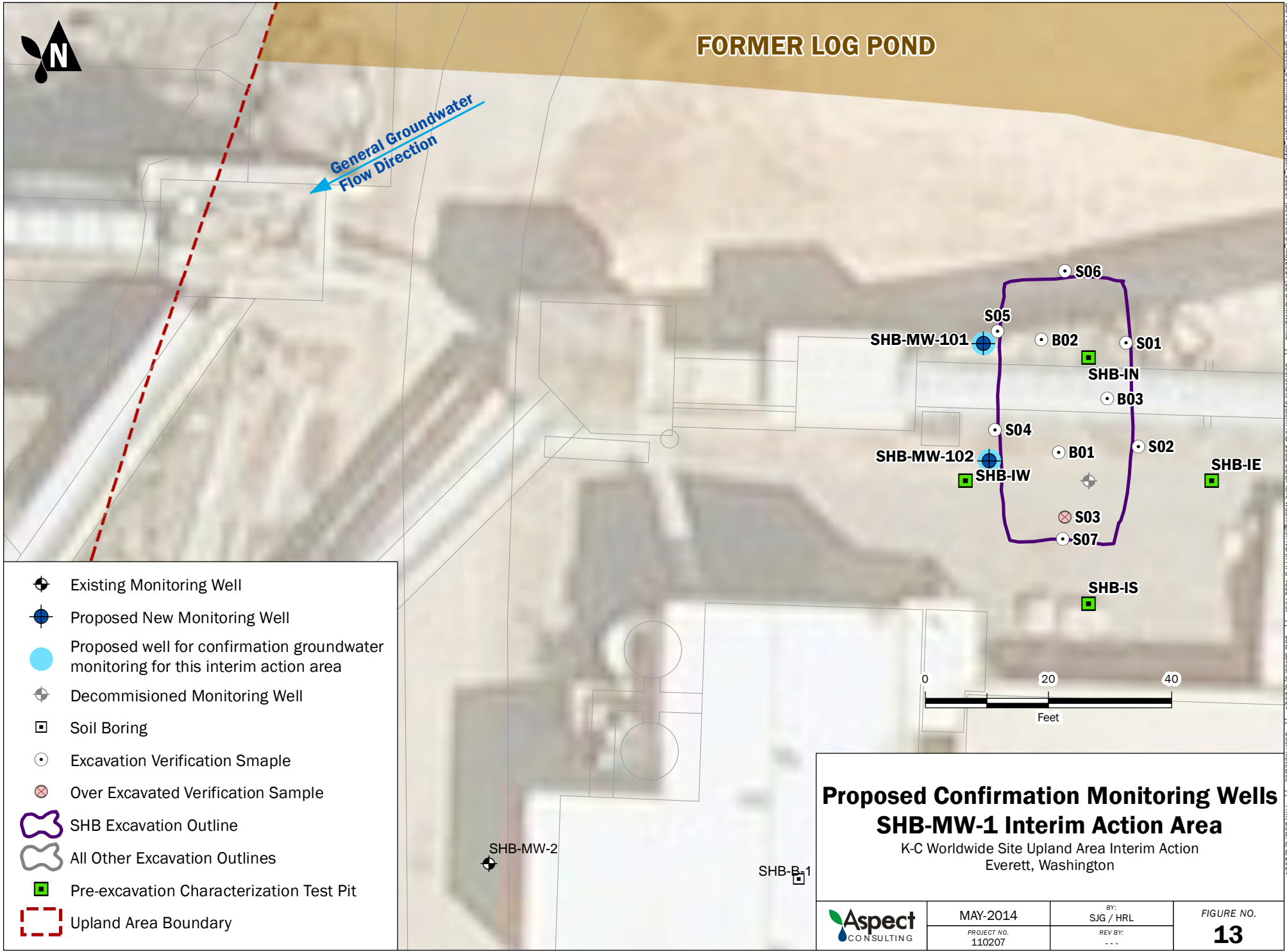


Proposed Confirmation Monitoring Well
Rail Car Dumper Interim Action Area
 K-C Worldwide Site Upland Area Interim Action
 Everett, Washington

	APR-2014	BY: SJG / HRL	FIGURE NO. 11
	PROJECT NO. 110207	REV BY: ---	

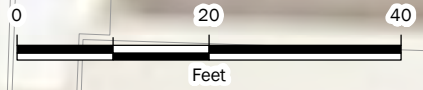
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General Groundwater
Flow Direction

- Existing Monitoring Well
- Proposed New Monitoring Well
- Proposed well for confirmation groundwater monitoring for this interim action area
- Decommissioned Monitoring Well
- Soil Boring
- Excavation Verification Sample
- Over Excavated Verification Sample
- SHB Excavation Outline
- All Other Excavation Outlines
- Pre-excavation Characterization Test Pit
- Upland Area Boundary



**Proposed Confirmation Monitoring Wells
SHB-MW-1 Interim Action Area**
K-C Worldwide Site Upland Area Interim Action
Everett, Washington

	MAY-2014	BY: SJG / HRL	FIGURE NO. 13
	PROJECT NO. 110207	REV BY: ---	

SHB-MW-2

SHB-B-1

SHB-MW-101

SHB-MW-102

SHB-IW

SHB-IN

SHB-IE

SHB-IS

S06

S05

B02

S01

B03

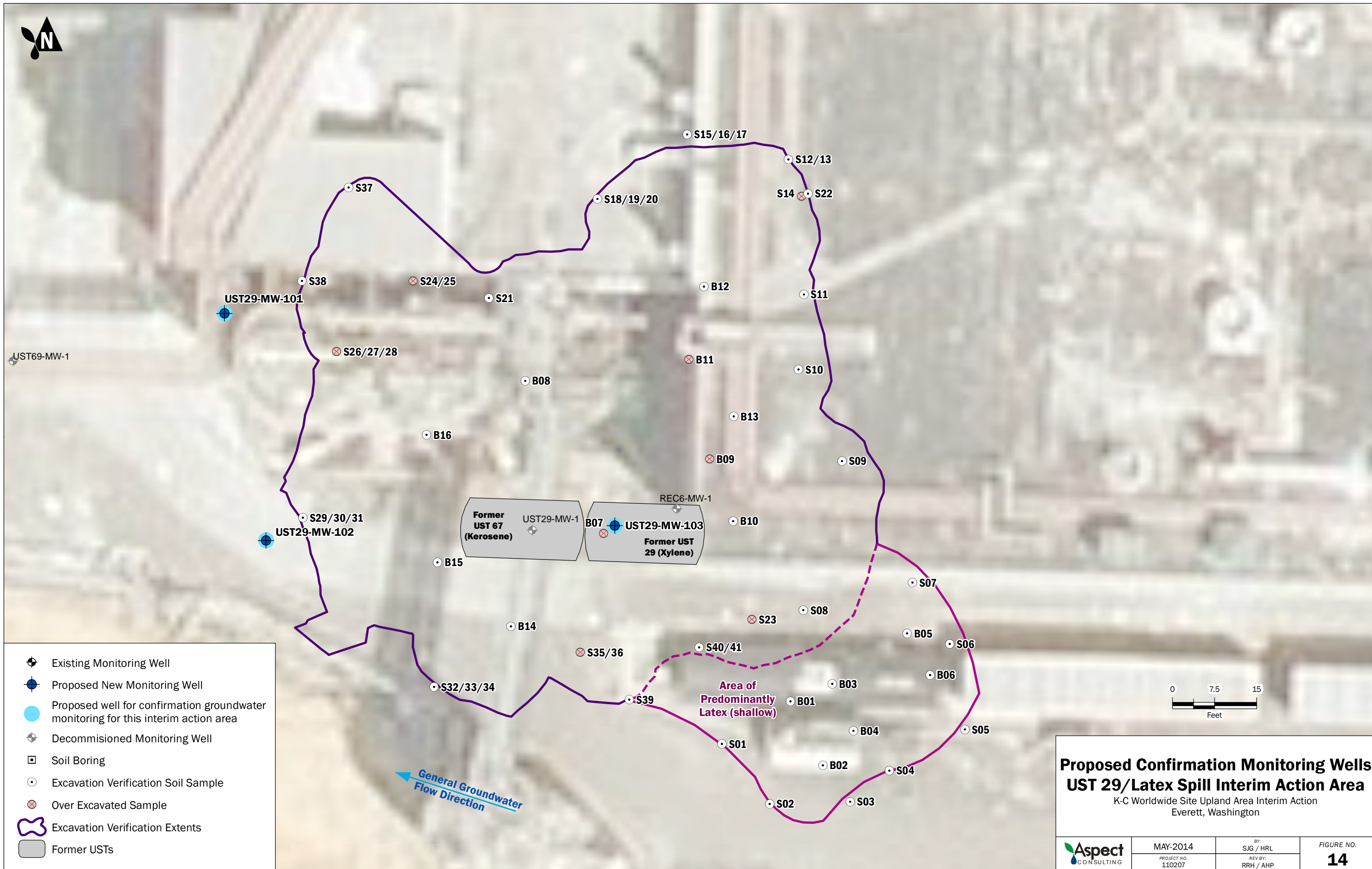
S04










B01

S02

S03

S07



-  Existing Monitoring Well
-  Proposed New Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommissioned Monitoring Well
-  Soil Boring
-  Excavation Verification Soil Sample
-  Over Excavated Sample
-  Excavation Verification Extents
-  Former USTs

**Proposed Confirmation Monitoring Wells
UST 29/Latex Spill Interim Action Area**

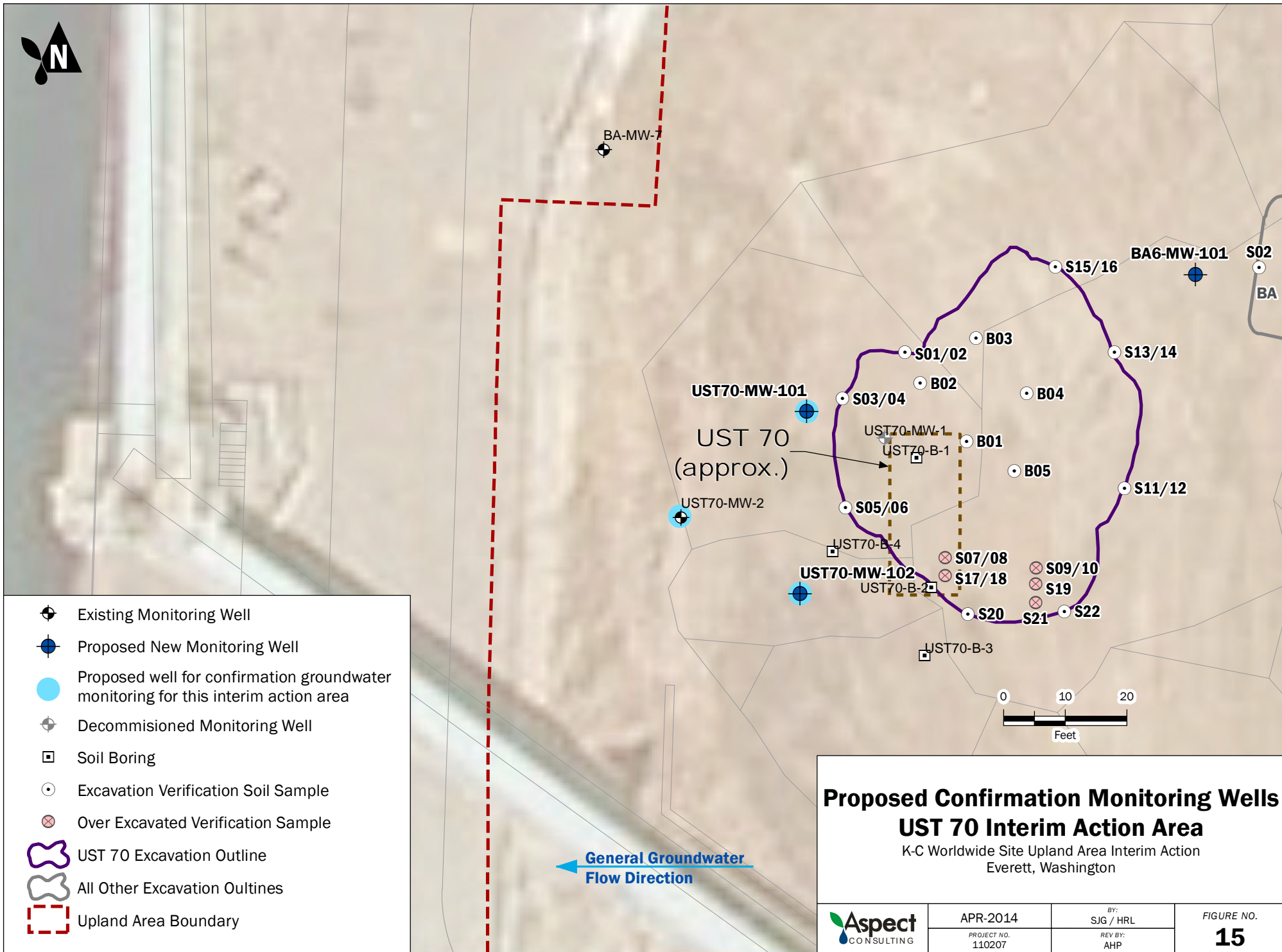
K-C Worldwide Site Upland Area Interim Action
Everett, Washington













MAY-2014
PROJECT NO.
110207

BY:
SJG / HRL
REV BY:
RRH / AHP


FIGURE NO.
14



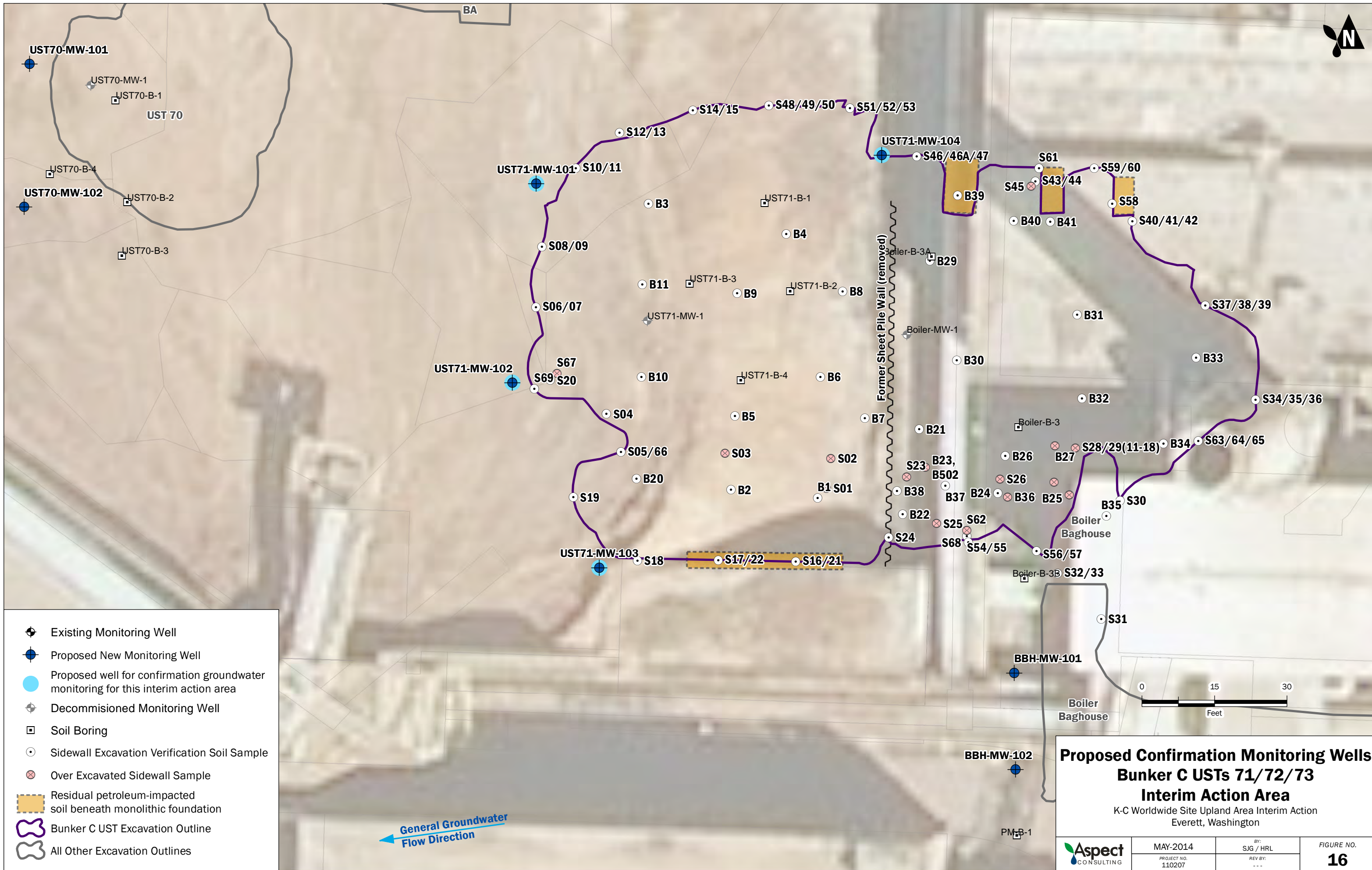
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-  Proposed New Monitoring Well
-  Proposed well for confirmation groundwater monitoring for this interim action area
-  Decommissioned Monitoring Well
-  Soil Boring
-  Excavation Verification Soil Sample
-  Over Excavated Verification Sample
-  UST 70 Excavation Outline
-  All Other Excavation Outlines
-  Upland Area Boundary

 **General Groundwater Flow Direction**

Proposed Confirmation Monitoring Wells
UST 70 Interim Action Area
 K-C Worldwide Site Upland Area Interim Action
 Everett, Washington

	APR-2014	BY: SJG / HRL	FIGURE NO. 15
	PROJECT NO. 110207	REV BY: AHP	

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- Existing Monitoring Well
- Proposed New Monitoring Well
- Proposed well for confirmation groundwater monitoring for this interim action area
- Decommissioned Monitoring Well
- Soil Boring
- Sidewall Excavation Verification Soil Sample
- Over Excavated Sidewall Sample
- Residual petroleum-impacted soil beneath monolithic foundation
- Bunker C UST Excavation Outline
- All Other Excavation Outlines

Proposed Confirmation Monitoring Wells
Bunker C USTs 71/72/73
Interim Action Area
 K-C Worldwide Site Upland Area Interim Action
 Everett, Washington

	MAY-2014	BY: SJG / HRL	FIGURE NO. 16
	PROJECT NO. 110207	REV BY: ---	

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APPENDIX A

Tables of Excavation Verification Soil Sample Data for Each Interim Action Area

Table A-1 - Excavation Verification Soil Quality Data for BA-MW-6 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place		Sidewall Samples in Place				Pre-Excavation Characterization Samples							
			BA-B01 3/5/14 (5 ft)	BA-B02 3/5/14 (6 ft)	BA-S01 3/5/14 (4 ft)	BA-S01 FD 3/5/14 (4 ft)	BA-S02 3/5/14 (4 ft)	BA-S03 3/5/14 (4 ft)	BA-6E 1/15/14 (0.5-1 ft)	BA-6E 1/15/14 (1.5-2 ft)	BA-6N 1/15/14 (0.5-1 ft)	BA-6N 1/15/14 (1.5-2 ft)	BA-6S 1/15/14 (0.5-1 ft)	BA-6S 1/15/14 (1.5-2 ft)	BA-6W 1/15/14 (0.5-1 ft)	BA-6W 1/15/14 (1.5-2 ft)
Total Petroleum Hydrocarbons (TPH)																
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	430	250 U	650	1,100	250 U	250 U	250 U	940
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	455	ND	675	1,120	ND	ND	ND	965
Polycyclic Aromatic Hydrocarbons (PAHs)																
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Phenanthrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Pyrene in mg/kg	110,000	110,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Chrysene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U								
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	ND	ND	ND	ND								

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 U = Analyte was not detected at or above the reported result.

Table A-2 - Excavation Verification Soil Quality Data for Boiler/Baghouse Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place												Sidewall Samples in Place															
		BBH-B01 10/16/13 (3 ft)	BBH-B01 FD 10/16/13 (3 ft)	BBH-B02 10/16/13 (2 ft)	BBH-B03 10/16/13 (3 ft)	BBH-B05 10/16/13 (2 ft)	BBH-B06 10/16/13 (3 ft)	BBH-B07 10/16/13 (3 ft)	BBH-B10 10/16/13 (4 ft)	BBH-B16 10/23/13 (3 ft)	BBH-B17 10/30/13 (5 ft)	BBH-B19 10/30/13 (5 ft)	BBH-B20 11/18/13 (6 ft)	BBH-S01 10/15/13 (1.5 ft)	BBH-S01 FD 10/15/13 (1.5 ft)	BBH-S02 10/15/13 (1.5 ft)	BBH-S03 10/15/13 (1.5 ft)	BBH-S04 10/15/13 (1.5 ft)	BBH-S05 10/15/13 (1.5 ft)	BBH-S06 10/15/13 (1.5 ft)	BBH-S07 10/15/13 (1.5 ft)	BBH-S08 10/15/13 (1.5 ft)	BBH-S09 10/15/13 (1.5 ft)	BBH-S11 10/15/13 (1.5 ft)	BBH-S12 10/15/13 (1.5 ft)	BBH-S13 10/15/13 (1.5 ft)	BBH-S14 10/15/13 (1.5 ft)		
Total Petroleum Hydrocarbons (TPH)																													
Diesel Range Hydrocarbons in mg/kg	2,000																												
Oil Range Hydrocarbons in mg/kg	2,000																												
Total TPHs in mg/kg	2,000																												
Metals																													
Antimony in mg/kg	1,400	1 U	1 U	1 U	1 U	4.01	1 U	1.22	1.52	2.07	1.59	6.62	1 U	1.12	1 U	4.21	12.4	2.34	5.57	8.29	6.05	1 U	5.91	23.1	2.42	2.76	3.62		
Arsenic in mg/kg	20	3.85	3.87	2.2	3.03	5.58	8.07	2.1	1 U	3.62	1.58	1 U	1 U	12.6	11.9	13.3	18	4.18	15.5	12.3	11.1	2.56	10.5	9.8	4.56	4.13	7.11		
Cadmium in mg/kg	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.17	26.4	9.78	1 U	9.16	1.44	1 U	1 U	1.86	1 U	1 U	1 U	1 U		
Copper in mg/kg	36	12.7	13.1	17.8	18.1	23.3	45.3	57.3	13.1	10.6	21.1	47.3	17.7	27.7	34.3	67.9	44.1	28.8	75.3	52.2	58.5	30.6	76.5	74.5	28.4	69.9	72.3		
Lead in mg/kg	1,000	5.96	4.6	3.76	3.47	65.3	595	15.1	7.3	28.6	9.59	326	8.81	27.5	36.4	143	125	17.2	58.2	374	78.6	57.6	132	485	62.1	282	160		
Mercury in mg/kg	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J	0.43 J	0.1 U	0.1 U	0.1 U	0.13	16	0.1 U	0.21 J	0.31	0.58 J	0.4 J	0.22 J	0.53 J	0.84 J	0.94 J	0.12 J	1.1 J	1.9 J	0.34 J	1.7 J	0.99 J		
Nickel in mg/kg	48	15.4 J	16.3 J	12.3 J	11.6 J	9.89 J	17.8 J	15 J	10.1 J	8.25	11.9	9.21	1.96	16.3	18.4	19.2	19.9	23	16.6	19	14	16.7	20	26	16.7	2.34	6.3		
Zinc in mg/kg	100	25.9	25.6	25.8	18.1	27.7	56.8	40.6	30.2	12.9	24.5	16.3	3.64	67.4	103 J	328	207 J	64.2 J	216 J	172 J	95.1 J	40.9 J	131 J	79.7 J	33.6 J	17.3 J	55.1 J		
Polycyclic Aromatic Hydrocarbons (PAHs)																													
Acenaphthene in mg/kg	210,000	0.01 U	0.01 U			0.048						0.01 U	0.01 U	0.073	0.01 U					0.58				0.2					
Acenaphthylene in mg/kg		0.01 U	0.01 U			0.01 U						0.01 U	0.01 U	0.01 U	0.01 U					0.1 U				0.1 U					
Anthracene in mg/kg	1,100,000	0.01 U	0.01 U			0.091						0.01 U	0.01 U	0.01 U	0.01 U					0.65				0.41					
Benzo(g,h,i)perylene in mg/kg		0.01 U	0.01 U			0.081						0.01 U	0.01 U	0.061	0.041					0.4				0.24					
Fluoranthene in mg/kg	140,000	0.011	0.01 U			0.3						0.01 U	0.01 U	0.27	0.079					2.5				1.4					
Fluorene in mg/kg	140,000	0.01 U	0.01 U			0.05						0.01 U	0.01 U	0.1	0.01 U					0.32				0.17					
Phenanthrene in mg/kg		0.01 U	0.01 U			0.37						0.01 U	0.01 U	0.37	0.012					2.2				1.4					
Pyrene in mg/kg	110,000	0.012	0.01 U			0.37						0.01 U	0.01 U	0.23	0.078					2.4				1.3					
Naphthalene in mg/kg	70,000	0.01 U	0.01 U			0.052						0.01 U	0.01 U	0.56	0.01 U					0.13				0.1 U					
Benz(a)anthracene in mg/kg		0.01 U	0.01 U			0.16						0.01 U	0.01 U	0.11	0.072					0.95				0.55					
Benzo(a)pyrene in mg/kg		0.01 U	0.01 U			0.14						0.01 U	0.01 U	0.1	0.065					0.76				0.43					
Benzo(b)fluoranthene in mg/kg		0.013	0.01 U			0.17						0.01 U	0.01 U	0.13	0.09					0.85				0.49					
Benzo(k)fluoranthene in mg/kg		0.01 U	0.01 U			0.068						0.01 U	0.01 U	0.044	0.035					0.29				0.25					
Chrysene in mg/kg		0.01 U	0.01 U			0.2						0.01 U	0.01 U	0.11	0.076					1.1				0.64					
Dibenzo(a,h)anthracene in mg/kg		0.01 U	0.01 U			0.025						0.01 U	0.01 U	0.016	0.011					0.12				0.1 U					
Indeno(1,2,3-cd)pyrene in mg/kg		0.01 U	0.01 U			0.094						0.01 U	0.01 U	0.065	0.045					0.46				0.26					
Total cPAHs TEQ in mg/kg	7.9	0.00835	ND			0.194						ND	ND	0.138	0.0911					1.04				0.596					
Dioxins/Furans																													
Total HpCDD in mg/kg		2.9E-05	0.00015																										
Total HpCDF in mg/kg		1.1E-05	2.4E-05																										
Total HxCDD in mg/kg		1.3E-05	3E-05																										
Total HxCDF in mg/kg		3.3E-06	7E-06																										
Total PeCDD in mg/kg		9.1E-06	1.7E-05																										
Total PeCDF in mg/kg		3.2E-06	2.8E-06																										
Total TCDD in mg/kg		7.3E-06	1.2E-05																										
Total TCDF in mg/kg		3.7E-06	3.2E-06																										
2,3,7,8-TCDD in mg/kg		5.4E-07 U	5.3E-07 U																										
1,2,3,7,8-PeCDD in mg/kg		3.2E-07 U	5.9E-07 U																										
1,2,3,4,7,8-HxCDD in mg/kg		2.7E-07 U	5E-07 U																										
1,2,3,6,7,8-HxCDD in mg/kg		1.1E-06 J	5.5E-07 U																										
1,2,3,7,8,9-HxCDD in mg/kg		6.7E-07 J	1.9E-06 J																										
1,2,3,4,6,7,8-HpCDD in mg/kg		1.2E-05	4.6E-05																										
OCDD in mg/kg		8.8E-05	0.0005																										
2,3,7,8-TCDF in mg/kg		5.4E-07 U	3.6E-07 J																										
1,2,3,7,8-PeCDF in mg/kg		2.7E-07 J	4.3E-07 J																										
2,3,4,7,8-PeCDF in mg/kg		3.3E-07 J	5.8E-07 U																										
1,2,3,4,7,8-HxCDF in mg/kg		6.2E-07 J	9.5E-07 J																										
1,2,3,6,7,8-HxCDF in mg/kg		3E-07 J	3.7E-07 U																										
1,2,3,7,8,9-HxCDF in mg/kg		2.7E-06 U	2.7E-06 U																										
2,3,4,6,7,8-HxCDF in mg/kg		3.2E-07 U	5.1E-07 J																										
1,2,3,4,6,7,8-HpCDF in mg/kg		5E-06	6.1E-06																										
1,2,3,4,7,8,9-HpCDF in mg/kg		2.7E-06 U	4.9E-07 J																										
OCDF in mg/kg		7.1E-06	2.4E-05																										
Total 2,3,7,8 TCDD [TEQ] (ND = 1/2 RDL) in mg/kg	0.0017	1.4E-06 J	2.4E-06 J																										

Notes

All soils in this excavation are unsaturated. Concentrations shaded and bolded indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

J = Analyte was positively identified. The reported result is an estimate.

U = Analyte was not detected at or above the reported result.

Table A-2 - Excavation Verification Soil Quality Data for Boiler/Baghouse Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place																Overexcavated Samples										
		BBH-S15 10/15/13 (1.5 ft)	BBH-S16 10/15/13 (1.5 ft)	BBH-S17 10/15/13 (1.5 ft)	BBH-S18 10/15/13 (1.5 ft)	BBH-S19 10/15/13 (1.5 ft)	BBH-S20 10/15/13 (1.5 ft)	BBH-S20 FD 10/15/13 (1.5 ft)	BBH-S21 10/15/13 (1.5 ft)	BBH-S22 10/15/13 (1.5 ft)	BBH-S23 10/15/13 (1.5 ft)	BBH-S24 10/15/13 (1.5 ft)	BBH-S25 10/15/13 (1.5 ft)	BBH-S26 10/15/13 (1.5 ft)	BBH-S27 10/15/13 (1.5 ft)	BBH-S28 10/15/13 (1.5 ft)	BBH-S29 10/23/13 (1.5 ft)	BBH-B04 10/16/13 (2 ft) OverEx	BBH-B08 10/16/13 (3 ft) OverEx	BBH-B09 10/16/13 (3 ft) OverEx	BBH-B11 10/16/13 (3 ft) OverEx	BBH-B13 10/23/13 (4 ft) OverEx	BBH-B14 10/23/13 (4 ft) OverEx	BBH-B15 10/23/13 (4 ft) OverEx	BBH-B18 10/30/13 (5 ft) OverEx	BBH-S10 10/15/13 (1.5 ft) OverEx		
Total Petroleum Hydrocarbons (TPH)																												
Diesel Range Hydrocarbons in mg/kg	2,000																											
Oil Range Hydrocarbons in mg/kg	2,000																											
Total TPHs in mg/kg	2,000																											
Metals																												
Antimony in mg/kg	1,400	3.75	3.05	2.31	5.12	9.02	7.9	10.3 J	24 J	4.56 J	1 U	1 U	1 U	1 U	1 U	1 U	13.4	5.24	35.5	19.9	4.56	18	4.03	2.49	1.44	16.4		
Arsenic in mg/kg	20	4.86	3.03	5.75	8.58	16.2	9.2	9.93	12	8.45	2.35	4.25	4.78	6.18	3.76	3.86	18.5	13.5	34.8	13.5	1 U	58.2	4	1 U	1.4	13.5		
Cadmium in mg/kg	3,500	1 U	1 U	1 U	1 U	1.18	1.29	1.6	2.46	2.4	1 U	1 U	1 U	1 U	1 U	1 U	3.33	1 U	1.79	1.35	1 U	1 U	1 U	1 U	1 U	2.72		
Copper in mg/kg	36	96.9	36.6	63.5	49.6	35.6	81.5	81.7	47.9	71.8	16.5	14.3	32.9	18.9	19.2	14.1	59.2	90.3	180	86.7	164	140	26.6	137	901	136		
Lead in mg/kg	1,000	151	73.1	114	99.7	80.2	182	232	779	54.7	4.32	3.76	4.72	4.07	3.1	5.18	275	35.3	1,840	407	132	301	94.7	67.3	174	584		
Mercury in mg/kg	0.1	0.41 J	0.1 U	0.31 J	0.25 J	0.19 J	0.52 J	0.78 J	0.81 J	0.49 J	0.1 U	0.1 U	0.13	0.14	0.1 U	0.1 U	0.8	0.1 U	1.1 J	1.2 J	0.1 U	0.64	0.33	0.1 U	0.11	2.1 J		
Nickel in mg/kg	48	4.96	8.6	4.36	14.3	18.2	19	21.7	12.7	14.9	23.3	14.7	15.2	9.51	12.3	12.3	19.8	26.7 J	12.8 J	17.7 J	1.88 J	12.1	13.1	1 U	8.79	18.1		
Zinc in mg/kg	100	32 J	24 J	40.8 J	93.5 J	145 J	106 J	149 J	84.3 J	121 J	33.5 J	27 J	25.6 J	12.7 J	19.7 J	19.9 J	299	30.2	343	187	11.4	515	152	6.3	62.5	167 J		
Polycyclic Aromatic Hydrocarbons (PAHs)																												
Acenaphthene in mg/kg	210,000		0.01 U						0.063					0.01 U					0.026									
Acenaphthylene in mg/kg			0.01 U						0.01 U					0.01 U					0.01 U									
Anthracene in mg/kg	1,100,000		0.01 U						0.13					0.01 U					0.063									
Benzo(g,h,i)perylene in mg/kg			0.01 U						0.08					0.01 U					0.11									
Fluoranthene in mg/kg	140,000		0.01 U						0.37					0.01 U					0.36									
Fluorene in mg/kg	140,000		0.01 U						0.052					0.01 U					0.021									
Phenanthrene in mg/kg			0.01 U						0.4					0.01 U					0.2									
Pyrene in mg/kg	110,000		0.01 U						0.4					0.01 U					0.36									
Naphthalene in mg/kg	70,000		0.01 U						0.022					0.01 U					0.015									
Benz(a)anthracene in mg/kg			0.01 U						0.19					0.01 U					0.2									
Benzo(a)pyrene in mg/kg			0.01 U						0.15					0.01 U					0.19									
Benzo(b)fluoranthene in mg/kg			0.011						0.18					0.01 U					0.23									
Benzo(k)fluoranthene in mg/kg			0.01 U						0.056					0.01 U					0.075									
Chrysene in mg/kg			0.01 U						0.23					0.01 U					0.24									
Dibenzo(a,h)anthracene in mg/kg			0.01 U						0.025					0.01 U					0.03									
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U						0.089					0.01 U					0.12									
Total cPAHs TEQ in mg/kg	7.9		0.00815						0.206					ND					0.258									
Dioxins/Furans																												
Total HpCDD in mg/kg																			6.9E-05	0.00138								
Total HpCDF in mg/kg																			2.3E-06 U	0.00028								
Total HxCDD in mg/kg																			1.9E-05	0.00211								
Total HxCDF in mg/kg																			1.2E-06 J	0.00018								
Total PeCDD in mg/kg																			2.6E-07 J	0.00166								
Total PeCDF in mg/kg																			1.5E-06 J	0.00033								
Total TCDD in mg/kg																			6.6E-06	0.00145								
Total TCDF in mg/kg																			2.7E-06	0.00073								
2,3,7,8-TCDD in mg/kg																			5.6E-07 U	7E-06								
1,2,3,7,8-PeCDD in mg/kg																			2.6E-07 J	2.5E-05								
1,2,3,4,7,8-HxCDD in mg/kg																			2.1E-07 J	3.2E-05								
1,2,3,6,7,8-HxCDD in mg/kg																			1.1E-06 J	6.8E-05								
1,2,3,7,8,9-HxCDD in mg/kg																			7.9E-07 J	5.9E-05								
1,2,3,4,6,7,8-HpCDD in mg/kg																			1.8E-05	0.00066								
OCDD in mg/kg																			0.00017	0.00474								
2,3,7,8-TCDF in mg/kg																			5.6E-07 U	3.3E-05								
1,2,3,7,8-PeCDF in mg/kg																			1.7E-07 U	2.2E-05 J								
2,3,4,7,8-PeCDF in mg/kg																			2.4E-07 J	3.3E-05								
1,2,3,4,7,8-HxCDF in mg/kg																			3E-07 U	2.5E-05 J								
1,2,3,6,7,8-HxCDF in mg/kg																			1.7E-07 U	1.3E-05								
1,2,3,7,8,9-HxCDF in mg/kg																			2.8E-06 U	1.7E-06 J								
2,3,4,6,7,8-HxCDF in mg/kg																			1.6E-07 U	1.7E-05 J								
1,2,3,4,6,7,8-HpCDF in mg/kg																			9.6E-07 U	7.4E-05								
1,2,3,4,7,8,9-HpCDF in mg/kg																			2.8E-06 U	7.4E-06								
OCDF in mg/kg																			1.6E-06 J	0.00026								
Total 2,3,7,8 TCDD [TEQ] (ND = 1/2 RDL) in mg/kg	0.0017																		1.3E-06 J	7.7E-05								

Notes

All soils in this excavation are unsaturated. Concentrations shaded and bolded indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

J - Analyte was positively identified. The reported result is an estimate.

U - Analyte was not detected at or above the reported result.

Table A-3 - Excavation Verification Soil Quality Data for Bunker C ASTs Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsat. Soil	Bottom Samples in Place																									
			BAST-B001 10/10/13 (3.5 ft) SAT	BAST-B002 10/17/13 (4 ft) SAT	BAST-B003 10/17/13 (5 ft) SAT	BAST-B004 10/17/13 (5 ft) SAT	BAST-B005 10/17/13 (6 ft) SAT	BAST-B006 10/17/13 (6 ft) SAT	BAST-B007 10/17/13 (5 ft) SAT	BAST-B008 10/17/13 (6 ft) SAT	BAST-B010 10/18/13 (5 ft) SAT	BAST-B011 10/17/13 (4 ft) SAT	BAST-B012 10/17/13 (4 ft) SAT	BAST-B013 10/17/13 (4 ft) SAT	BAST-B014 10/17/13 (4 ft) SAT	BAST-B015 10/17/13 (5 ft) SAT	BAST-B016 10/17/13 (5 ft) SAT	BAST-B017 10/17/13 (5 ft) SAT	BAST-B018 10/17/13 (5 ft) SAT	BAST-B021 10/17/13 (4 ft) SAT	BAST-B022 10/22/13 (7 ft) SAT	BAST-B023 10/18/13 (4 ft) SAT	BAST-B023 FD 10/18/13 (4 ft) SAT	BAST-B024 10/17/13 (5 ft) SAT	BAST-B026 10/22/13 (6 ft) SAT	BAST-B027 10/22/13 (7 ft) SAT	BAST-B028 10/22/13 (7 ft) SAT	
Acetone in mg/kg	3,200,000	3,200,000																										
Benzene in mg/kg	2,400	2,400																										
Bromobenzene in mg/kg																												
Bromodichloromethane in mg/kg	2,100	2,100																										
Bromoform in mg/kg	17,000	17,000																										
Bromomethane in mg/kg	4,900	4,900																										
Carbon tetrachloride in mg/kg	1,900	1,900																										
Chlorobenzene in mg/kg	70,000	70,000																										
Chloroethane in mg/kg																												
Chloroform in mg/kg	4,200	4,200																										
Chloromethane in mg/kg																												
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000																										
cis-1,3-Dichloropropene in mg/kg																												
Dibromochloromethane in mg/kg	1,600	1,600																										
Dibromomethane in mg/kg	35,000	35,000																										
Dichlorodifluoromethane in mg/kg	700,000	700,000																										
Ethylbenzene in mg/kg	350,000	350,000																										
Hexachlorobutadiene in mg/kg	1,700	1,700																										
Isopropylbenzene in mg/kg	350,000	350,000																										
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000																										
Methylene chloride in mg/kg	21,000	21,000																										
n-Propylbenzene in mg/kg	350,000	350,000																										
p-Isopropyltoluene in mg/kg																												
sec-Butylbenzene in mg/kg	350,000	350,000																										
Styrene in mg/kg	700,000	700,000																										
tert-Butylbenzene in mg/kg	350,000	350,000																										
Tetrachloroethene (PCE) in mg/kg	21,000	21,000																										
Toluene in mg/kg	280,000	280,000																										
trans-1,2-Dichloroethene in mg/kg	70,000	70,000																										
trans-1,3-Dichloropropene in mg/kg																												
Trichloroethene (TCE) in mg/kg	1,800	1,800																										
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000																										
Vinyl chloride in mg/kg	88	88																										
m,p-Xylenes in mg/kg	700,000	700,000																										
o-Xylene in mg/kg	700,000	700,000																										
Naphthalene in mg/kg	70,000	70,000																										
Polychlorinated Biphenyls (PCBs)																												
Aroclor 1016 in mg/kg																												
Aroclor 1221 in mg/kg																												
Aroclor 1232 in mg/kg																												
Aroclor 1242 in mg/kg																												
Aroclor 1248 in mg/kg																												
Aroclor 1254 in mg/kg																												
Aroclor 1260 in mg/kg																												
Total PCBs (Sum of Aroclors) in mg/kg	10	10																										

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsat. Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-3 - Excavation Verification Soil Quality Data for Bunker C ASTs Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place																								
			BAST-B052 12/23/13 (7 ft) SAT	BAST-B052 FD 12/23/13 (7 ft) SAT	BAST-B053 1/2/14 (10 ft) SAT	BAST-B054 12/23/13 (7 ft) SAT	BAST-B055 1/2/14 (10 ft) SAT	BAST-B056 1/27/14 (4 ft)	BAST-B057 1/27/14 (7 ft) SAT	BAST-B058 1/27/14 (4 ft)	BAST-B059 1/27/14 (4 ft)	BAST-B060 1/27/14 (4 ft)	BAST-B061 1/27/14 (4 ft)	BAST-B062 1/27/14 (4 ft) SAT	BAST-B063 1/27/14 (4 ft) SAT	BAST-B064 1/27/14 (4 ft) SAT	BAST-B065 1/27/14 (3.5 ft)	BAST-B065 FD 1/27/14 (3.5 ft)	BAST-B066 1/28/14 (7 ft) SAT	BAST-B067 2/11/14 (5 ft)	BAST-B068 2/11/14 (5 ft)	BAST-B069 2/11/14 (5 ft)	BAST-B070 2/13/14 (4 ft)	BAST-B072 2/20/14 (6 ft) FD	BAST-B072 2/20/14 (6 ft) SAT	BAST-B073 2/20/14 (7 ft) SAT	BAST-B074 2/21/14 (7 ft) SAT
Acetone in mg/kg	3,200,000	3,200,000			0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene in mg/kg	2,400	2,400			0.03 U		0.03 U											0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bromobenzene in mg/kg					0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromodichloromethane in mg/kg	2,100	2,100			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromoform in mg/kg	17,000	17,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromomethane in mg/kg	4,900	4,900			0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride in mg/kg	1,900	1,900			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chlorobenzene in mg/kg	70,000	70,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chloroethane in mg/kg					0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform in mg/kg	4,200	4,200			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chloromethane in mg/kg					0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
cis-1,3-Dichloropropene in mg/kg					0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dibromochloromethane in mg/kg	1,600	1,600			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dibromomethane in mg/kg	35,000	35,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dichlorodifluoromethane in mg/kg	700,000	700,000			0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene in mg/kg	350,000	350,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Hexachlorobutadiene in mg/kg	1,700	1,700			0.25 U		0.25 U											0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Isopropylbenzene in mg/kg	350,000	350,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methylene chloride in mg/kg	21,000	21,000			0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene in mg/kg	350,000	350,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
p-Isopropyltoluene in mg/kg					0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
sec-Butylbenzene in mg/kg	350,000	350,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Styrene in mg/kg	700,000	700,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
tert-Butylbenzene in mg/kg	350,000	350,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Tetrachloroethene (PCE) in mg/kg	21,000	21,000			0.025 U		0.025 U											0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Toluene in mg/kg	280,000	280,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
trans-1,2-Dichloroethene in mg/kg	70,000	70,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
trans-1,3-Dichloropropene in mg/kg					0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Trichloroethene (TCE) in mg/kg	1,800	1,800			0.03 U		0.03 U											0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000			0.5 U		0.5 U											0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride in mg/kg	88	88			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
m,p-Xylenes in mg/kg	700,000	700,000			0.1 U		0.1 U											0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene in mg/kg	700,000	700,000			0.05 U		0.05 U											0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Naphthalene in mg/kg	70,000	70,000																									
Polychlorinated Biphenyls (PCBs)																											
Aroclor 1016 in mg/kg																											
Aroclor 1221 in mg/kg																											
Aroclor 1232 in mg/kg																											
Aroclor 1242 in mg/kg																											
Aroclor 1248 in mg/kg																											
Aroclor 1254 in mg/kg																											
Aroclor 1260 in mg/kg																											
Total PCBs (Sum of Aroclors) in mg/kg	10	10																									

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-3 - Excavation Verification Soil Quality Data for Bunker C ASTs Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsat. Soil	Bottom Samples in Place				Sidewall Samples in Place																							
			BAST-B075 2/21/14 (7 ft) SAT	BAST-B076 2/21/14 (7 ft) SAT	BAST-B077 2/21/14 (8 ft) SAT	BAST-B078 2/24/14 (4 ft)	BAST-S013 10/21/13 (3 ft)	BAST-S014 10/21/13 (3 ft)	BAST-S015 10/21/13 (3 ft)	BAST-S016 10/18/13 (3 ft)	BAST-S022 10/22/13 (3 ft)	BAST-S024 10/22/13 (3 ft) SAT	BAST-S025 10/18/13 (3 ft)	BAST-S026 10/23/13 (3 ft)	BAST-S027 10/23/13 (3 ft)	BAST-S028 10/23/13 (3 ft)	BAST-S029 10/23/13 (3 ft)	BAST-S033 10/25/13 (3 ft) SAT	BAST-S034 10/23/13 (3 ft)	BAST-S034A 11/1/13 (3 ft) SAT	BAST-S035 11/1/13 (3 ft) SAT	BAST-S036 11/1/13 (3 ft) SAT	BAST-S041 12/23/13 (3 ft)	BAST-S042 12/23/13 (5 ft) SAT	BAST-S043 12/30/13 (3 ft)					
Total Petroleum Hydrocarbons (TPH)																														
Gasoline Range Hydrocarbons in mg/kg	100	100	2 U	2 U	2 U	2 U											2 U	2 U	2 U									2 U		
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U																			50 U	50 U	50 U			
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U																			250 U	250 U	1,700			
Bunker C in mg/kg	2,000	2,000					250 U	250 U	250 U	250 U	250 U	650	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U							
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	250 U	250 U	250 U	250 U	250 U	650	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	ND	ND		1,720			
Metals																														
Antimony in mg/kg	1,400	1,400									1 U																			
Arsenic in mg/kg	20	20		1 U						1 U	17								1.69 J	4.03							3.05			
Barium in mg/kg	700,000	700,000																												
Beryllium in mg/kg	7,000	7,000																												
Cadmium in mg/kg	3,500	3,500		1 U						1 U	1 U								1 U	1 U							1 U			
Chromium (Total) in mg/kg	5,300,000	5,300,000																												
Copper in mg/kg	36	36		3.92							13.5	52.9							4.54 J	25.4							9.53			
Lead in mg/kg	81	1,000		1.33							2.16	10.1							1.85 J	3.27							97.6			
Mercury in mg/kg	0.1	0.1		0.1 U							0.1 U	0.11							0.1 U	0.1 U							0.18			
Nickel in mg/kg	48	48		10.7							11.1	40.6							6.7	24.6							9.33			
Selenium in mg/kg	18,000	18,000																												
Silver in mg/kg	18,000	18,000																												
Thallium in mg/kg	35	35																												
Zinc in mg/kg	85	100		7.99							57.7 J	64.5							20.8	38.1							94.5			
Polycyclic Aromatic Hydrocarbons (PAHs)																														
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.034	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.1 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.6	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.44	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.48		
Dibenzofuran in mg/kg	3,500	3,500																												
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.045	0.01 U	0.01 U	0.01 U	0.017	0.01 U	1.9	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.07	0.026	0.013	0.01 U	0.01 U	0.01 U	0.1 U			
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U			
Phenanthrene in mg/kg			0.01 U	0.01 U	0.01 U	0.035	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	1.5	0.022	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.072	0.01 U	0.034	0.01 U	0.01 U	0.01 U	0.1 U			
Pyrene in mg/kg	110,000	110,000	0.01 U	0.01 U	0.01 U	0.051	0.01 U	0.01 U	0.01 U	0.019	0.01 U	1.9	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.073	0.025	0.024	0.01 U	0.01 U	0.01 U	0.24			
2-Methylnaphthalene in mg/kg	14,000	14,000																												
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	2.5	0.01 U	0.019	0.023	0.01 U	0.01 U	0.1 U	0.01 U	0.015	0.01 U	0.01 U	0.01	0.01 U	0.023	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U			
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.78	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.032	0.01	0.013	0.01 U	0.01 U	0.01 U	0.1 U			
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.61	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.024	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.25			
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.024	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.76	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.029	0.015	0.013	0.01 U	0.01 U	0.01 U	0.1			
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.27	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U			
Chrysene in mg/kg			0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.97	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.036	0.011	0.017	0.01 U	0.01 U	0.01 U	0.19			
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U			
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.011 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.35	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.16			
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	ND	0.0191	ND	ND	ND	ND	ND	0.841	ND	ND	ND	ND	ND	ND	ND	ND	0.0337	0.0171	0.00927	ND	ND		0.293			
Volatile Organic Compounds (VOC)																														
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,1,2,2-Tetrachloroethane in mg/kg	660	660	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,1,2-Trichloroethane in mg/kg	2,300	2,300	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,1-Dichloroethane in mg/kg	23,000	23,000	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,1-Dichloroethene in mg/kg	180,000	180,000	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,1-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,2,3-Trichlorobenzene in mg/kg			0.25 U	0.25 U	0.25 U	0.25 U																						0.25 U		
1,2,3-Trichloropropane in mg/kg	4.4	4.4	0.05 U	0.05 U	0.05 U	0.05 U																						0.05 U		
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500	0.25 U	0.25 U	0.25 U	0.25 U																						0.25 U		
1,2,4-Trimethylbenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U		</																						

Table A-3 - Excavation Verification Soil Quality Data for Bunker C ASTs Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place				Sidewall Samples in Place																					
			BAST-B075 2/21/14 (7 ft) SAT	BAST-B076 2/21/14 (7 ft) SAT	BAST-B077 2/21/14 (8 ft) SAT	BAST-B078 2/24/14 (4 ft)	BAST-S013 10/21/13 (3 ft)	BAST-S014 10/21/13 (3 ft)	BAST-S015 10/21/13 (3 ft)	BAST-S016 10/18/13 (3 ft)	BAST-S022 10/22/13 (3 ft)	BAST-S024 10/22/13 (3 ft) SAT	BAST-S025 10/18/13 (3 ft)	BAST-S026 10/23/13 (3 ft)	BAST-S027 10/23/13 (3 ft)	BAST-S028 10/23/13 (3 ft)	BAST-S029 10/23/13 (3 ft)	BAST-S033 10/25/13 (3 ft) SAT	BAST-S034 10/23/13 (3 ft)	BAST-S034A 11/1/13 (3 ft) SAT	BAST-S035 11/1/13 (3 ft) SAT	BAST-S036 11/1/13 (3 ft) SAT	BAST-S041 12/23/13 (3 ft)	BAST-S042 12/23/13 (5 ft) SAT	BAST-S043 12/30/13 (3 ft)			
Acetone in mg/kg	3,200,000	3,200,000	0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
Benzene in mg/kg	2,400	2,400	0.03 U	0.03 U	0.03 U	0.03 U										0.03 U	0.03 U	0.03 U										0.03 U
Bromobenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Bromodichloromethane in mg/kg	2,100	2,100	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Bromoform in mg/kg	17,000	17,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Bromomethane in mg/kg	4,900	4,900	0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
Carbon tetrachloride in mg/kg	1,900	1,900	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Chlorobenzene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Chloroethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
Chloroform in mg/kg	4,200	4,200	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Chloromethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
cis-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Dibromochloromethane in mg/kg	1,600	1,600	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Dibromomethane in mg/kg	35,000	35,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Dichlorodifluoromethane in mg/kg	700,000	700,000	0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
Ethylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Hexachlorobutadiene in mg/kg	1,700	1,700	0.25 U	0.25 U	0.25 U	0.25 U										0.25 U	0.25 U	0.25 U										0.25 U
Isopropylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Methylene chloride in mg/kg	21,000	21,000	0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
n-Propylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
p-Isopropyltoluene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
sec-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Styrene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
tert-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Tetrachloroethene (PCE) in mg/kg	21,000	21,000	0.025 U	0.025 U	0.025 U	0.025 U										0.025 U	0.025 U	0.025 U										0.025 U
Toluene in mg/kg	280,000	280,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
trans-1,2-Dichloroethene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
trans-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Trichloroethene (TCE) in mg/kg	1,800	1,800	0.03 U	0.03 U	0.03 U	0.03 U										0.03 U	0.03 U	0.03 U										0.03 U
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000	0.5 U	0.5 U	0.5 U	0.5 U										0.5 U	0.5 U	0.5 U										0.5 U
Vinyl chloride in mg/kg	88	88	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
m,p-Xylenes in mg/kg	700,000	700,000	0.1 U	0.1 U	0.1 U	0.1 U										0.1 U	0.1 U	0.1 U										0.1 U
o-Xylene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U										0.05 U	0.05 U	0.05 U										0.05 U
Naphthalene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	1.2										0.05 U	0.05 U	0.05 U										0.05 U
Polychlorinated Biphenyls (PCBs)																												
Aroclor 1016 in mg/kg																												
Aroclor 1221 in mg/kg																												
Aroclor 1232 in mg/kg																												
Aroclor 1242 in mg/kg																												
Aroclor 1248 in mg/kg																												
Aroclor 1254 in mg/kg																												
Aroclor 1260 in mg/kg																												
Total PCBs (Sum of Aroclors) in mg/kg	10	10																										

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-3 - Excavation Verification Soil Quality Data for Bunker C ASTs Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Overexcavated Samples												
			BAST-S031 10/25/13 (3 ft) OverEx SAT	BAST-S032 10/25/13 (3 ft) OverEx SAT	BAST-S045 12/30/13 (3 ft) OverEx	BAST-S046 12/30/13 (5 ft) OverEx SAT	BAST-S050 1/3/14 (8 ft) OverEx SAT	BAST-S055 1/20/14 (3 ft) OverEx SAT	BAST-S067 1/28/14 (4 ft) OverEx	BAST-S069 2/11/14 (3 ft) OverEx	BAST-S069 FD 2/11/14 (3 ft) OverEx	BAST-S073 2/13/14 (3 ft) OverEx	BAST-S082 2/21/14 (4 ft) OverEx	BAST-S090 2/25/14 (4 ft) OverEx	BCAST-SUMP-1 10/8/13 OverEx
Total Petroleum Hydrocarbons (TPH)															
Gasoline Range Hydrocarbons in mg/kg	100	100			2 U	120	660		97	2 U	2 U	2 U	2 U	14	
Diesel Range Hydrocarbons in mg/kg	2,000	2,000			50 U	510	1,200	50 U	4,500	50 U	50 U	9,600	50 U	2,100 x	
Oil Range Hydrocarbons in mg/kg	2,000	2,000			250 U	250 U	250 U	13,000	440 x	250 U	250 U	250 U	250 U	1,500	
Bunker C in mg/kg	2,000	2,000	15,000	250 U											140,000
Total TPHs in mg/kg	2,000	2,000	15,000	250 U	ND	635	1,320	13,000	4,940	ND	ND	9,720	ND	3,600	140,000
Metals															
Antimony in mg/kg	1,400	1,400													
Arsenic in mg/kg	20	20								2.06	10				1.71
Barium in mg/kg	700,000	700,000													12.1
Beryllium in mg/kg	7,000	7,000													
Cadmium in mg/kg	3,500	3,500								1 U	1 U				1 U
Chromium (Total) in mg/kg	5,300,000	5,300,000													7.29
Copper in mg/kg	36	36								22.3	40.1				12.8
Lead in mg/kg	81	1,000								4.62	7.56				30.4
Mercury in mg/kg	0.1	0.1								0.11 J	0.1 UJ				0.1 U
Nickel in mg/kg	48	48								19.4	28.7				13.2
Selenium in mg/kg	18,000	18,000													1 U
Silver in mg/kg	18,000	18,000													1 U
Thallium in mg/kg	35	35													
Zinc in mg/kg	85	100								86.2	45.9				25.2
Polycyclic Aromatic Hydrocarbons (PAHs)															
Acenaphthene in mg/kg	210,000	210,000	0.043	0.048	0.01 U	0.01 U	0.28	0.01 U	0.15	0.01 U	0.01 U	0.25	0.01 U	0.5 U	
Acenaphthylene in mg/kg			0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.5 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.56	
Benzo(g,h,i)perylene in mg/kg			0.06	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.56	
Dibenzofuran in mg/kg	3,500	3,500													
Fluoranthene in mg/kg	140,000	140,000	0.026	0.018	0.01 U	0.024	0.029	0.01 U	0.045	0.01 U	0.01 U	0.05	0.01 U	1.3	
Fluorene in mg/kg	140,000	140,000	0.01 U	0.027	0.01 U	0.01 U	0.048	0.01 U	1.5	0.01 U	0.01 U	1.8	0.01 U	0.5 U	
Phenanthrene in mg/kg			0.025	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	1	0.01 U	0.5 U	
Pyrene in mg/kg	110,000	110,000	0.081	0.023	0.01 U	0.038	0.031	0.033	0.16	0.01 U	0.01 U	0.17	0.01 U	2.6	
2-Methylnaphthalene in mg/kg	14,000	14,000													
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.5 U	
Benz(a)anthracene in mg/kg			0.022	0.01	0.01 U	0.015	0.01 U	0.014	0.034	0.01 U	0.01 U	0.018	0.01 U	1.4	
Benzo(a)pyrene in mg/kg			0.037	0.01 U	0.01 U	0.019	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	1.2	
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	1.1	
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.5 U	
Chrysene in mg/kg			0.042	0.015	0.01 U	0.028	0.01 U	0.023	0.11	0.01 U	0.01 U	0.074	0.01 U	1.5	
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.5 U	
Indeno(1,2,3-cd)pyrene in mg/kg			0.036	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.51 J	
Total cPAHs TEQ in mg/kg	0.4	7.9	0.0447	0.00815	ND	0.0228	ND	0.00863	0.0115	ND	ND	0.085	ND	1.57	
Volatile Organic Compounds (VOC)															
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,2,2-Tetrachloroethane in mg/kg	660	660			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,2-Trichloroethane in mg/kg	2,300	2,300			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloroethane in mg/kg	23,000	23,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloroethene in mg/kg	180,000	180,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloropropene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2,3-Trichlorobenzene in mg/kg					0.25 U	0.25 U	0.25 U		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2,3-Trichloropropane in mg/kg	4.4	4.4			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500			0.25 U	0.25 U	0.25 U		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2,4-Trimethylbenzene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2-Dibromo-3-chloropropane in mg/kg	160	160			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
1,2-Dibromoethane (EDB) in mg/kg	66	66			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2-Dichlorobenzene in mg/kg	320,000	320,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2-Dichloroethane (EDC) in mg/kg	1,400	1,400			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2-Dichloropropane in mg/kg	3,600	3,600			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,3,5-Trimethylbenzene in mg/kg	35,000	35,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,3-Dichlorobenzene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,3-Dichloropropane in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,4-Dichlorobenzene in mg/kg	24,000	24,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
2,2-Dichloropropane in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
2-Butanone in mg/kg	2,100,000	2,100,000			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
2-Chlorotoluene in mg/kg	70,000	70,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
2-Hexanone in mg/kg					0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
4-Chlorotoluene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
4-Methyl-2-pentanone in mg/kg	280,000	280,000			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	

Table A-3 - Excavation Verification Soil Quality Data for Bunker C ASTs Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Overexcavated Samples														
	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	BAST-S031 10/25/13 (3 ft) OverEx SAT	BAST-S032 10/25/13 (3 ft) OverEx SAT	BAST-S045 12/30/13 (3 ft) OverEx	BAST-S046 12/30/13 (5 ft) OverEx SAT	BAST-S050 1/3/14 (8 ft) OverEx SAT	BAST-S055 1/20/14 (3 ft) OverEx SAT	BAST-S067 1/28/14 (4 ft) OverEx	BAST-S069 2/11/14 (3 ft) OverEx	BAST-S069 FD 2/11/14 (3 ft) OverEx	BAST-S073 2/13/14 (3 ft) OverEx	BAST-S082 2/21/14 (4 ft) OverEx	BAST-S090 2/25/14 (4 ft) OverEx	BCAST-SUMP-1 10/8/13 OverEx
Acetone in mg/kg	3,200,000	3,200,000			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Benzene in mg/kg	2,400	2,400			0.03 U	0.03 U	0.03 U		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	
Bromobenzene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Bromodichloromethane in mg/kg	2,100	2,100			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Bromoform in mg/kg	17,000	17,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Bromomethane in mg/kg	4,900	4,900			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Carbon tetrachloride in mg/kg	1,900	1,900			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Chlorobenzene in mg/kg	70,000	70,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Chloroethane in mg/kg					0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Chloroform in mg/kg	4,200	4,200			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Chloromethane in mg/kg					0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
cis-1,3-Dichloropropene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Dibromochloromethane in mg/kg	1,600	1,600			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Dibromomethane in mg/kg	35,000	35,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Dichlorodifluoromethane in mg/kg	700,000	700,000			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Ethylbenzene in mg/kg	350,000	350,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Hexachlorobutadiene in mg/kg	1,700	1,700			0.25 U	0.25 U	0.25 U		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
Isopropylbenzene in mg/kg	350,000	350,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Methylene chloride in mg/kg	21,000	21,000			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
n-Propylbenzene in mg/kg	350,000	350,000			0.05 U	0.05 U	0.05 U		0.073	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
p-Isopropyltoluene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
sec-Butylbenzene in mg/kg	350,000	350,000			0.05 U	0.05 U	0.052		0.088	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Styrene in mg/kg	700,000	700,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
tert-Butylbenzene in mg/kg	350,000	350,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Tetrachloroethene (PCE) in mg/kg	21,000	21,000			0.025 U	0.025 U	0.025 U		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	
Toluene in mg/kg	280,000	280,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
trans-1,2-Dichloroethene in mg/kg	70,000	70,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
trans-1,3-Dichloropropene in mg/kg					0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Trichloroethene (TCE) in mg/kg	1,800	1,800			0.03 U	0.03 U	0.03 U		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000			0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
Vinyl chloride in mg/kg	88	88			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
m,p-Xylenes in mg/kg	700,000	700,000			0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
o-Xylene in mg/kg	700,000	700,000			0.05 U	0.05 U	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Naphthalene in mg/kg	70,000	70,000								0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
Polychlorinated Biphenyls (PCBs)															
Aroclor 1016 in mg/kg															0.1 U
Aroclor 1221 in mg/kg															0.1 U
Aroclor 1232 in mg/kg															0.1 U
Aroclor 1242 in mg/kg															0.1 U
Aroclor 1248 in mg/kg															0.1 U
Aroclor 1254 in mg/kg															0.1 U
Aroclor 1260 in mg/kg															0.1 U
Total PCBs (Sum of Aroclors) in mg/kg	10	10													ND

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-4 - Excavation Verification Soil Quality Data for CN-B-2 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place																				
			CNB2-B01 3/3/14 (4 ft) SAT	CNB2-B02 3/3/14 (4 ft) SAT	CNB2-B03 3/3/14 (8 ft) SAT	CNB2-B03 FD 3/3/14 (8 ft) SAT	CNB2-B04 3/3/14 (8 ft) SAT	CNB2-B10 3/7/14 (11 ft) SAT	CNB2-B10 FD 3/7/14 (11 ft) SAT	CNB2-B14 3/14/14 (15 ft) SAT	CNB2-B15 3/15/14 (18 ft) SAT	CNB2-B16 3/15/14 (18 ft) SAT	CNB2-B17 3/15/14 (18 ft) SAT	CNB2-B18 3/15/14 (18 ft) SAT	CNB2-B19 3/15/14 (18 ft) SAT	CNB2-B21 3/15/14 (16 ft) SAT	CNB2-B24 3/19/14 (16 ft) SAT	CNB2-B24 FD 3/19/14 (16 ft) SAT	CNB2-B25 3/19/14 (18 ft) SAT	CNB2-B26 3/20/14 (4 ft) SAT	CNB2-B27 3/20/14 (4 ft) SAT	CNB2-B28 3/20/14 (4 ft) SAT	
Total Petroleum Hydrocarbons (TPH)																							
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	200 U	200 U	200 U	200 U	250 U	250 U	250 U	50 U	50 U	50 U	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U	1,250 U	1,250 U	1,250 U	250 U	250 U	250 U		
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Metals																							
Arsenic in mg/kg	20	20			3.61	3.36		3.94	5.04	1.59	12.6	13.7	1 U	12.5	1 U	25.2	1 U	1 U	14.7	2.16	5.14	2.02	
Cadmium in mg/kg	3,500	3,500		1 U	1 U		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Copper in mg/kg	36	36			7.57	6.83		16	17.2	4.68	13.5	11.4	12.9	12.4	1 U	21.2	1 U	1 U	8.83	10.4	14.3	8.87	
Lead in mg/kg	81	1,000			3.57	2.12		5.19	5.68	2	19.5	65.8	25.4	114	1 U	10.6	27.6	20.6	8	3.38	23.3	2.94	
Mercury in mg/kg	0.1	0.1		0.1 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Nickel in mg/kg	48	48			11.1	11.3		16.1	17.6	16.4	1 U	6.89	1 U	7.15	1 U	12.2	9.12	7.83	7.94	20.9	16.8	10.4	
Zinc in mg/kg	85	100			14.3	15.8	J	27.4	28.7	10.7	25.2	73.2	1 U	103	6.37	51.8	40	55.8	102	13.7	216	13.7	
Polycyclic Aromatic Hydrocarbons (PAHs)																							
Acenaphthene in mg/kg	210,000	210,000	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.021	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.11	0.017	
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.91	0.01 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01	0.019	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	1.1	0.01 U	
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.015	0.012	0.03	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	3.9	0.035	
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.018	0.01 U	0.01 U	0.049	0.052	0.086	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.018	8.2	0.022	
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.38	0.011	
Phenanthrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.031	0.038	0.085	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.012	5	0.014	
Pyrene in mg/kg	110,000	110,000	0.01 U	0.015	0.01 U	0.01 U	0.061	0.057	0.11	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.017	9.9	0.021	
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.032	0.019	0.049	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.34	0.019	
Benzo(a)anthracene in mg/kg			0.01 U	0.012	0.01 U	0.01 U	0.019	0.026	0.045	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	3.6	0.033	
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.021	0.044	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	4.7	0.049	
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.025	0.027	0.055	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.013	6	0.081	
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	1.9	0.022	
Chrysene in mg/kg			0.01 U	0.019	0.01 U	0.01 U	0.029	0.029	0.055	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.011	5.1	0.053	
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.85	0.01 U	
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.012	0.032	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	4	0.043	
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	0.00839	ND	ND	0.0241	0.0288	0.0603	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00841	6.39	0.0679	
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1016 in mg/kg																							
Aroclor 1221 in mg/kg																							
Aroclor 1232 in mg/kg																							
Aroclor 1242 in mg/kg																							
Aroclor 1248 in mg/kg																							
Aroclor 1254 in mg/kg																							
Aroclor 1260 in mg/kg																							
Total PCBs (Sum of Aroclors) in mg/kg	10	10																					

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-4 - Excavation Verification Soil Quality Data for CN-B-2 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsat. Soil	Sidewall Samples in Place																				
			CNB2-S01 3/3/14 (3 ft)	CNB2-S02 3/3/14 (3 ft)	CNB2-S03 3/3/14 (4 ft) SAT	CNB2-S04 3/3/14 (3 ft)	CNB2-S05 3/3/14 (6 ft) SAT	CNB2-S06 3/3/14 (3 ft)	CNB2-S07 3/3/14 (6 ft) SAT	CNB2-S08 3/3/14 (3 ft)	CNB2-S09 3/3/14 (6 ft) SAT	CNB2-S11 3/3/14 (3 ft)	CNB2-S12 3/3/14 (3 ft)	CNB2-S13 3/15/14 (4 ft) SAT	CNB2-S26 3/15/14 (8 ft) SAT	CNB2-S27 3/15/14 (12 ft) SAT	CNB2-S28 3/15/14 (4 ft) SAT	CNB2-S29 3/15/14 (8 ft) SAT	CNB2-S30 3/15/14 (12 ft) SAT	CNB2-S31 3/15/14 (4 ft) SAT	CNB2-S32 3/15/14 (8 ft) SAT	CNB2-S33 3/15/14 (12 ft) SAT	
Total Petroleum Hydrocarbons (TPH)																							
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200 U	50 U	50 U	50 U	50 U	50 U	50 U	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	1,000 U	250 U	250 U	250 U	250 U	250 U	250 U	
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Metals																							
Arsenic in mg/kg	20	20					3.35							4.67	3.28	1 U	6.23	3.23	3.04	8.07	4.82	3.19	
Cadmium in mg/kg	3,500	3,500					1 U						1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Copper in mg/kg	36	36					5.14						15.6	5.59	28	29.5	5.03	5.56	36.8	14.1	5.11		
Lead in mg/kg	81	1,000					2.14						2.29	1.62	24.6	5.68	1.46	1.56	8.07	2.34	1.65		
Mercury in mg/kg	0.1	0.1					0.1 U						0.1 U	0.1 U	0.1 U	0.15	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
Nickel in mg/kg	48	48					9.27						17.3	10	6.86	25.1	11.3	11.3	28.3	15.5	10.3		
Zinc in mg/kg	85	100					10.4 J							28.7	11.1	16.4	39.5	10.5	11.8	47.9	23.5	11.4	
Polycyclic Aromatic Hydrocarbons (PAHs)																							
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.023	0.011	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.011	0.01 U	0.018	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.021	0.011	0.01 U	0.027	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.024	0.01 U	0.017	0.026	0.01 U	0.032	0.01 U	0.069	0.042	0.01 U	0.052	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.024	0.01 U	0.01 U
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U
Phenanthrene in mg/kg			0.019	0.01 U	0.012	0.019	0.01 U	0.015	0.01 U	0.073	0.036	0.01 U	0.044	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U
Pyrene in mg/kg	110,000	110,000	0.029	0.01 U	0.019	0.027	0.01 U	0.034	0.01 U	0.074	0.042	0.01 U	0.04	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U
Naphthalene in mg/kg	70,000	70,000	0.015	0.01 U	0.011	0.011	0.01 U	0.01 U	0.01 U	0.027	0.012	0.01 U	0.026	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U
Benzo(a)anthracene in mg/kg			0.013 J	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.037	0.019	0.01 U	0.046	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 J	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.035	0.017	0.01 U	0.04	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.013 J	0.01 U	0.01 U	0.013	0.01 U	0.02	0.01 U	0.042	0.021	0.01 U	0.062	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.01 U	0.028	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene in mg/kg			0.014 J	0.01 U	0.01 U	0.011	0.01 U	0.018	0.01 U	0.044	0.022	0.01 U	0.09	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.022	0.01	0.01 U	0.028	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	0.0142	ND	ND	0.00841	ND	0.0241	ND	0.0476	0.0232	ND	0.0578	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1016 in mg/kg																							
Aroclor 1221 in mg/kg																							
Aroclor 1232 in mg/kg																							
Aroclor 1242 in mg/kg																							
Aroclor 1248 in mg/kg																							
Aroclor 1254 in mg/kg																							
Aroclor 1260 in mg/kg																							
Total PCBs (Sum of Aroclors) in mg/kg	10	10																					

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsat. Soil.
 SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-4 - Excavation Verification Soil Quality Data for CN-B-2 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsat. Soil	Sidewall Samples in Place																
			CNB2-S34 3/15/14 (4 ft) SAT	CNB2-S35 3/15/14 (8 ft) SAT	CNB2-S36 3/15/14 (12 ft) SAT	CNB2-S37 3/15/14 (4 ft) SAT	CNB2-S38 3/15/14 (8 ft) SAT	CNB2-S39 3/15/14 (12 ft) SAT	CNB2-S40 3/15/14 (4 ft) SAT	CNB2-S41 3/15/14 (8 ft) SAT	CNB2-S42 3/15/14 (12 ft) SAT	CNB2-S43 3/15/14 (4 ft) SAT	CNB2-S44 3/15/14 (8 ft) SAT	CNB2-S45 3/15/14 (12 ft) SAT	CNB2-S49 3/19/14 (12 ft) SAT	CNB2-S50 3/20/14 (3 ft)	CNB2-S51 3/20/14 (3 ft)	CNB2-S52 3/20/14 (3 ft)	CNB2-S53 3/20/14 (3 ft)
Total Petroleum Hydrocarbons (TPH)																			
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	320 x	50 U	50 U	50 U	50 U	50 U	200 U	50 U	50 U	200 U	250 U	50 U	50 U	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	1,500	250 U	250 U	250 U	250 U	250 U	1,000 U	250 U	250 U	1,000 U	1,250 U	250 U	250 U	250 U	250 U
Total TPHs in mg/kg	2,000	2,000	ND	ND	1,820	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																			
Arsenic in mg/kg	20	20	1.43	3.52	5.21 J	5.64	3.28	7.53	3.22	3.31	1 U	3.45	3.07	1 U	8.89	8.28	1.93	4.96	4.49
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Copper in mg/kg	36	36	10.9	4.78	77.6	26	5.12	37.2	9.67	4.94	35.7	14	5.6	15.9	15.2	37.1	9.53	22.7	11.9
Lead in mg/kg	81	1,000	1.87	1.55	121	4.15	1.59	8.24	1.99	1.62	16.7	2.25	1.71	15.9	13.2	7.64	3.12	10	4.27
Mercury in mg/kg	0.1	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel in mg/kg	48	48	23.6	10.5	9.45 J	22.6	10.4	29.6	12.8	9.84	11.2 J	16.3	11.3	1 U	6	25	11.2	22.2	16.4
Zinc in mg/kg	85	100	13.9	10.4	58.3	35.9	11.2	45	18.1	10.9	17 J	23.9	12	17.1	19.5 J	40.8	15.7 J	39.9	5.2 J
Polycyclic Aromatic Hydrocarbons (PAHs)																			
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.3 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.12
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.3 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.3 U	0.057	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.015
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.54	0.034	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.62	0.059	0.01 U	0.01 U	0.018	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.017
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.3 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.088
Phenanthrene in mg/kg			0.01 U	0.01 U	0.3 U	0.042	0.01 U	0.01 U	0.013	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.093
Pyrene in mg/kg	110,000	110,000	0.01 U	0.01 U	0.68	0.046	0.01 U	0.01 U	0.016	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.013
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.3 U	0.023	0.01 U	0.01 U	0.016	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.032
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.34	0.088	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.54	0.071	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.68	0.099	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.3 U	0.043	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene in mg/kg			0.01 U	0.01 U	0.51	0.19	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.3 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.54	0.041	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	0.73	0.101	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Polychlorinated Biphenyls (PCBs)																			
Aroclor 1016 in mg/kg																			
Aroclor 1221 in mg/kg																			
Aroclor 1232 in mg/kg																			
Aroclor 1242 in mg/kg																			
Aroclor 1248 in mg/kg																			
Aroclor 1254 in mg/kg																			
Aroclor 1260 in mg/kg																			
Total PCBs (Sum of Aroclors) in mg/kg	10	10																	

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsat. Soil.
 SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-4 - Excavation Verification Soil Quality Data for CN-B-2 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Overexcavated Samples																							
			CN-2E 1/15/14 (5-6 ft) OverEx SAT	CN-2E 1/15/14 (9-10 ft) OverEx SAT	CN-2E 1/15/14 (10-11 ft) OverEx SAT	CN-2N 1/15/14 (5-6 ft) OverEx SAT	CN-2N 1/15/14 (10-11 ft) OverEx SAT	CN-2N 1/15/14 (11-12 ft) OverEx SAT	CN-2S 1/15/14 (5-6 ft) OverEx SAT	CN-2S 1/15/14 (9-10 ft) OverEx SAT	CN-2S 1/15/14 (11-12 ft) OverEx SAT	CN-2W 1/15/14 (5-6 ft) OverEx SAT	CN-2W 1/15/14 (9-10 ft) OverEx SAT	CN-2W 1/15/14 (10-11 ft) OverEx SAT	CNB2-B05 3/3/14 (7 ft) OverEx SAT	CNB2-B06 3/3/14 (7 ft) OverEx SAT	CNB2-B07 3/3/14 (4 ft) OverEx SAT	CNB2-B08 3/7/14 (12 ft) OverEx SAT	CNB2-B09 3/7/14 (11 ft) OverEx SAT	CNB2-B11 3/7/14 (11 ft) OverEx SAT	CNB2-B12 3/7/14 (11 ft) OverEx SAT	CNB2-B13 3/7/14 (11 ft) OverEx SAT				
Total Petroleum Hydrocarbons (TPH)																										
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	500 U	500 U	500 U	50 U	50 U	50 U	50 U	50 U	500 U	50 U	500 U	50 U	50 U	50 U	50 U	50 U	500 U	50 U	50 U	50 U				
Oil Range Hydrocarbons in mg/kg	2,000	2,000	120,000	33,000	170,000	5,900	5,200	250 U	250 U	9,400	260,000	250 U	86,000	4,600	1,800	600	250 U	2,500	51,000	250 U	1,800	13,000				
Total TPHs in mg/kg	2,000	2,000	120,000	33,200	170,000	5,920	5,220	ND	ND	9,420	260,000	ND	86,200	4,620	1,820	625	ND	2,520	51,200	ND	1,820	13,000				
Metals																										
Arsenic in mg/kg	20	20																	6.32	1 U	8.04	6.68	20.6			
Cadmium in mg/kg	3,500	3,500																1 U	1 U	1 U	1 U	1 U				
Copper in mg/kg	36	36																	56.5	17	38.5	20.2	87			
Lead in mg/kg	81	1,000																	161	33.6	5.83	46.4	62.7			
Mercury in mg/kg	0.1	0.1																	0.14	0.1 U	0.1 U	0.1 U	0.1 U			
Nickel in mg/kg	48	48																	18.2	4.45	10	1 U	48.8			
Zinc in mg/kg	85	100																	39.7	8.06	5.22	18.7	256			
Polycyclic Aromatic Hydrocarbons (PAHs)																										
Acenaphthene in mg/kg	210,000	210,000																	0.078	0.062	0.01 U	0.25	0.5 U	0.05 U	0.05 U	0.5 U
Acenaphthylene in mg/kg																			0.13	0.26	0.01 U	0.29	0.5 U	0.05 U	0.05 U	0.59
Anthracene in mg/kg	1,100,000	1,100,000																	0.17	0.26	0.01 U		0.5 U	0.05 U	0.05 U	0.88
Benzo(g,h,i)perylene in mg/kg																			0.6	0.91	0.01 U	2.7	0.5 U	0.05 U	0.05 U	2.4
Fluoranthene in mg/kg	140,000	140,000																	1.1	2.9	0.01	8.5	0.53	0.05 U	0.05 U	6.8
Fluorene in mg/kg	140,000	140,000																	0.11	0.14	0.01 U	0.38	0.5 U	0.05 U	0.05 U	0.5 U
Phenanthrene in mg/kg																			1.1	1.5	0.01 U	5.4	0.5 U	0.05 U	0.05 U	4.7
Pyrene in mg/kg	110,000	110,000																	1.3	2.8	0.01 U	8.6	0.89	0.05 U	0.05 U	8.2
Naphthalene in mg/kg	70,000	70,000																	0.37	0.15	0.015	0.13	0.5 U	0.05 U	0.076	0.5 U
Benz(a)anthracene in mg/kg																			0.64	0.94	0.01 U	3.7	1.1	0.05 U	0.05 U	3.1
Benzo(a)pyrene in mg/kg																			0.74	1.2	0.01 U	3.9	0.5 U	0.05 U	0.05 U	3.6
Benzo(b)fluoranthene in mg/kg																			1	1.7	0.01 U	4.3	0.5 U	0.05 U	0.05 U	4.2
Benzo(k)fluoranthene in mg/kg																			0.34	0.49	0.01 U		0.5 U	0.05 U	0.05 U	1.5
Chrysene in mg/kg																			0.85	1.5	0.01 U	3.8	1.4	0.05 U	0.05 U	3.8
Dibenzo(a,h)anthracene in mg/kg																			0.11	0.19	0.01 U		0.5 U	0.05 U	0.05 U	0.54
Indeno(1,2,3-cd)pyrene in mg/kg																			0.59	0.99	0.01 U	2.8	0.5 U	0.05 U	0.05 U	2.5
Total cPAHs TEQ in mg/kg	0.4	7.9																	1.02	1.65	ND	5.21	0.474	ND	ND	4.82
Polychlorinated Biphenyls (PCBs)																										
Aroclor 1016 in mg/kg																										
Aroclor 1221 in mg/kg																										
Aroclor 1232 in mg/kg																										
Aroclor 1242 in mg/kg																										
Aroclor 1248 in mg/kg																										
Aroclor 1254 in mg/kg																										
Aroclor 1260 in mg/kg																										
Total PCBs (Sum of Aroclors) in mg/kg	10	10																								

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-4 - Excavation Verification Soil Quality Data for CN-B-2 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Overexcavated Samples																			
			CNB2-B20 3/15/14 (16 ft) OverEx SAT	FD 3/15/14 (16 ft) OverEx SAT	CNB2-B22 3/15/14 (14 ft) OverEx SAT	CNB2-B23 3/15/14 (14 ft) OverEx SAT	CNB2-S10 3/3/14 (6 ft) OverEx SAT	CNB2-S14 3/7/14 (6 ft) OverEx SAT	CNB2-S15 3/7/14 (10 ft) OverEx SAT	CNB2-S16 3/7/14 (6 ft) OverEx SAT	CNB2-S17 3/7/14 (10 ft) OverEx SAT	CNB2-S18 3/7/14 (6 ft) OverEx SAT	CNB2-S19 3/7/14 (10 ft) OverEx SAT	CNB2-S20 3/7/14 (6 ft) OverEx SAT	CNB2-S21 3/7/14 (10 ft) OverEx SAT	CNB2-S22 3/7/14 (6 ft) OverEx SAT	CNB2-S23 3/7/14 (10 ft) OverEx SAT	CNB2-S24 3/7/14 (6 ft) OverEx SAT	CNB2-S25 3/7/14 (10 ft) OverEx SAT	CNB2-S46 3/15/14 (4 ft) OverEx SAT	CNB2-S47 3/15/14 (8 ft) OverEx SAT	CNB2-S48 3/15/14 (12 ft) OverEx SAT
Total Petroleum Hydrocarbons (TPH)																						
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	200 U	200 U	200 U	38,000 x	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	660 x
Oil Range Hydrocarbons in mg/kg	2,000	2,000	1,000 U	1,000 U	1,000 U	120,000	250 U	250 U	16,000	250 U	18,000	250 U	250 U	250 U	250 U	3,700	250 U	9,800	4,900	250 U	250 U	3,200
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	158,000	ND	ND	16,000	ND	18,000	ND	ND	ND	ND	3,720	ND	9,820	4,920	ND	ND	3,860
Metals																						
Arsenic in mg/kg	20	20	10.5 J	6.95 J	1 U	1 U	5.53	5.85	58	6.32	11.3	5.77	6.92	4.23	56	20.5	24.9	14.8	38.8	4.01	4.47	23.5
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Copper in mg/kg	36	36	123	136	11	4.62	22.2	24	156	25.9	132	25	40.8	18.2	153	95.5	193	154	104	12.3	7.27	53.3
Lead in mg/kg	81	1,000	156	152	21.1	25.4	9.56	4.22	201	5.72	175	5.74	11.9	4.14	192	183	119	258	161	2	1.91	65
Mercury in mg/kg	0.1	0.1	0.13	0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U	0.19	0.1 U	0.1 U	0.1 U	0.1 U
Nickel in mg/kg	48	48	7.85	7.52 J	8.85	1 U	18.5	19.6	31.7	21.5	11.4	21.8	14.9	25.6	42.7	14.8	29	23.6	16.5	14.5	11.6	12.7
Zinc in mg/kg	85	100	5.4 J	8.48 J	10.4	1 U	31.4 J	32.8	502	35.9	147	36.5	72.4	40.6	703	120	74.1	411	145	22.1	14.9	94.6
Polycyclic Aromatic Hydrocarbons (PAHs)																						
Acenaphthene in mg/kg	210,000	210,000	0.05 U	0.05 U	0.05 U	0.3 U	0.01 U	0.01 U	5 U	0.01 U	5 U	0.01 U	0.1 U	0.01 U	0.05 U	0.5 U	0.01 U	0.5 U	0.05 U	0.01 U	0.01 U	0.04 U
Acenaphthylene in mg/kg			0.05 U	0.05 U	0.05 U	0.3 U	0.01 U	0.01 U	5 U	0.01 U	5 U	0.01 U	0.15	0.01 U	0.25	0.56	0.01 U	0.5 U	0.05 U	0.01 U	0.01 U	0.04 U
Anthracene in mg/kg	1,100,000	1,100,000	0.05 U	0.05 U	0.05 U	0.3 U	0.01 U	0.01 U	5 U	0.01 U	5 U	0.01 U	0.21	0.01 U	0.26	0.5 U	0.01 U	0.5 U	0.05 U	0.01 U	0.01 U	0.04 U
Benzo(g,h,i)perylene in mg/kg			0.05 U	0.05 U	0.05 U	0.79	0.01 U	0.01 U	6.7	0.01 U	5.5	0.01 U	0.72	0.011	2.3	3.2	0.01 U	2.2 J	0.13	0.01 U	0.01 U	0.075
Fluoranthene in mg/kg	140,000	140,000	0.05 U	0.05 U	0.05 U	0.77	0.01 U	0.01 U	9	0.021	8	0.027	2	0.027	2.7	1.2	0.01 U	0.5 U	0.16	0.01 U	0.01 U	0.1
Fluorene in mg/kg	140,000	140,000	0.05 U	0.05 U	0.05 U	0.47	0.01 U	0.01 U	5 U	0.01 U	5 U	0.01 U	0.11	0.01 U	0.058	0.5 U	0.01 U	0.5 U	0.05 U	0.01 U	0.01 U	0.04 U
Phenanthrene in mg/kg			0.05 U	0.05 U	0.05 U	0.3 U	0.01 U	0.01 U	5 U	0.018	5 U	0.018	1.5	0.025	0.9	0.5 U	0.01 U	0.5 U	0.054	0.01 U	0.01 U	0.042
Pyrene in mg/kg	110,000	110,000	0.05 U	0.05 U	0.05 U	2.7	0.01 U	0.01 U	11	0.02	9.5	0.028	2.1	0.027	3	1.8	0.01 U	0.72	0.2	0.01 U	0.01 U	0.13
Naphthalene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.3 U	0.01 U	0.01 U	5 U	0.016	5 U	0.023	0.1 U	0.01 U	0.11	0.5 U	0.01 U	0.5 U	0.05 U	0.01 U	0.01 U	0.04 U
Benzo(a)anthracene in mg/kg			0.05 U	0.05 U	0.05 U	1.8	0.01 U	0.01 U	5	0.01 U	5 U	0.01 U	0.81	0.013	2	1.3	0.01 U	0.5 U	0.079	0.01 U	0.01 U	0.07
Benzo(a)pyrene in mg/kg			0.05 U	0.05 U	0.05 U	1.6	0.01 U	0.01 U	8.1	0.01 U	6.4	0.01 U	1	0.018	3	4.3	0.01 U	1.1 J	0.092	0.01 U	0.01 U	0.071
Benzo(b)fluoranthene in mg/kg			0.05 U	0.05 U	0.05 U	1.9	0.01 U	0.01 U	9.7	0.01 U	7.7	0.01 U	1.3	0.02	3.4	4.3	0.01 U	1.6 J	0.15	0.01 U	0.01 U	0.11
Benzo(k)fluoranthene in mg/kg			0.05 U	0.05 U	0.05 U	0.3 U	0.01 U	0.01 U	5 U	0.01 U	5 U	0.01 U	0.38	0.01 U	1.1	1.5	0.01 U	0.5 U	0.057	0.01 U	0.01 U	0.04 U
Chrysene in mg/kg			0.05 U	0.05 U	0.05 U	5.3	0.01 U	0.01 U	7.1	0.01 U	6.1	0.01 U	1.1	0.018	2.5	1.8	0.01 U	0.68	0.13	0.01 U	0.01 U	0.096
Dibenzo(a,h)anthracene in mg/kg			0.05 U	0.05 U	0.05 U	1.4	0.01 U	0.01 U	5 U	0.01 U	5 U	0.01 U	0.13	0.01 U	0.47	0.68	0.01 U	0.58 J	0.05 U	0.01 U	0.01 U	0.04 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.05 U	0.05 U	0.05 U	0.5	0.01 U	0.01 U	6.2	0.01 U	5.3	0.01 U	0.72	0.01	2.4	3.3	0.01 U	1.7 J	0.11	0.01 U	0.01 U	0.078
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	ND	2.23	ND	ND	10.8	ND	8.51	ND	1.35	0.0235	3.96	5.43	ND	1.54 J	0.135	ND	ND	0.102
Polychlorinated Biphenyls (PCBs)																						
Aroclor 1016 in mg/kg							0.02 U															
Aroclor 1221 in mg/kg							0.02 U															
Aroclor 1232 in mg/kg							0.02 U															
Aroclor 1242 in mg/kg							0.02 U															
Aroclor 1248 in mg/kg							0.02 U															
Aroclor 1254 in mg/kg							0.02 U															
Aroclor 1260 in mg/kg							0.02 U															
Total PCBs (Sum of Aroclors) in mg/kg	10	10					ND															

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-5 - Excavation Verification Soil Quality Data for GF-11 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place			Sidewall Samples in Place								Pre-Excavation Characterization Samples										
		GF11-B01 10/11/13 (3 ft)	GF11-B02 10/11/13 (3 ft)	GF11-B02 FD 10/11/13 (3 ft)	GF11-S01 10/11/13 (1.5 ft)	GF11-S02 10/11/13 (1.5 ft)	GF11-S03 10/11/13 (1.5 ft)	GF11-S04 10/11/13 (1.5 ft)	GF11-S05 10/11/13 (1.5 ft)	GF11-S06 10/11/13 (1.5 ft)	GF11-S07 10/11/13 (1.5 ft)	GF11-TP1-B 8/22/13 (3 ft)	GF11-TP1-S 8/22/13 (0-3 ft)	GF11-TP2-B 8/22/13 (3 ft)	GF11-TP2-S 8/22/13 (0-3 ft)	GF11-TP3-B 8/22/13 (3 ft)	GF11-TP3-S 8/22/13 (0-3 ft)	GF11-TP4-B 8/22/13 (3 ft)	GF11-TP4-S 8/22/13 (0-3 ft)	GF11-TP5-B 8/22/13 (3 ft)	GF11-TP5-S 8/22/13 (0-3 ft)	GF11-TP6-B 8/22/13 (3 ft)	GF11-TP6-S 8/22/13 (0-3 ft)
Metals																							
Arsenic in mg/kg	20	1 U	4.65	5.16	3.81	5.3	8.74	6.26	6.11	3.39	2.9	2.78	3.6	2.92	4.17	3.39	6.34	2.8	4.36	2.73	3.56	13.6	9.87
Cadmium in mg/kg	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium (Total) in mg/kg	5,300,000											6.02	13.4	15.9	10.3	10.9	22.8	12.5	13.1	12.3	11.3	13.7	13.6
Copper in mg/kg	36	3.12 J	22 J	31.6 J	31.8 J	29.2 J	32.9 J	30.3 J	26.3 J	36.2 J	99.2 J	5.36	18.2	17.4	16.7	11.9	52.8	17	40.3	28.3	18.9	39.7	24.7
Lead in mg/kg	1,000	40.1	15.6	24.7	44.4	448	32.8	28.1	58	59	169	22.2	12.5	16.4	17.7	7.91	14.2	2.4	120	9.06	30.3	40.8	34.9
Mercury in mg/kg	0.1	0.33	0.1	0.43	0.1 U	0.1 U	0.11	0.16	0.5	0.39	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.3	0.36	0.1 U	0.15	0.1 U	0.14	0.1 U	0.1 U
Nickel in mg/kg	48	1 U	6.86	7.92	15.6	17.5	15.9	12.8	9.23	13.5	17.3	11.2	17.2	12.4	11.6	12.4	20	12.5	32.3	14.3	13.9	16.8	14.1
Zinc in mg/kg	100	1.33 J	17.5 J	22 J	35.9 J	39.1 J	63.3 J	43.6 J	18.2 J	45.6 J	126 J	18.4	34.1	25.6	24.4	22	50.2	25.9	81.4	25.7	32.3	81.6	64.6
Polycyclic Aromatic Hydrocarbons (PAHs)																							
Acenaphthene in mg/kg	210,000	1.6	3.9	3.8	0.01 U	0.01 U	0.01 U	0.01 U	0.034	0.018	0.11												
Acenaphthylene in mg/kg		0.018	0.16	0.15	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.045												
Anthracene in mg/kg	1,100,000	0.012	4.4	4.3	0.013	0.01 U	0.019	0.01 U	0.034	0.013	0.037												
Benzo(g,h,i)perylene in mg/kg		0.023	0.38	0.39	0.027	0.028	0.04	0.019	0.034	0.054	0.11												
Fluoranthene in mg/kg	140,000	0.065	39	38	0.06	0.036	0.13	0.048	0.17	0.083	0.075												
Fluorene in mg/kg	140,000	0.45	6.7	6.5	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.15												
Phenanthrene in mg/kg		0.041	40	39	0.053	0.026	0.062	0.026	0.13	0.042	0.022												
Pyrene in mg/kg	110,000	0.081	28	27	0.059	0.038	0.13	0.047	0.17	0.098	0.12												
Naphthalene in mg/kg	70,000	0.023	0.017	0.021	0.016	0.01	0.018	0.01 U	0.018	0.013	0.01 U												
Benzo(a)anthracene in mg/kg		0.024	5.2	5.1	0.028	0.022	0.057	0.02	0.057	0.044	0.12												
Benzo(a)pyrene in mg/kg		0.024	1.2	1.2	0.03	0.023	0.048	0.019	0.046	0.051	0.17												
Benzo(b)fluoranthene in mg/kg		0.037	2.6	2.5	0.042	0.03	0.08	0.037	0.074	0.085	0.16												
Benzo(k)fluoranthene in mg/kg		0.011	0.73	0.8	0.011	0.011	0.027	0.012	0.026	0.027	0.053												
Chrysene in mg/kg		0.036	5.1	4.9	0.037	0.036	0.085	0.027	0.079	0.083	0.19												
Dibenzo(a,h)anthracene in mg/kg		0.01 U	0.13	0.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015	0.033												
Indeno(1,2,3-cd)pyrene in mg/kg		0.021	0.5	0.51	0.025	0.019	0.04	0.018	0.036	0.052	0.096												
Total cPAHs TEQ in mg/kg	7.9	0.0342	2.17	2.15	0.0415	0.0321	0.0698	0.0285	0.0666	0.0741	0.218												

Notes

All soils in this excavation are unsaturated. Concentrations shaded and bolded indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

J = Analyte was positively identified. The reported result is an estimate.

U = Analyte was not detected at or above the reported result.

Table A-6 - Excavation Verification Soil Quality Data for Heavy Duty Shop Sump Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsaturated Soil	Bottom Sample in Place	Sidewall Samples in Place			
		HDS-EX-BTM 9/12/13 (4 ft)	HDS-EX-ESW 9/12/13 (2 ft)	HDS-EX-NSW 9/12/13 (2 ft)	HDS-EX-SSW 9/12/13 (2 ft)	HDS-EX-WSW 9/12/13 (2 ft)
Total Petroleum Hydrocarbons (TPH)						
Gasoline Range Hydrocarbons in mg/kg	100	2 U	2 U	2 U	2 U	2 U
Diesel Range Hydrocarbons in mg/kg	2,000	50 U	50 U	50 U	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	250 U	250 U	250 U	250 U	250 U
Total TPHs in mg/kg	2,000	ND	ND	ND	ND	ND
Metals						
Antimony in mg/kg	1,400	1 U	1 U	1.51	1 U	1 U
Arsenic in mg/kg	20	7.79	4.05	13.2	4.02	6.09
Beryllium in mg/kg	7,000	1 U	1 U	1 U	1 U	1 U
Cadmium in mg/kg	3,500	1 U	1 U	1 U	1 U	1 U
Chromium (Total) in mg/kg	5,300,000	11.3	9.07	12.4	10.6	9.45
Copper in mg/kg	36	16.1	12.2	19.6	12.1	21.4
Lead in mg/kg	1,000	53.2	26	62.5	5.3	17.1
Mercury in mg/kg	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel in mg/kg	48	17.2 J	12.9 J	17 J	14.3 J	13 J
Selenium in mg/kg	18,000	1 U	1 U	1 U	1 U	1 U
Silver in mg/kg	18,000	1 U	1 U	1 U	1 U	1 U
Thallium in mg/kg	35	1 U	1 U	1 U	1 U	1 U
Zinc in mg/kg	100	45.6	27.8	114	23.7	48.6
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene in mg/kg	210,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Acenaphthylene in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Anthracene in mg/kg	1,100,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Benzo(g,h,i)perylene in mg/kg		0.03 U	0.072	0.03 U	0.03 U	0.03 U
Dibenzofuran in mg/kg	3,500	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Fluoranthene in mg/kg	140,000	0.048	0.53	0.03 U	0.03 U	0.03 U
Fluorene in mg/kg	140,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Phenanthrene in mg/kg		0.057	0.053	0.03 U	0.03 U	0.03 U
Pyrene in mg/kg	110,000	0.078	0.5	0.03 U	0.03 U	0.03 U
2-Methylnaphthalene in mg/kg	14,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Naphthalene in mg/kg	70,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Benz(a)anthracene in mg/kg		0.03	0.0041	0.0062	0.002 U	0.012
Benzo(a)pyrene in mg/kg		0.036	0.0054	0.0083	0.0023	0.014
Benzo(b)fluoranthene in mg/kg		0.046	0.0075	0.011	0.0034 J	0.017
Benzo(k)fluoranthene in mg/kg		0.017	0.0026	0.0031	0.002 U	0.005
Chrysene in mg/kg		0.042	0.0059	0.0097	0.0026	0.017
Dibenzo(a,h)anthracene in mg/kg		0.0078	0.002 U	0.002 U	0.002 U	0.0027
Indeno(1,2,3-cd)pyrene in mg/kg		0.028	0.0052	0.0071	0.0021	0.011
Total cPAHs TEQ in mg/kg	7.9	0.0493	0.0075	0.0112	0.00318	0.0189
Other Semivolatiles						
1,2,4-Trichlorobenzene in mg/kg	4,500	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,2-Dichlorobenzene in mg/kg	320,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,3-Dichlorobenzene in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
1,4-Dichlorobenzene in mg/kg	24,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
2,4,5-Trichlorophenol in mg/kg	350,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4,6-Trichlorophenol in mg/kg	3,500	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dichlorophenol in mg/kg	11,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dimethylphenol in mg/kg	70,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dinitrophenol in mg/kg	7,000	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
2-Chloronaphthalene in mg/kg	280,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
2-Chlorophenol in mg/kg	18,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Methylphenol in mg/kg	180,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Nitroaniline in mg/kg	35,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
2-Nitrophenol in mg/kg		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
3 & 4 Methylphenol in mg/kg		0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
3-Nitroaniline in mg/kg		3 U	3 U	3 U	3 U	3 U

Aspect Consulting

6/20/2014

V:\110207 KC Everett Mill\Deliverables\VA Confirmation GW Monitoring Work Plan\Final\APP A data tables\Table 9 - Heavy Duty Shop Sump Area.xlsx

Table A-6

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Table A-6 - Excavation Verification Soil Quality Data for Heavy Duty Shop Sump Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsaturated Soil	Bottom Sample in Place	Sidewall Samples in Place			
		HDS-EX-BTM 9/12/13 (4 ft)	HDS-EX-ESW 9/12/13 (2 ft)	HDS-EX-NSW 9/12/13 (2 ft)	HDS-EX-SSW 9/12/13 (2 ft)	HDS-EX-WSW 9/12/13 (2 ft)
4,6-Dinitro-2-methylphenol in mg/kg		0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Bromophenyl phenyl ether in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
4-Chloro-3-methylphenol in mg/kg		0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Chloroaniline in mg/kg	660	3 U	3 U	3 U	3 U	3 U
4-Chlorophenyl phenyl ether in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
4-Nitroaniline in mg/kg		3 U	3 U	3 U	3 U	3 U
4-Nitrophenol in mg/kg		0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Benzoic acid in mg/kg	14,000,000	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Benzyl alcohol in mg/kg	350,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Benzyl butyl phthalate in mg/kg	69,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bis(2-chloro-1-methylethyl) ether in mg/kg	1,900	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bis(2-chloroethoxy)methane in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bis(2-chloroethyl) ether in mg/kg	120	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Bis(2-ethylhexyl) phthalate in mg/kg	9,400	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Carbazole in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Diethyl phthalate in mg/kg	2,800,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Dimethyl phthalate in mg/kg		0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Di-n-butyl phthalate in mg/kg	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Di-n-octyl phthalate in mg/kg	35,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Hexachlorobenzene in mg/kg	82	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Hexachlorobutadiene in mg/kg	1,700	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Hexachlorocyclopentadiene in mg/kg	21,000	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
Hexachloroethane in mg/kg	2,500	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Isophorone in mg/kg	140,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Nitrobenzene in mg/kg	7,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
N-Nitroso-di-n-propylamine in mg/kg	19	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
N-Nitrosodiphenylamine in mg/kg	27,000	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Pentachlorophenol in mg/kg	330	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Phenol in mg/kg	1,100,000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2,4-Dinitrotoluene in mg/kg	420	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
2,6-Dinitrotoluene in mg/kg	88	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Volatile Organic Compounds (VOC)						
1,1,1,2-Tetrachloroethane in mg/kg	5,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,1-Trichloroethane in mg/kg	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,2,2-Tetrachloroethane in mg/kg	660	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,2-Trichloroethane in mg/kg	2,300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloroethane in mg/kg	23,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloroethene in mg/kg	180,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloropropene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene in mg/kg		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane in mg/kg	4.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trimethylbenzene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dibromo-3-chloropropane in mg/kg	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB) in mg/kg	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichloroethane (EDC) in mg/kg	1,400	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichloropropane in mg/kg	3,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3,5-Trimethylbenzene in mg/kg	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,3-Dichloropropane in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2,2-Dichloropropane in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Butanone in mg/kg	2,100,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chlorotoluene in mg/kg	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
2-Hexanone in mg/kg		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chlorotoluene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
4-Methyl-2-pentanone in mg/kg	280,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone in mg/kg	3,200,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzene in mg/kg	2,400	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U

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V:\110207 KC Everett Mill\Deliverables\VA Confirmation GW Monitoring Work Plan\Final\APP A data tables\Table 9 - Heavy Duty Shop Sump Area.xlsx

Table A-6

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Table A-6 - Excavation Verification Soil Quality Data for Heavy Duty Shop Sump Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsaturated Soil	Bottom Sample in Place	Sidewall Samples in Place			
		HDS-EX-BTM 9/12/13 (4 ft)	HDS-EX-ESW 9/12/13 (2 ft)	HDS-EX-NSW 9/12/13 (2 ft)	HDS-EX-SSW 9/12/13 (2 ft)	HDS-EX-WSW 9/12/13 (2 ft)
Bromobenzene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromodichloromethane in mg/kg	2,100	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromoform in mg/kg	17,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Bromomethane in mg/kg	4,900	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride in mg/kg	1,900	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chlorobenzene in mg/kg	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chloroethane in mg/kg		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform in mg/kg	4,200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Chloromethane in mg/kg		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
cis-1,3-Dichloropropene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dibromochloromethane in mg/kg	1,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dibromomethane in mg/kg	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dichlorodifluoromethane in mg/kg	700,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene in mg/kg	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Isopropylbenzene in mg/kg	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Methylene chloride in mg/kg	21,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene in mg/kg	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
p-Isopropyltoluene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
sec-Butylbenzene in mg/kg	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Styrene in mg/kg	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
tert-Butylbenzene in mg/kg	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Tetrachloroethene (PCE) in mg/kg	21,000	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Toluene in mg/kg	280,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
trans-1,2-Dichloroethene in mg/kg	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
trans-1,3-Dichloropropene in mg/kg		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Trichloroethene (TCE) in mg/kg	1,800	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U
Trichlorofluoromethane in mg/kg	1,100,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride in mg/kg	88	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
m,p-Xylenes in mg/kg	700,000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene in mg/kg	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Polychlorinated Biphenyls (PCBs)						
Aroclor 1016 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1221 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1232 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1242 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1248 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1254 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Aroclor 1260 in mg/kg		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total PCBs (Sum of Aroclors) in mg/kg	10	ND	ND	ND	ND	ND

Notes

All soils in this excavation are unsaturated. Concentrations shaded and bolded indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

J - Analyte was positively identified. The reported result is an estimate.

U - Analyte was not detected at or above the reported result.

UJ - Analyte was not detected at or above the reported estimate

Table A-7 - Excavation Verification Soil Quality Data for Hydraulic Barker Vault Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place		Sidewall Samples in Place				Pre-Ex Characterization
			BV-B01 1/17/14 (8 ft) SAT	BV-B02 1/17/14 (8 ft) SAT	BV-S01 1/17/14 (6 ft)	BV-S02 1/17/14 (6 ft)	BV-S03 1/17/14 (6 ft)	BV-S04 1/17/14 (6 ft)	XY Area Vt-TP1 9/3/13 (2 ft) OverEx
Total Petroleum Hydrocarbons (TPH)									
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	73	50 U	50 U	50 U	50 U	50 U	750 x
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	450	7,900
Total TPHs in mg/kg	2,000	2,000	198	ND	ND	ND	ND	475	8,650
Metals									
Arsenic in mg/kg	20	20		2.12					1.53
Barium in mg/kg	700,000	700,000							25.1
Cadmium in mg/kg	3,500	3,500		1 U					1 U
Chromium (Total) in mg/kg	5,300,000	5,300,000							10.2
Copper in mg/kg	36	36		18.7					16.1
Lead in mg/kg	81	1,000		9.37					3.28
Mercury in mg/kg	0.1	0.1		0.1 U					0.1 U
Nickel in mg/kg	48	48		18.5					25.5
Zinc in mg/kg	85	100		33.9 J					40.5
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.024	0.01 U	0.01 U	0.039	
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.044	0.01 U	0.01 U	0.057	
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01	0.027	0.01 U	0.01 U	0.027	
Fluoranthene in mg/kg	140,000	140,000	0.033	0.03	0.16	0.013	0.01 U	0.36	
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.04	
Phenanthrene in mg/kg			0.021 J	0.016	0.18	0.01 U	0.01 U	0.21	
Pyrene in mg/kg	110,000	110,000	0.031	0.03	0.17	0.015	0.01 U	0.31	
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.019	
Benz(a)anthracene in mg/kg			0.01 U	0.012	0.066	0.01 U	0.01 U	0.065	
Benzo(a)pyrene in mg/kg			0.01 U	0.013	0.051	0.01 U	0.01 U	0.052	
Benzo(b)fluoranthene in mg/kg			0.013	0.016	0.055	0.01 U	0.01 U	0.062	
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.026	0.01 U	0.01 U	0.02	
Chrysene in mg/kg			0.012	0.015	0.081	0.01 U	0.01 U	0.08	
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.019 J	0.01 U	0.01 U	0.031 J	
Total cPAHs TEQ in mg/kg	0.4	7.9	0.00842	0.0175	0.0689	ND	ND	0.0711	
Polychlorinated Biphenyls (PCBs)									
Aroclor 1016 in mg/kg									0.1 U
Aroclor 1221 in mg/kg									0.1 U
Aroclor 1232 in mg/kg									0.1 U
Aroclor 1242 in mg/kg									0.1 U
Aroclor 1248 in mg/kg									0.1 U
Aroclor 1254 in mg/kg									0.1 U
Aroclor 1260 in mg/kg									0.1 U
Total PCBs (Sum of Aroclors) in mg/kg	10	10							ND

Notes

- Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
- Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
- SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
- J = Analyte was positively identified. The reported result is an estimate.
- U = Analyte was not detected at or above the reported result.
- x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-8 - Excavation Verification Soil Quality Data for Naval Reserve Parcel UST Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place						Sidewall Samples in Place															
			NRU-B01 1/22/14 (14 ft) SAT	NRU-B02 1/22/14 (14 ft) SAT	NRU-B03 1/23/14 (14 ft) SAT	NRU-B04 1/24/14 (14 ft) SAT	NRU-B06 1/30/14 (14 ft) SAT	NRU-B07 1/30/14 (14 ft) SAT	NRU-S01 1/23/14 (4 ft)	NRU-S02 1/23/14 (8 ft)	NRU-S03 1/22/14 (12 ft) SAT	NRU-S04 1/24/14 (4 ft)	NRU-S04 FD 1/24/14 (4 ft)	NRU-S05 1/24/14 (8 ft)	NRU-S06 1/23/14 (12 ft) SAT	NRU-S07 1/23/14 (4 ft)	NRU-S08 1/23/14 (8 ft)	NRU-S09 1/22/14 (12 ft) SAT	NRU-S10 1/24/14 (4 ft)	NRU-S11 1/24/14 (8 ft)	NRU-S12 1/22/14 (12 ft) SAT	NRU-S13 1/23/14 (4 ft)		
Total Petroleum Hydrocarbons (TPH)																								
Gasoline Range Hydrocarbons in mg/kg	100	100					2 U	2 U																
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100	50 U	50 U	50 U	150	50 U	50 U	50 U	50 U	50 U	50 U	72	50 U	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	300	250 U	250 U	250 U	
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	225	ND	ND	ND	275	ND	ND	ND	325	ND	197	ND		
Polycyclic Aromatic Hydrocarbons (PAHs)																								
Acenaphthene in mg/kg	210,000	210,000	0.082	0.076	0.087	0.01 U	0.04 U	0.01 U	0.057	0.019	0.17	0.01 UJ	0.85 J	0.027	0.17	0.046	0.01 U	0.3	0.01 U	0.018	0.096	0.017		
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.04 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.036	0.01 U	0.01 U	0.04 U	0.01 U	0.035	0.011	0.082	0.012 J	0.32 J	0.031	0.084	0.055	0.01 U	0.02	0.01 U	0.011	0.038	0.019		
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.03	0.017	0.016	0.12	0.02	0.065	0.038	0.014	0.038	0.056	0.1 J	0.24 J	0.17	0.01 U	0.01 U	0.027	0.035	0.019	0.038		
Dibenzofuran in mg/kg	3,500	3,500																						
Fluoranthene in mg/kg	140,000	140,000	0.054	0.12	0.072	0.057	0.24	0.051	0.21	0.14	0.11	0.15 J	0.57 J	0.31 J	0.53 J	0.36	0.01 U	0.051	0.05	0.09	0.097	0.11		
Fluorene in mg/kg	140,000	140,000	0.01 U	0.096	0.077	0.01 U	0.04 U	0.01 U	0.04	0.01 U	0.17	0.01 UJ	0.49 J	0.017	0.1	0.034	0.01 U	0.11	0.01 U	0.01 U	0.057	0.018		
Phenanthrene in mg/kg			0.031	0.23	0.06	0.042	0.15	0.027	0.14	0.027	0.036	0.043 J	0.084 J	0.09	0.24 J	0.23	0.01 U	0.018	0.022	0.032	0.036	0.048		
Pyrene in mg/kg	110,000	110,000	0.052	0.11	0.069	0.054	0.26	0.056	0.22	0.13	0.14	0.17 J	0.62 J	0.3 J	0.57 J	0.39	0.01 U	0.049	0.054	0.098	0.11	0.13		
2-Methylnaphthalene in mg/kg	14,000	14,000																						
Naphthalene in mg/kg	70,000	70,000	0.029	0.033	0.016	0.025	0.045	0.016	0.025	0.047	0.033	0.01 UJ	0.061 J	0.018	0.033	0.045	0.01 U	0.02	0.01 U	0.01 U	0.02	0.018		
Benz(a)anthracene in mg/kg			0.01 U	0.04	0.018	0.014	0.11	0.017	0.083	0.041	0.029	0.064 J	0.18 J	0.13 J	0.28 J	0.16	0.01 U	0.012	0.024	0.032	0.033	0.046		
Benzo(a)pyrene in mg/kg			0.01 U	0.044	0.023	0.019	0.2	0.02	0.099	0.055	0.021	0.062 J	0.12 J	0.16 J	0.4 J	0.23	0.01 U	0.01 U	0.035	0.047	0.028	0.057		
Benzo(b)fluoranthene in mg/kg			0.01	0.054	0.031	0.026	0.25	0.029	0.12	0.063	0.023	0.08 J	0.14 J	0.18 J	0.44 J	0.3	0.01 U	0.01 U	0.045	0.053	0.031	0.065		
Benzo(k)fluoranthene in mg/kg			0.01 U	0.02	0.011	0.01 U	0.081	0.01 U	0.04	0.021	0.01 U	0.03	0.037	0.068 J	0.19 J	0.089	0.01 U	0.01 U	0.013	0.016	0.011	0.024		
Chrysene in mg/kg			0.013	0.051	0.027	0.02	0.24	0.022	0.11	0.046	0.042	0.073 J	0.22 J	0.16 J	0.36 J	0.22	0.01 U	0.015	0.031	0.041	0.048	0.066		
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.04 U	0.01 U	0.019	0.01 U	0.01 U	0.011	0.015	0.017 J	0.06	0.04	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.029	0.017	0.014	0.12	0.016	0.065	0.039	0.011	0.038	0.038	0.1 J	0.26 J	0.17	0.01 U	0.01 U	0.026	0.033	0.015	0.033		
Total cPAHs TEQ in mg/kg	0.4	7.9	0.00813	0.0593	0.0315	0.0256	0.261	0.0274	0.133	0.0724	0.0287	0.085	0.163	0.211	0.527	0.308	ND	0.00835	0.0466	0.0613	0.038	0.075		
Volatile Organic Compounds (VOC)																								
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000					0.2 U	0.05 U																
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000					0.2 U	0.05 U																
1,1,2,2-Tetrachloroethane in mg/kg	660	660					0.2 U	0.05 U																
1,1,2-Trichloroethane in mg/kg	2,300	2,300					0.2 U	0.05 U																
1,1-Dichloroethane in mg/kg	23,000	23,000					0.2 U	0.05 U																
1,1-Dichloroethene in mg/kg	180,000	180,000					0.2 U	0.05 U																
1,1-Dichloropropene in mg/kg							0.2 U	0.05 U																
1,2,3-Trichlorobenzene in mg/kg							1 U	0.25 U																
1,2,3-Trichloropropane in mg/kg	4.4	4.4					0.2 U	0.05 U																
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500					1 U	0.25 U																
1,2,4-Trimethylbenzene in mg/kg							0.2 U	0.05 U																
1,2-Dibromo-3-chloropropane in mg/kg	160	160					2 U	0.5 U																
1,2-Dibromoethane (EDB) in mg/kg	66	66					0.2 U	0.05 U																
1,2-Dichlorobenzene in mg/kg	320,000	320,000					0.2 U	0.05 U																
1,2-Dichloroethane (EDC) in mg/kg	1,400	1,400					0.2 U	0.05 U																
1,2-Dichloropropane in mg/kg	3,600	3,600					0.2 U	0.05 U																
1,3,5-Trimethylbenzene in mg/kg	35,000	35,000					0.2 U	0.05 U																
1,3-Dichlorobenzene in mg/kg							0.2 U	0.05 U																
1,3-Dichloropropane in mg/kg							0.2 U	0.05 U																
1,4-Dichlorobenzene in mg/kg	24,000	24,000					0.2 U	0.05 U																
2,2-Dichloropropane in mg/kg							0.2 U	0.05 U																
2-Butanone in mg/kg	2,100,000	2,100,000					2 U	0.5 U																
2-Chlorotoluene in mg/kg	70,000	70,000					0.2 U	0.05 U																
2-Hexanone in mg/kg							2 U	0.5 U																
4-Chlorotoluene in mg/kg							0.2 U	0.05 U																
4-Methyl-2-pentanone in mg/kg	280,000	280,000					2 U	0.5 U																
Acetone in mg/kg	3,200,000	3,200,000					2 U	0.5 U																
Benzene in mg/kg	2,400	2,400					0.12 U	0.03 U																
Bromobenzene in mg/kg							0.2 U	0.05 U																

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Table A-8

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Table A-8 - Excavation Verification Soil Quality Data for Naval Reserve Parcel UST Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place						Sidewall Samples in Place															
			NRU-B01 1/22/14 (14 ft) SAT	NRU-B02 1/22/14 (14 ft) SAT	NRU-B03 1/23/14 (14 ft) SAT	NRU-B04 1/24/14 (14 ft) SAT	NRU-B06 1/30/14 (14 ft) SAT	NRU-B07 1/30/14 (14 ft) SAT	NRU-S01 1/23/14 (4 ft)	NRU-S02 1/23/14 (8 ft)	NRU-S03 1/22/14 (12 ft) SAT	NRU-S04 1/24/14 (4 ft)	NRU-S04 FD 1/24/14 (4 ft)	NRU-S05 1/24/14 (8 ft)	NRU-S06 1/23/14 (12 ft) SAT	NRU-S07 1/23/14 (4 ft)	NRU-S08 1/23/14 (8 ft)	NRU-S09 1/22/14 (12 ft) SAT	NRU-S10 1/24/14 (4 ft)	NRU-S11 1/24/14 (8 ft)	NRU-S12 1/22/14 (12 ft) SAT	NRU-S13 1/23/14 (4 ft)		
Bromodichloromethane in mg/kg	2,100	2,100					0.2 U	0.05 U																
Bromoform in mg/kg	17,000	17,000					0.2 U	0.05 U																
Bromomethane in mg/kg	4,900	4,900					2 U	0.5 U																
Carbon tetrachloride in mg/kg	1,900	1,900					0.2 U	0.05 U																
Chlorobenzene in mg/kg	70,000	70,000					0.2 U	0.05 U																
Chloroethane in mg/kg							2 U	0.5 U																
Chloroform in mg/kg	4,200	4,200					0.2 U	0.05 U																
Chloromethane in mg/kg							2 U	0.5 U																
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000					0.2 U	0.05 U																
cis-1,3-Dichloropropene in mg/kg							0.2 U	0.05 U																
Dibromochloromethane in mg/kg	1,600	1,600					0.2 U	0.05 U																
Dibromomethane in mg/kg	35,000	35,000					0.2 U	0.05 U																
Dichlorodifluoromethane in mg/kg	700,000	700,000					2 U	0.5 U																
Ethylbenzene in mg/kg	350,000	350,000					0.2 U	0.05 U																
Hexachlorobutadiene in mg/kg	1,700	1,700					1 U	0.25 U																
Isopropylbenzene in mg/kg	350,000	350,000					0.2 U	0.05 U																
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000					0.2 U	0.05 U																
Methylene chloride in mg/kg	21,000	21,000					2 U	0.5 U																
n-Propylbenzene in mg/kg	350,000	350,000					0.2 U	0.05 U																
p-Isopropyltoluene in mg/kg							0.2 U	0.05 U																
sec-Butylbenzene in mg/kg	350,000	350,000					0.2 U	0.05 U																
Styrene in mg/kg	700,000	700,000					0.2 U	0.05 U																
tert-Butylbenzene in mg/kg	350,000	350,000					0.2 U	0.05 U																
Tetrachloroethene (PCE) in mg/kg	21,000	21,000					0.1 U	0.025 U																
Toluene in mg/kg	280,000	280,000					0.2 U	0.05 U																
trans-1,2-Dichloroethene in mg/kg	70,000	70,000					0.2 U	0.05 U																
trans-1,3-Dichloropropene in mg/kg							0.2 U	0.05 U																
Trichloroethene (TCE) in mg/kg	1,800	1,800					0.12 U	0.03 U																
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000					2 U	0.5 U																
Vinyl chloride in mg/kg	88	88					0.2 U	0.05 U																
m,p-Xylenes in mg/kg	700,000	700,000					0.4 U	0.1 U																
o-Xylene in mg/kg	700,000	700,000					0.2 U	0.05 U																
Naphthalene in mg/kg	70,000	70,000																						

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
 J - Analyte was positively identified. The reported result is an estimate.
 U - Analyte was not detected at or above the reported result.
 UJ - Analyte was not detected at or above the reported estimate
 x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-8 - Excavation Verification Soil Quality Data for Naval Reserve Parcel UST Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place																Overexcavated Samples		
			NRU-S16 1/24/14 (12 ft) SAT	NRU-S17 1/24/14 (8 ft)	NRU-S18 1/24/14 (4 ft)	NRU-S19 1/24/14 (8 ft)	NRU-S20 1/24/14 (12 ft) SAT	NRU-S20 FD 1/24/14 (12 ft) SAT	NRU-S21 1/24/14 (4 ft)	NRU-S22 1/24/14 (8 ft)	NRU-S23 1/24/14 (12 ft) SAT	NRU-S24 1/30/14 (4 ft)	NRU-S25 1/30/14 (8 ft) SAT	NRU-S26 1/30/14 (12 ft) SAT	NRU-S27 1/30/14 (4 ft)	NRU-S27 FD 1/30/14 (4 ft)	NRU-S28 1/30/14 (8 ft) SAT	NRU-S29 1/30/14 (12 ft) SAT	NRU-B05 1/27/14 (16 ft) OverEx SAT	NRU-S14 1/23/14 (8 ft) OverEx	NRU-S15 1/23/14 (12 ft) OverEx SAT
Total Petroleum Hydrocarbons (TPH)																					
Gasoline Range Hydrocarbons in mg/kg	100	100										2 U	2 U	2 U	2 U	2 U	2 U	130			
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	320	50 U	65	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	1,300	8,000	2,800	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	770	4,900	1,600	
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	445	ND	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,070	12,900	4,400	
Polycyclic Aromatic Hydrocarbons (PAHs)																					
Acenaphthene in mg/kg	210,000	210,000	0.063	0.09	0.01 U	0.04	0.025	0.035	0.01 U	0.012	0.021	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	1.3	7.9	2.9
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.1 U	0.1 U	0.1 U
Anthracene in mg/kg	1,100,000	1,100,000	0.011	0.031	0.01 U	0.041	0.02	0.035	0.01 U	0.023	0.013	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	1.1	6.5	1.8
Benzo(g,h,i)perylene in mg/kg			0.029	0.022	0.01 U	0.077	0.018	0.02	0.01 U	0.044	0.017	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.15	0.84	0.28
Dibenzofuran in mg/kg	3,500	3,500																			
Fluoranthene in mg/kg	140,000	140,000	0.11	0.089	0.013	0.25	0.05 J	0.089 J	0.014	0.12	0.075	0.01 U	0.013	0.039	0.01 U		0.01	0.01 U	0.38	1.9	2
Fluorene in mg/kg	140,000	140,000	0.018	0.05	0.01 U	0.026	0.019	0.032	0.01 U	0.01	0.017	0.01 U	0.01 U	0.01	0.01 U		0.01 U	0.01 U	1.6	8.7	2.7
Phenanthrene in mg/kg			0.089	0.047	0.01 U	0.17	0.038	0.052	0.011	0.096	0.068	0.01 U	0.01 U	0.036	0.01 U		0.01 U	0.01 U	4	6.4	6.8
Pyrene in mg/kg	110,000	110,000	0.095	0.098	0.015	0.27	0.07 J	0.12 J	0.016	0.13	0.069	0.01 U	0.015	0.04	0.01 U		0.011	0.01 U	1.5	8	2.9
2-Methylnaphthalene in mg/kg	14,000	14,000																			
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.074	0.01 U	0.025	0.012	0.024	0.01 U	0.01 U	0.033	0.01 U	0.01 U	0.02	0.01 U		0.01 U	0.01 U	0.1 U	0.1 U	0.1 U
Benz(a)anthracene in mg/kg			0.032	0.028	0.01 U	0.098	0.023	0.037	0.01 U	0.06	0.023	0.01 U	0.01 U	0.014	0.01 U		0.01 U	0.01 U	0.56	3	0.99
Benzo(a)pyrene in mg/kg			0.044	0.035	0.01 U	0.13	0.023	0.032	0.01 U	0.073	0.024	0.01 U	0.01 U	0.012	0.01 U		0.01 U	0.01 U	0.3	1.6	0.59
Benzo(b)fluoranthene in mg/kg			0.058	0.056	0.011	0.16	0.025	0.039	0.011	0.087	0.033	0.01 U	0.01 U	0.015	0.01 U		0.01 U	0.01 U	0.18	0.86	0.56
Benzo(k)fluoranthene in mg/kg			0.017	0.017	0.01 U	0.055	0.01 U	0.012	0.01 U	0.027	0.011	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.1 U	0.12	0.15
Chrysene in mg/kg			0.047	0.031	0.01 U	0.14	0.032	0.05	0.01	0.082	0.03	0.01 U	0.01 U	0.016	0.01 U		0.01 U	0.01 U	0.84	4.5	1.2
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.1 U	0.26	0.1 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.03	0.021	0.01 U	0.079	0.012	0.016	0.01 U	0.043	0.016	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U	0.01 U	0.1 U	0.25	0.16
Total cPAHs TEQ in mg/kg	0.4	7.9	0.0587	0.048	0.00815	0.173	0.0303	0.0434	0.0082	0.0969	0.0331	ND	ND	0.0166	ND		ND	ND	0.397	2.09	0.793
Volatile Organic Compounds (VOC)																					
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,1,2,2-Tetrachloroethane in mg/kg	660	660										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,1,2-Trichloroethane in mg/kg	2,300	2,300										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,1-Dichloroethane in mg/kg	23,000	23,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,1-Dichloroethene in mg/kg	180,000	180,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,1-Dichloropropene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,2,3-Trichlorobenzene in mg/kg												0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U			
1,2,3-Trichloropropane in mg/kg	4.4	4.4										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500										0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U			
1,2,4-Trimethylbenzene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,2-Dibromo-3-chloropropane in mg/kg	160	160										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
1,2-Dibromoethane (EDB) in mg/kg	66	66										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,2-Dichlorobenzene in mg/kg	320,000	320,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,2-Dichloroethane (EDC) in mg/kg	1,400	1,400										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,2-Dichloropropane in mg/kg	3,600	3,600										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,3,5-Trimethylbenzene in mg/kg	35,000	35,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,3-Dichlorobenzene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,3-Dichloropropane in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
1,4-Dichlorobenzene in mg/kg	24,000	24,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
2,2-Dichloropropane in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
2-Butanone in mg/kg	2,100,000	2,100,000										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
2-Chlorotoluene in mg/kg	70,000	70,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
2-Hexanone in mg/kg												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
4-Chlorotoluene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
4-Methyl-2-pentanone in mg/kg	280,000	280,000										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
Acetone in mg/kg	3,200,000	3,200,000										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
Benzene in mg/kg	2,400	2,400										0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.02 U		
Bromobenzene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			

Aspect Consulting

6/12/2014

V:\110207 KC Everett Mill\Deliverables\IA Confirmation GW Monitoring Work Plan\Final\APP A data tables\Table 11 - Naval Reserve Parcel UST Interim Action Area.xlsx

Table A-8

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Table A-8 - Excavation Verification Soil Quality Data for Naval Reserve Parcel UST Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place																Overexcavated Samples		
			NRU-S16 1/24/14 (12 ft) SAT	NRU-S17 1/24/14 (8 ft)	NRU-S18 1/24/14 (4 ft)	NRU-S19 1/24/14 (8 ft)	NRU-S20 1/24/14 (12 ft) SAT	NRU-S20 FD 1/24/14 (12 ft) SAT	NRU-S21 1/24/14 (4 ft)	NRU-S22 1/24/14 (8 ft)	NRU-S23 1/24/14 (12 ft) SAT	NRU-S24 1/30/14 (4 ft)	NRU-S25 1/30/14 (8 ft) SAT	NRU-S26 1/30/14 (12 ft) SAT	NRU-S27 1/30/14 (4 ft)	NRU-S27 FD 1/30/14 (4 ft)	NRU-S28 1/30/14 (8 ft) SAT	NRU-S29 1/30/14 (12 ft) SAT	NRU-B05 1/27/14 (16 ft) OverEx SAT	NRU-S14 1/23/14 (8 ft) OverEx	NRU-S15 1/23/14 (12 ft) OverEx SAT
Bromodichloromethane in mg/kg	2,100	2,100										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Bromoform in mg/kg	17,000	17,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Bromomethane in mg/kg	4,900	4,900										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
Carbon tetrachloride in mg/kg	1,900	1,900										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Chlorobenzene in mg/kg	70,000	70,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Chloroethane in mg/kg												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
Chloroform in mg/kg	4,200	4,200										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Chloromethane in mg/kg												0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
cis-1,3-Dichloropropene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Dibromochloromethane in mg/kg	1,600	1,600										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Dibromomethane in mg/kg	35,000	35,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Dichlorodifluoromethane in mg/kg	700,000	700,000										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
Ethylbenzene in mg/kg	350,000	350,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.08		
Hexachlorobutadiene in mg/kg	1,700	1,700										0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U			
Isopropylbenzene in mg/kg	350,000	350,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Methylene chloride in mg/kg	21,000	21,000										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
n-Propylbenzene in mg/kg	350,000	350,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
p-Isopropyltoluene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
sec-Butylbenzene in mg/kg	350,000	350,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Styrene in mg/kg	700,000	700,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
tert-Butylbenzene in mg/kg	350,000	350,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Tetrachloroethene (PCE) in mg/kg	21,000	21,000										0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U			
Toluene in mg/kg	280,000	280,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.02 U		
trans-1,2-Dichloroethene in mg/kg	70,000	70,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
trans-1,3-Dichloropropene in mg/kg												0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Trichloroethene (TCE) in mg/kg	1,800	1,800										0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U			
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000										0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U			
Vinyl chloride in mg/kg	88	88										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
m,p-Xylenes in mg/kg	700,000	700,000										0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U			
o-Xylene in mg/kg	700,000	700,000										0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U			
Naphthalene in mg/kg	70,000	70,000														0.05 U					

Notes

- Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
- Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
- SAT - Sample of saturated soil; samples without this designation are unsaturated soil.
- J - Analyte was positively identified. The reported result is an estimate.
- U - Analyte was not detected at or above the reported result.
- UJ - Analyte was not detected at or above the reported estimate
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-9 - Excavation Verification Soil Quality Data for Naval Reserve Parcel South Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place										Sidewall Samples in Place												
			NRS-B01 2/12/14 (13 ft) SAT	NRS-B01 FD 2/12/14 (13 ft) SAT	NRS-B02 2/12/14 (13 ft) SAT	NRS-B03 2/12/14 (13 ft) SAT	NRS-B04 2/12/14 (13 ft) SAT	NRS-B05 2/12/14 (13 ft) SAT	NRS-B06 2/12/14 (13 ft) SAT	NRS-B07 2/12/14 (13 ft) SAT	NRS-B08 2/12/14 (13 ft) SAT	NRS-B09 2/18/14 (10 ft) SAT	NRS-S01 2/11/14 (8 ft)	NRS-S02 2/11/14 (11 ft) SAT	NRS-S03 2/11/14 (8 ft)	NRS-S04 2/11/14 (11 ft) SAT	NRS-S05 2/11/14 (8 ft)	NRS-S06 2/11/14 (11 ft) SAT	NRS-S09 2/11/14 (8 ft)	NRS-S10 2/11/14 (11 ft) SAT	NRS-S11 2/11/14 (8 ft) SAT	NRS-S12 2/11/14 (11 ft) SAT	NRS-S13 2/12/14 (8 ft) SAT	NRS-S14 2/12/14 (11 ft) SAT	
Total Petroleum Hydrocarbons (TPH)																									
Gasoline Range Hydrocarbons in mg/kg	100	100	2 U	2 U	2 U	34	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4.1	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Bunker C in mg/kg	2,000	2,000																							
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals																									
Arsenic in mg/kg	20	20	4.74							3.72									14.5				4.18		
Cadmium in mg/kg	3,500	3,500	1 U							1 U									1 U				1 U		
Copper in mg/kg	36	36	17.8							8.72									15.5				11.4		
Lead in mg/kg	81	1,000	3.8							2.36									3.48				2.61		
Mercury in mg/kg	0.1	0.1	0.1 U							0.1 U									0.1 U				0.1 U		
Nickel in mg/kg	48	48	17							12.5									23.9				13.8		
Zinc in mg/kg	85	100	27.2							14.9									30.7				17.8		
Polycyclic Aromatic Hydrocarbons (PAHs)																									
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.011	0.074	0.049	0.01 U	0.01 U	0.01 U	0.01 U	3.3	0.01 U	0.044	0.28	0.01 U	0.016	0.01 U	0.01 U	0.045	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.016	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.013	0.012	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.13	0.015	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.044	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.024	0.035	0.068	0.078	0.035	0.017	0.016	0.05	0.12	0.12	0.023	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.033	0.01 U	0.01 U	0.01 U
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.012	0.033	0.049	0.01 U	0.01 U	0.01 U	1.4	0.011	0.012	0.21	0.01 U	0.023	0.01 U	0.026	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene in mg/kg			0.016	0.024	0.058	0.016	0.089	0.013	0.021	0.04	1.5	0.069	0.01 U	0.14	0.01 U	0.019	0.01 U	0.01 U	0.01 U	0.01 U	0.025	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene in mg/kg	110,000	110,000	0.024	0.035	0.077	0.07	0.029	0.016	0.015	0.05	0.078	0.11	0.024	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.035	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene in mg/kg	70,000	70,000	0.02	0.029	0.11	0.029	0.053	0.015	0.013	0.046	0.5	0.051	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.034	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.018	0.017	0.01 U	0.01 U	0.01 U	0.011	0.014	0.038	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.015	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.012	0.056	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.028	0.015	0.01 U	0.01 U	0.01 U	0.015	0.016	0.074	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene in mg/kg			0.01 U	0.01 U	0.027	0.014	0.01 U	0.01 U	0.01 U	0.013	0.014	0.058	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.050	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	0.0332	0.00984	ND	ND	ND	0.0152	0.0166	0.0755	0.00805	ND	ND	ND	ND	ND	ND	ND	0.0178	ND	ND	ND	ND
Volatile Organic Compounds (VOC)																									
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,2,2-Tetrachloroethane in mg/kg	660	660	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,2-Trichloroethane in mg/kg	2,300	2,300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloroethane in mg/kg	23,000	23,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloroethene in mg/kg	180,000	180,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene in mg/kg			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane in mg/kg	4.4	4.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2,4-Trimethylbenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dibromo-3-chloropropane in mg/kg	160	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB) in mg/kg	66	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichlorobenzene in mg/kg	320,000	320,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichloroethane (EDC) in mg/kg	1,400	1,400	0.05 U	0.05 U	0.05 U	0.05 U																			

Table A-9 - Excavation Verification Soil Quality Data for Naval Reserve Parcel South Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place										Sidewall Samples in Place													
			NRS-B01 2/12/14 (13 ft) SAT	NRS-B01 FD 2/12/14 (13 ft) SAT	NRS-B02 2/12/14 (13 ft) SAT	NRS-B03 2/12/14 (13 ft) SAT	NRS-B04 2/12/14 (13 ft) SAT	NRS-B05 2/12/14 (13 ft) SAT	NRS-B06 2/12/14 (13 ft) SAT	NRS-B07 2/12/14 (13 ft) SAT	NRS-B08 2/12/14 (13 ft) SAT	NRS-B09 2/18/14 (10 ft) SAT	NRS-S01 2/11/14 (8 ft)	NRS-S02 2/11/14 (11 ft) SAT	NRS-S03 2/11/14 (8 ft)	NRS-S04 2/11/14 (11 ft) SAT	NRS-S05 2/11/14 (8 ft)	NRS-S06 2/11/14 (11 ft) SAT	NRS-S09 2/11/14 (8 ft)	NRS-S10 2/11/14 (11 ft) SAT	NRS-S11 2/11/14 (8 ft) SAT	NRS-S12 2/11/14 (11 ft) SAT	NRS-S13 2/12/14 (8 ft) SAT	NRS-S14 2/12/14 (11 ft) SAT		
Benzene in mg/kg	2,400	2,400	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U		
Bromobenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Bromodichloromethane in mg/kg	2,100	2,100	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Bromoform in mg/kg	17,000	17,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Bromomethane in mg/kg	4,900	4,900	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
Carbon tetrachloride in mg/kg	1,900	1,900	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Chlorobenzene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Chloroethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
Chloroform in mg/kg	4,200	4,200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Chloromethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
cis-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Dibromochloromethane in mg/kg	1,600	1,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Dibromomethane in mg/kg	35,000	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Dichlorodifluoromethane in mg/kg	700,000	700,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
Ethylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Hexachlorobutadiene in mg/kg	1,700	1,700	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		
Isopropylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Methylene chloride in mg/kg	21,000	21,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
n-Propylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
p-Isopropyltoluene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
sec-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Styrene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
tert-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Tetrachloroethene (PCE) in mg/kg	21,000	21,000	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		
Toluene in mg/kg	280,000	280,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
trans-1,2-Dichloroethene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
trans-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Trichloroethene (TCE) in mg/kg	1,800	1,800	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U		
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		
Vinyl chloride in mg/kg	88	88	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
m,p-Xylenes in mg/kg	700,000	700,000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		
o-Xylene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Naphthalene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.098	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		
Polychlorinated Biphenyls (PCBs)																										
Aroclor 1016 in mg/kg																										
Aroclor 1221 in mg/kg																										
Aroclor 1232 in mg/kg																										
Aroclor 1242 in mg/kg																										
Aroclor 1248 in mg/kg																										
Aroclor 1254 in mg/kg																										
Aroclor 1260 in mg/kg																										
Total PCBs (Sum of Aroclors) in mg/kg	10	10																								

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.

Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

SAT = Sample of saturated soil; samples without this designation are unsaturated soil.

J = Analyte was positively identified. The reported result is an estimate.

U = Analyte was not detected at or above the reported result.

UJ = Analyte was not detected at or above the reported estimate.

x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-9 - Excavation Verification Soil Quality Data for Naval Reserve Parcel South Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place														Overexcavated Samples							
			NRS-S15 2/12/14 (8 ft) SAT	NRS-S16 2/12/14 (11 ft) SAT	NRS-S17 2/12/14 (8 ft) SAT	NRS-S17 FD 2/12/14 (8 ft) SAT	NRS-S18 2/12/14 (11 ft) SAT	NRS-S19 2/12/14 (8 ft) SAT	NRS-S20 2/12/14 (11 ft) SAT	NRS-S23 2/12/14 (8 ft) SAT	NRS-S24 2/12/14 (11 ft) SAT	NRS-S25 2/12/14 (8 ft) SAT	NRS-S26 2/12/14 (11 ft) SAT	NRS-S27 2/18/14 (8 ft) SAT	NRS-S28 2/18/14 (8 ft) SAT	NRS-S29 2/19/14 (8 ft)	NRA1-PC1 1/6/14 (12 ft) OverEx	NRA1-PC2 1/6/14 (8 ft) OverEx	NRA1-PC3 1/6/14 (8 ft) OverEx	NRS-S07 2/11/14 (8 ft) OverEx	NRS-S08 2/11/14 (11 ft) OverEx	NRS-S21 2/12/14 (8 ft) OverEx	NRS-S22 2/12/14 (11 ft) OverEx	
Total Petroleum Hydrocarbons (TPH)																								
Gasoline Range Hydrocarbons in mg/kg	100	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.7	2 U	2 U	2 U	2 U	2 U	6.3	3.9	2 U	240	2 U	2 U	2 U	
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U		50 U	50 U	58 x	50 U	50 U	50 U	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U		250 U	250 U	320	250 U	250 U	250 U	
Bunker C in mg/kg	2,000	2,000															2,000							
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,000	ND	ND	378	ND	ND	ND	
Metals																								
Arsenic in mg/kg	20	20			3.92	2.79											11	4.04	4.78				6.26	
Cadmium in mg/kg	3,500	3,500			1 U	1 U											1 U	1 U	1 U				1 U	
Copper in mg/kg	36	36			7	6.32											21.6	9.36	14.7				27	
Lead in mg/kg	81	1,000			2.45	1.86											23.7	1.93	2.57				8.07	
Mercury in mg/kg	0.1	0.1			0.1 U	0.1 U											0.1 U	0.1 U	0.1 U				0.1 U	
Nickel in mg/kg	48	48			11.2	10.7											16	11	13.9				21.2	
Zinc in mg/kg	85	100			13.6	11.9											82.3	15.4 J	25.4				36.7	
Polycyclic Aromatic Hydrocarbons (PAHs)																								
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.49	0.013	0.01 U	0.01 U	0.01 U	0.072	0.01 U	
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.26	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.01 U	
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.056	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.019	0.055	0.01 U	0.014	0.01 U	0.018	0.01 U	0.01 U	0.01 U	0.28	0.032	0.01 U	0.01 U	0.01 U	0.12	0.036	
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.45	0.01 U	0.01 U	0.01 U	0.01 U	0.048	0.01 U	
Phenanthrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01	0.018	0.041	0.01 U	0.016	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.87	0.01 U	0.01 U	0.01 U	0.01 U	0.16	0.023	
Pyrene in mg/kg	110,000	110,000	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.018	0.06	0.01 U	0.014	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.45	0.029	0.01 U	0.01 U	0.01 U	0.091	0.035	
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.076	0.01 U	0.026	0.01 U	0.01 U	0.019	0.01 U	0.01 U	0.01 U	0.023	0.01 U	0.01 U	0.01 U	0.15	0.015	
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.16	0.011	0.01 U	0.01 U	0.01 U	0.01	0.011	
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.098	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.081	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.013	
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Chrysene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.27	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.015	
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.036	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	ND	ND	ND	ND	0.133	0.00822	ND	ND	ND	0.00865	0.00905	
Volatile Organic Compounds (VOC)																								
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,1,2,2-Tetrachloroethane in mg/kg	660	660	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,1,2-Trichloroethane in mg/kg	2,300	2,300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloroethane in mg/kg	23,000	23,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloroethene in mg/kg	180,000	180,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,1-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,2,3-Trichlorobenzene in mg/kg			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U					0.25 U	0.25 U	0.25 U	0.25 U
1,2,3-Trichloropropane in mg/kg	4.4	4.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U					0.25 U	0.25 U	0.25 U	0.25 U
1,2,4-Trimethylbenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dibromo-3-chloropropane in mg/kg	160	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U					0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromoethane (EDB) in mg/kg	66	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichlorobenzene in mg/kg	320,000	320,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichloroethane (EDC) in mg/kg	1,400	1,400	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichloropropane in mg/kg	3,600	3,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,3,5-Trimethylbenzene in mg/kg	35,000	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U
1,3-Dichlorobenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U					0.05 U	0.05 U	0.05 U	0.05 U</

Table A-9 - Excavation Verification Soil Quality Data for Naval Reserve Parcel South Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place														Overexcavated Samples						
			NRS-S15 2/12/14 (8 ft) SAT	NRS-S16 2/12/14 (11 ft) SAT	NRS-S17 2/12/14 (8 ft) SAT	NRS-S17 FD 2/12/14 (8 ft) SAT	NRS-S18 2/12/14 (11 ft) SAT	NRS-S19 2/12/14 (8 ft) SAT	NRS-S20 2/12/14 (11 ft) SAT	NRS-S23 2/12/14 (8 ft) SAT	NRS-S24 2/12/14 (11 ft) SAT	NRS-S25 2/12/14 (8 ft) SAT	NRS-S26 2/12/14 (11 ft) SAT	NRS-S27 2/18/14 (8 ft) SAT	NRS-S28 2/18/14 (8 ft) SAT	NRS-S29 2/19/14 (8 ft)	NRA1-PC1 1/6/14 (12 ft) OverEx	NRA1-PC2 1/6/14 (8 ft) OverEx	NRA1-PC3 1/6/14 (8 ft) OverEx	NRS-S07 2/11/14 (8 ft) OverEx	NRS-S08 2/11/14 (11 ft) OverEx	NRS-S21 2/12/14 (8 ft) OverEx	NRS-S22 2/12/14 (11 ft) OverEx
Benzene in mg/kg	2,400	2,400	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.02 U	0.02 U	0.02 U	0.03 U	0.03 U	0.03 U	0.03 U
Bromobenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Bromodichloromethane in mg/kg	2,100	2,100	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Bromoform in mg/kg	17,000	17,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Bromomethane in mg/kg	4,900	4,900	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride in mg/kg	1,900	1,900	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Chlorobenzene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Chloroethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U
Chloroform in mg/kg	4,200	4,200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Chloromethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
cis-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Dibromochloromethane in mg/kg	1,600	1,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Dibromomethane in mg/kg	35,000	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Dichlorodifluoromethane in mg/kg	700,000	700,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.02 U	0.02 U	0.02 U	0.05 U	0.05 U	0.05 U	0.05 U
Hexachlorobutadiene in mg/kg	1,700	1,700	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U				0.25 U	0.25 U	0.25 U	0.25 U
Isopropylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Methylene chloride in mg/kg	21,000	21,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
p-Isopropyltoluene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
sec-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.077	0.05 U	0.05 U	0.05 U
Styrene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
tert-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.058	0.05 U	0.05 U	0.05 U
Tetrachloroethene (PCE) in mg/kg	21,000	21,000	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U				0.025 U	0.025 U	0.025 U	0.025 U
Toluene in mg/kg	280,000	280,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.02 U	0.02 U	0.02 U	0.05 U	0.05 U	0.05 U	0.05 U
trans-1,2-Dichloroethene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
trans-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Trichloroethene (TCE) in mg/kg	1,800	1,800	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U				0.03 U	0.03 U	0.03 U	0.03 U
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U				0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride in mg/kg	88	88	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
m,p-Xylenes in mg/kg	700,000	700,000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U				0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Naphthalene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U				0.05 U	0.05 U	0.05 U	0.05 U
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1016 in mg/kg																	0.02 U	0.02 U	0.02 U				
Aroclor 1221 in mg/kg																	0.02 U	0.02 U	0.02 U				
Aroclor 1232 in mg/kg																	0.02 U	0.02 U	0.02 U				
Aroclor 1242 in mg/kg																	0.02 U	0.02 U	0.02 U				
Aroclor 1248 in mg/kg																	0.02 U	0.02 U	0.02 U				
Aroclor 1254 in mg/kg																	0.02 U	0.02 U	0.02 U				
Aroclor 1260 in mg/kg																	0.02 U	0.02 U	0.02 U				
Total PCBs (Sum of Aroclors) in mg/kg	10	10															ND	ND	ND				

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-10 - Excavation Verification Soil Quality Data for Rail Car Dumper Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place			Sidewall Samples in Place							Overexcavated Samples				
			RCD-B01 9/30/13 (3 ft)	RCD-B02A 10/4/13 (6 ft)	RCD-B03 9/30/13 (2 ft)	RCD-S01 9/30/13 (1.5 ft)	RCD-S02 9/30/13 (2 ft)	RCD-S02 9/30/13 (4 ft)	RCD-S03 9/30/13 (1 ft)	RCD-S03 FD 9/30/13 (1 ft)	RCD-S07 10/4/13 (1.5 ft)	RCD-S09 10/11/13 (2 ft)	RCD-B02 9/30/13 (4 ft) OverEx	RCD-S04 9/30/13 (1.5 ft) OverEx	RCD-S05 9/30/13 (2 ft) OverEx	RCD-S08 10/4/13 (2 ft) OverEx	RCD-SLAG-1 10/8/13 OverEx
Total Petroleum Hydrocarbons (TPH)																	
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	1,700	250 U	250 U	250 U	250 U	1,400	250 U	250 U	7,500	420	250 U	250 U	
Total TPHs in mg/kg	2,000	2,000	ND	ND	1,720	ND	ND	ND	ND	1,420	ND	ND	7,520	445	ND	ND	
Metals																	
Arsenic in mg/kg	20	20	1.55	1.68	2.26	4.32	1.83	2.33	2.25	2.94	3.62	1.65	1.9	8.29	24.4	4.58	10.3
Barium in mg/kg	700,000	700,000															391
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium (Total) in mg/kg	5,300,000	5,300,000															24.4
Copper in mg/kg	36	36	10.7	11.5	11.6	16	10.8	9.89	12.7	16.1	23.7	8.27 J	10.1	27.5	60	103	116
Lead in mg/kg	81	1,000	1.86	1.98	4.25	43	6.47	9.22	10.2	14.1	16.2	1.62 J	2.62	19.2	54.3	47.4	485
Mercury in mg/kg	0.1	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	6	0.12	2.2	0.1 U
Mercury in mg/L	0.1	0.1															0.1 U
Nickel in mg/kg	48	48	20.7	35.7	20.4	16.9	19.2	16.9	17.1	20.3	25.9	15.2	22.6	20.4	34.7	50.5	35.4
Selenium in mg/kg	18,000	18,000															1 U
Silver in mg/kg	18,000	18,000															1 U
Zinc in mg/kg	85	100	11.4	22.8	18.7	34.9	15.2	16.1	24.1	34.2	44.4	8.75	17.3	157	118	144	118
SPLP Metals																	
Barium in mg/L																	0.00915
Copper in mg/L																	0.005 U
Lead in mg/L																	0.005 U
Zinc in mg/L																	0.005 U
TCLP Metals																	
Arsenic in mg/L																	1 U
Barium in mg/L																	1 U
Cadmium in mg/L																	1 U
Chromium (Total) in mg/L																	1 U
Lead in mg/L																	1 U
Selenium in mg/L																	1 U
Silver in mg/L																	1 U
Polycyclic Aromatic Hydrocarbons (PAHs)																	
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.025	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.017	0.02	0.01 U	
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.012	0.039 J	0.01 U	0.01 U	0.01 U	0.032	0.01 U	0.01 U	0.01 U	0.067	0.023	0.01 U	
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Phenanthrene in mg/kg			0.01 U	0.01 U	0.015	0.012	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.01 U	0.01 U	0.043	0.01 U	0.01 U	
Pyrene in mg/kg	110,000	110,000	0.01 U	0.01 U	0.018	0.044	0.01 U	0.01 U	0.01 U	0.031	0.01 U	0.01 U	0.01 U	0.057	0.025	0.01 U	
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.022	0.013	0.01 U	
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.019	0.015	0.01 U	
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.014	0.054 J	0.01 U	0.01 U	0.01 U	0.024	0.01 U	0.01 U	0.01 U	0.04	0.025	0.01 U	
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	
Chrysene in mg/kg			0.01 U	0.01 U	0.013	0.04	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.013	0.038	0.017	0.01 U	
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.027	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.018	0.017	0.01 U	
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	0.00853	0.0339	ND	ND	ND	0.0181	ND	ND	0.00763	0.0291	0.0217	ND	
Polychlorinated Biphenyls (PCBs)																	
Aroclor 1016 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	0.019 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	
Aroclor 1221 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	0.019 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	
Aroclor 1232 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	0.019 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	
Aroclor 1242 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	0.019 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	
Aroclor 1248 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	0.019 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	
Aroclor 1254 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.13	0.1 U	0.1 U	0.02 U	0.019 U	0.15	0.1 U	0.1 U	0.1 U	0.02 U	
Aroclor 1260 in mg/kg			0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	0.019 U	0.1 U	0.1 U	0.1 U	0.1 U	0.02 U	
Total PCBs (Sum of Aroclors) in mg/kg	10	10	ND	ND	ND	ND	0.43	ND	ND	ND	ND	0.45	ND	ND	ND	ND	

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.

Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

SAT = Sample of saturated soil; samples without this designation are unsaturated soil.

J = Analyte was positively identified. The reported result is an estimate.

U = Analyte was not detected at or above the reported result.

Table A-11 - Excavation Verification Soil Quality Data for Proposed Confirmational Monitoring Wells, REC2-MW-5 (near Diesel AST) Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place								Sidewall Samples in Place								Overexcavated Samples							
			DAST-B01 9/27/13 (3 ft) SAT	DAST-B02 9/27/13 (3 ft) SAT	DAST-B04 9/27/13 (3 ft) SAT	DAST-B05 9/27/13 (3 ft) SAT	DAST-B06 9/27/13 (3 ft) SAT	DAST-B07 9/27/13 (3 ft) SAT	DAST-B10 10/11/13 (4 ft) SAT	DAST-S01 9/27/13 (2 ft)	DAST-S03 9/27/13 (2 ft) SAT	DAST-S04 9/27/13 (2 ft) SAT	DAST-S05 9/27/13 (2 ft)	DAST-S06 9/27/13 (2 ft)	DAST-S07 9/27/13 (2 ft)	DAST-S08 9/27/13 (2 ft)	DAST-S09 9/27/13 (2 ft)	DAST-S10 9/27/13 (2 ft)	DAST-S11 10/11/13 (2 ft)	DAST-B03 9/27/13 (3 ft) OverEx SAT	DAST-B08 9/27/13 (3 ft) OverEx SAT	FD 9/27/13 (3 ft) OverEx SAT	DAST-S02 9/27/13 (2 ft) OverEx SAT	D-AST-TP1 8/30/13 (1 ft) OverEx		
Total Petroleum Hydrocarbons (TPH)																										
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	890	290	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	790	250 U	710	250 U	250 U	250 U	250 U	250 U	
Bunker C in mg/kg	2,000	2,000																							250 U	
Total TPHs in mg/kg	2,000	2,000	ND	ND	915	315	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	815	ND	735	ND	ND	ND	ND	250 U	
Metals																										
Arsenic in mg/kg	20	20	9.25	4.17	3.43	3.07	4.27	6.23	8.39	5.28	3.57	3.51	7.39	7.4	3.53	4.96	7.29	4.92	6.12	14.7	8.49 J	13.7 J	6.3	1.74		
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.05	2.19	1 U	1 U	9.95	
Chromium (Total) in mg/kg	5,300,000	5,300,000																								
Copper in mg/kg	36	36	30.9	20.7	43.3	31	41.6	56.9	35.3 J	39.3	15.5	43.7	42.8	32.2	31.4	47.7	29.2	36.1	28.9 J	72.6	55.7	64.4	50	14.7		
Lead in mg/kg	81	1,000	8.32	12.1	31.9	39.7	35.5	34	26.9 J	27.9	8.5	14.9	45.9	24	10.3	21	24.1	64.5	84.6 J	94.5	28.1	39.1	61.5	7.35		
Mercury in mg/kg	0.1	0.1	0.1 U	0.1 U	0.1 U	0.14	0.17	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.31	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25	0.17	0.1	0.1	0.17	0.1 U	
Nickel in mg/kg	48	48	28.1	23.2	18.1	14.5	18.4	25.1	16.8	22.6	14.1	18.5	19.3	26.1	24.1	43.5	23.8	15.6	5.12	23.2	21.4	21.5	20.7	14.1		
Zinc in mg/kg	85	100	43.9 J	99 J	70.9 J	45.3 J	43.7 J	525 J	62.7	94.1 J	23.1 J	54.4 J	63.8 J	89.8 J	104 J	456 J	46.6 J	78.9 J	19.7	144 J	91	110	74.5 J	26.4		
Polycyclic Aromatic Hydrocarbons (PAHs)																										
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.028	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.1	0.12	0.089	0.01 U	0.017	0.043	0.071	0.1 U	0.01 UJ	0.026 J	0.03			
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.018	0.022	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.012	0.042	0.026	0.1 U	0.01 U	0.01	0.015			
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.017	0.013	0.026	0.011	0.01 U	0.018	0.01 U	0.01 U	0.19	0.2	0.01 U	0.01 U	0.039	0.11	0.058	0.1 U	0.01 UJ	0.074 J	0.04			
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.18	0.05	0.094	0.059	0.01 U	0.021	0.013	0.01 U	0.1	0.37	0.01	0.019	0.11	0.13	0.21	0.1	0.031 J	0.19 J	0.092			
Fluoranthene in mg/kg	140,000	140,000	0.015	0.01 U	0.039	0.065	0.14	0.025	0.017	0.056	0.012	0.01 U	0.51	0.99	0.016	0.035	0.11	0.34	0.18	0.1 U	0.037 J	0.76 J	0.16			
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.16	0.13	0.02	0.01 U	0.014	0.051	0.058	0.1 U	0.01 UJ	0.024 J	0.026			
Phenanthrene in mg/kg			0.01 U	0.014	0.019	0.037	0.08	0.027	0.016	0.064	0.01 U	0.01 U	0.63	0.9	0.012	0.03	0.12	0.099	0.098	0.1 U	0.019 J	0.32 J	0.13			
Pyrene in mg/kg	110,000	110,000	0.017	0.01 U	0.039	0.072	0.15	0.024	0.018	0.056	0.012	0.01 U	0.41	1.2	0.017	0.03	0.11	0.29	0.16	0.14	0.036 J	0.69 J	0.16			
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.012	0.01 U	0.018	0.028	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.091	0.11	0.97	0.017	0.01 U	0.024	0.027	0.1 U	0.011	0.017	0.016			
Benzo(a)anthracene in mg/kg			0.01 U	0.01 U	0.02	0.034	0.066	0.016	0.01 U	0.023	0.01 U	0.01 U	0.22	0.58	0.012	0.016	0.046	0.098	0.059	0.1 U	0.031 J	0.52 J	0.08			
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.039	0.034	0.063	0.018	0.01 U	0.019	0.01 U	0.01 U	0.16	0.62	0.013	0.018	0.04	0.088	0.053	0.11	0.04 J	0.38 J	0.087			
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.096	0.08	0.17	0.046	0.011	0.027	0.016	0.01 U	0.22	0.67	0.018	0.029	0.057	0.22	0.21	0.15	0.089 J	0.63 J	0.13			
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.023	0.026	0.044	0.01	0.01 U	0.011	0.01 U	0.01 U	0.098	0.24	0.01 U	0.01 U	0.022	0.21	0.061	0.1 U	0.021 J	0.19 J	0.038			
Chrysene in mg/kg			0.01 U	0.01 U	0.038	0.059	0.12	0.023	0.01 U	0.029	0.01	0.01 U	0.23	0.74	0.013	0.024	0.067	0.17	0.11	0.1 U	0.048 J	0.64 J	0.11			
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.023	0.012	0.024	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.029	0.1 U	0.01 U	0.01 U	0.01	0.023	0.045	0.1 U	0.01 UJ	0.073 J	0.021			
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.12	0.051	0.099	0.049	0.01 U	0.018	0.012	0.01 U	0.12	0.39	0.01	0.018	0.054	0.12	0.18	0.1 U	0.028 J	0.23 J	0.093			
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	0.0676	0.0549	0.105	0.0313	0.00815	0.0277	0.0094	ND	0.231	0.82	0.0181	0.0255	0.0596	0.157	0.11	0.146	0.0579	0.551	0.124			
Polychlorinated Biphenyls (PCBs)																										
Aroclor 1016 in mg/kg			0.1 U	0.1 U	0.1 U	1 U	10 U	0.1 U	0.019 U	1 U		0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	1 U	0.019 U	0.1 U	0.1	0.1	1 U	0.1 U		
Aroclor 1221 in mg/kg			0.1 U	0.1 U	0.1 U	1 U	10 U	0.1 U	0.019 U	1 U		0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	1 U	0.019 U	0.1 U	0.1	0.1	1 U	0.1 U		
Aroclor 1232 in mg/kg			0.1 U	0.1 U	0.1 U	1 U	10 U	0.1 U	0.019 U	1 U		0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	1 U	0.019 U	0.1 U	0.1	0.1	1 U	0.1 U		
Aroclor 1242 in mg/kg			0.1 U	0.1 U	0.1 U	1 U	10 U	0.1 U	0.019 U	1 U		0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	1 U	0.019 U	0.1 U	0.1	0.1	1 U	0.1 U		
Aroclor 1248 in mg/kg			0.1 U	0.1 U	0.1 U	1 U	10 U	0.1 U	0.019 U	1 U		0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	1 U	0.019 U	0.1 U	0.1	0.1	1 U	0.1 U		
Aroclor 1254 in mg/kg			0.1 U	0.1 U	0.11	1.1	0.97	1.1	0.04	1.2		0.24	0.77	0.1 U		0.1 U	0.11	1.7	0.59	3.9	0.29	0.4	6.3	0.1 U		
Aroclor 1260 in mg/kg			0.1 U	0.1 U	0.15	1.5	1.1	0.79	0.074	1.4		0.26	0.78	0.1 U		0.1 U	0.1 U	2	0.6	4.2	0.31	0.34	6.5	0.1 U		
Total PCBs (Sum of Aroclors) in mg/kg	10	10	ND	ND	0.51	2.6	2.07	2.14	0.161	5.1		0.75	1.8	ND		ND	0.41	6.2	1.24	8.35	0.85	0.99	15.3	ND		

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.

Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

SAT = Sample of saturated soil; samples without this designation are unsaturated soil.

J = Analyte was positively identified. The reported result is an estimate.

U = Analyte was not detected at or above the reported result.

UJ = Analyte was not detected at or above the reported estimate

Table A-12 - Excavation Verification Soil Quality Data for SHB-MW-1 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place				Sidewall Samples in Place						Overexcavated		Pre-Excavation Characterization Samples			
			SHB-B01 3/6/14 (5 ft)	SHB-B01 FD 3/6/14 (5 ft)	SHB-B02 3/6/14 (5 ft)	SHB-B03 3/6/14 (5 ft)	SHB-S01 3/6/14 (3 ft)	SHB-S02 3/6/14 (3 ft)	SHB-S04 3/6/14 (3 ft)	SHB-S05 3/6/14 (3 ft)	SHB-S06 3/6/14 (3 ft)	SHB-S07 3/11/14 (3 ft)	SHB-1N 1/15/14 (2.5-3.5 ft) OverEx	SHB-S03 3/6/14 (3 ft) OverEx	SHB-1E 1/15/14 (2.5-3.5 ft)	SHB-1S 1/15/14 (2.5-3.5 ft)	SHB-1W 1/15/14 (2.5-3.5 ft)	
Total Petroleum Hydrocarbons (TPH)																		
Gasoline Range Hydrocarbons in mg/kg	100	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	87	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	300	530	4,300	250 U	250 U	250 U
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	212	ND	ND	ND	ND	ND	325	555	4,320	ND	ND	ND
Metals																		
Arsenic in mg/kg	20	20	4.37	5.6	12.7	5.33	8.74	2.95	9.13	7.94	6.47			10.2				
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U			1 U				
Copper in mg/kg	36	36	12.7	20	10	12.1	16.7	58.7	45.4	65.1	15.4	28	562	50.7	8.86	21.4	16.9	
Lead in mg/kg	81	1,000	3.37 J	5.54 J	9.41	3.7	6.45	45	22.8	25.7	13.6			138				
Mercury in mg/kg	0.1	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12	0.1 U	0.1 U	0.1 U			1.5				
Nickel in mg/kg	48	48	11.6	13.9	11.9	9.76	10.2	19.7	24.8	23.5	18.1			23.5				
Zinc in mg/kg	85	100	77.8	85.6	18.3	30.2	52.8	186	90.2	86.7	229			92.6				
Polycyclic Aromatic Hydrocarbons (PAHs)																		
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01	0.01 U	0.01 U	0.01 U	0.01 U		0.01 U				
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.096	0.01 U	0.01 U	0.01 U	0.01 U		0.011				
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.18	0.01 U	0.015	0.01 U	0.01 U		0.01				
Benzo(g,h,i)perylene in mg/kg			0.014	0.01 U	0.01 U	0.01 U	0.024	0.37	0.055	0.044	0.012			0.039				
Fluoranthene in mg/kg	140,000	140,000	0.034 J	0.011 J	0.01 U	0.01 U	0.01	0.72	0.11	0.15	0.011			0.033				
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.07	0.01 U	0.01 U	0.01 U			0.01 U				
Phenanthrene in mg/kg			0.019	0.01 U	0.01 U	0.01 U	0.01 U	0.65	0.049	0.068	0.01 U			0.026				
Pyrene in mg/kg	110,000	110,000	0.04 J	0.011 J	0.01 U	0.01 U	0.01	0.67	0.1	0.12	0.012			0.038				
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.024	0.01 U	0.01 U	0.01 U			0.063				
Benz(a)anthracene in mg/kg			0.011	0.01 U	0.01 U	0.01 U	0.011	0.37	0.044	0.059	0.01 U			0.025				
Benzo(a)pyrene in mg/kg			0.016	0.01 U	0.01 U	0.01 U	0.016	0.44	0.064	0.066	0.012			0.01 U				
Benzo(b)fluoranthene in mg/kg			0.018	0.011	0.01 U	0.01 U	0.02	0.61	0.11	0.085	0.016			0.01 U				
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.23	0.03	0.034	0.01 U			0.01 U				
Chrysene in mg/kg			0.014	0.01 U	0.01 U	0.01 U	0.027	0.52	0.076	0.07	0.011			0.03				
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.082	0.011	0.01 U	0.01 U			0.01 U				
Indeno(1,2,3-cd)pyrene in mg/kg			0.013	0.01 U	0.01 U	0.01 U	0.019	0.39	0.056	0.045	0.012			0.01 U				
Total cPAHs TEQ in mg/kg	0.4	7.9	0.0213	0.00815	ND	ND	0.0223	0.613	0.0899	0.0895	0.0164			0.0098				
Volatile Organic Compounds (VOC)																		
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,1,2,2-Tetrachloroethane in mg/kg	660	660	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,1,2-Trichloroethane in mg/kg	2,300	2,300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,1-Dichloroethane in mg/kg	23,000	23,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,1-Dichloroethene in mg/kg	180,000	180,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,1-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,2,3-Trichlorobenzene in mg/kg			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		0.25 U				
1,2,3-Trichloropropane in mg/kg	4.4	4.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		0.25 U				
1,2,4-Trimethylbenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,2-Dibromo-3-chloropropane in mg/kg	160	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
1,2-Dibromoethane (EDB) in mg/kg	66	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,2-Dichlorobenzene in mg/kg	320,000	320,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,2-Dichloroethane (EDC) in mg/kg	1,400	1,400	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,2-Dichloropropane in mg/kg	3,600	3,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,3,5-Trimethylbenzene in mg/kg	35,000	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,3-Dichlorobenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,3-Dichloropropane in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
1,4-Dichlorobenzene in mg/kg	24,000	24,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
2,2-Dichloropropane in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
2-Butanone in mg/kg	2,100,000	2,100,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				

Aspect Consulting

6/12/2014

V:\110207 KC Everett Mill\Deliverables\IA Confirmation GW Monitoring Work Plan\Final\APP A data tables\Table 15 - SHB-MW-1 Interim Action Area.xlsx

Table A-12

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Table A-12 - Excavation Verification Soil Quality Data for SHB-MW-1 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place				Sidewall Samples in Place							Overexcavated		Pre-Excavation Characterization Samples		
			SHB-B01 3/6/14 (5 ft)	SHB-B01 FD 3/6/14 (5 ft)	SHB-B02 3/6/14 (5 ft)	SHB-B03 3/6/14 (5 ft)	SHB-S01 3/6/14 (3 ft)	SHB-S02 3/6/14 (3 ft)	SHB-S04 3/6/14 (3 ft)	SHB-S05 3/6/14 (3 ft)	SHB-S06 3/6/14 (3 ft)	SHB-S07 3/11/14 (3 ft)	SHB-1N 1/15/14 (2.5-3.5 ft) OverEx	SHB-S03 3/6/14 (3 ft) OverEx	SHB-1E 1/15/14 (2.5-3.5 ft)	SHB-1S 1/15/14 (2.5-3.5 ft)	SHB-1W 1/15/14 (2.5-3.5 ft)	
2-Chlorotoluene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
2-Hexanone in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
4-Chlorotoluene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
4-Methyl-2-pentanone in mg/kg	280,000	280,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
Acetone in mg/kg	3,200,000	3,200,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
Benzene in mg/kg	2,400	2,400	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U		0.03 U				
Bromobenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Bromodichloromethane in mg/kg	2,100	2,100	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Bromoform in mg/kg	17,000	17,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Bromomethane in mg/kg	4,900	4,900	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ		0.5 UJ				
Carbon tetrachloride in mg/kg	1,900	1,900	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Chlorobenzene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Chloroethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
Chloroform in mg/kg	4,200	4,200	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Chloromethane in mg/kg			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
cis-1,2-Dichloroethene (DCE) in mg/kg	7,000	7,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
cis-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Dibromochloromethane in mg/kg	1,600	1,600	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Dibromomethane in mg/kg	35,000	35,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Dichlorodifluoromethane in mg/kg	700,000	700,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
Ethylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Hexachlorobutadiene in mg/kg	1,700	1,700	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		0.25 U				
Isopropylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Methyl tert-butyl ether (MTBE) in mg/kg	73,000	73,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Methylene chloride in mg/kg	21,000	21,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
n-Propylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
p-Isopropyltoluene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
sec-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Styrene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
tert-Butylbenzene in mg/kg	350,000	350,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Tetrachloroethene (PCE) in mg/kg	21,000	21,000	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U		0.025 U				
Toluene in mg/kg	280,000	280,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
trans-1,2-Dichloroethene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
trans-1,3-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Trichloroethene (TCE) in mg/kg	1,800	1,800	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U		0.03 U				
Trichlorofluoromethane in mg/kg	1,100,000	1,100,000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U				
Vinyl chloride in mg/kg	88	88	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
m,p-Xylenes in mg/kg	700,000	700,000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U		0.1 U				
o-Xylene in mg/kg	700,000	700,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				
Naphthalene in mg/kg	70,000	70,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U		0.05 U				

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.

Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

SAT - Sample of saturated soil; samples without this designation are unsaturated soil.

J - Analyte was positively identified. The reported result is an estimate.

U - Analyte was not detected at or above the reported result.

UJ - Analyte was not detected at or above the reported estimate

Table A-13 - Excavation Verification Soil Quality Data for UST 29/Latex Spill Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place																						
			UST29-S07 12/23/13 (3 ft)	UST29-S08 12/30/13 (8 ft) SAT	UST29-S09 12/30/13 (8 ft) SAT	UST29-S10 12/30/13 (8 ft) SAT	UST29-S11 12/30/13 (8 ft) SAT	UST29-S12 1/3/14 (3 ft)	UST29-S13 1/3/14 (6 ft) SAT	UST29-S15 1/3/14 (3 ft)	UST29-S16 1/3/14 (6 ft) SAT	UST29-S17 1/3/14 (9 ft) SAT	UST29-S18 1/3/14 (3 ft)	UST29-S19 1/3/14 (6 ft) SAT	UST29-S20 1/3/14 (9 ft) SAT	UST29-S21 1/3/14 (3 ft)	UST29-S22 1/7/14 (9 ft) SAT	UST29-S29 1/8/14 (9 ft) SAT	UST29-S30 1/8/14 (6 ft) SAT	UST29-S31 1/8/14 (3 ft)	UST29-S32 1/8/14 (9 ft) SAT	UST29-S33 1/8/14 (6 ft) SAT	UST29-S34 1/8/14 (3 ft)	UST29-S37 1/9/14 (6 ft) SAT	
Total Petroleum Hydrocarbons (TPH)																									
Gasoline Range Hydrocarbons in mg/kg	100	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5	4.8	81	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	150 x	50 U	50 U	50 U	50 U	50 U	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	275	ND	ND	ND	ND	ND	
Metals																									
Arsenic in mg/kg	20	20		3.85									1.93			1.33	6.65			9.68				5.43	
Barium in mg/kg	700,000	700,000																							
Cadmium in mg/kg	3,500	3,500		1 U									1 U			1 U	1 U		1 U					1 U	
Chromium (Total) in mg/kg	5,300,000	5,300,000																							
Copper in mg/kg	36	36		22												5.47	27			20				5.66	
Lead in mg/kg	81	1,000		21.9												1.47	7.22			10.5				1.94	
Mercury in mg/kg	0.1	0.1		0.1 U												0.1 U	0.1 U			0.1 U				0.1 U	
Nickel in mg/kg	48	48		20.6												8.34	19.5			12.9				11.5	
Selenium in mg/kg	18,000	18,000																							
Silver in mg/kg	18,000	18,000																							
Zinc in mg/kg	85	100		64.8												13.3	32.5			28.8				9.84	
TCPL Metals																									
Arsenic in mg/L																									
Barium in mg/L																									
Cadmium in mg/L																									
Chromium (Total) in mg/L																									
Lead in mg/L																									
Mercury in mg/L																									
Selenium in mg/L																									
Silver in mg/L																									
Conventional Chemistry Parameters																									
Formaldehyde in mg/kg	700,000	700,000	2.5 U	12	2.2 J	10	4.7	3.4	2.8	0.68 J	0.75 J	2.6	5.5	4.8	3.3	5.0								6.7	
Total Solids in percent			79.8	79.9	81.1	81.3	80.5	87.5	80.3	89.4	89.6	79.2	80.5	78.2	87.0	94.0									83.5
Polycyclic Aromatic Hydrocarbons (PAHs)																									
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.046	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Benzo(g,h,i)perylene in mg/kg			0.015	0.012	0.01	0.01	0.014	0.01	0.01	0.029	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Fluoranthene in mg/kg	140,000	140,000	0.036	0.094	0.01 U	0.017	0.017	0.02	0.027	0.072	0.016	0.022	0.026	0.019	0.044	0.01 U	0.016	0.01 U	0.037	0.01 U	0.084	0.011	0.031	0.01 U	
Fluorene in mg/kg	140,000	140,000	0.01 U	0.085	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.042	0.01 U	0.064	0.01 U	
Phenanthrene in mg/kg			0.016	0.26	0.01 U	0.01 U	0.01 U	0.023	0.019	0.027	0.012	0.01 U	0.01	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.078	0.01 U	0.48	0.01 U	
Pyrene in mg/kg	110,000	110,000	0.037	0.097	0.011	0.017	0.017	0.027	0.028	0.069	0.015	0.02	0.024	0.017	0.044	0.01 U	0.017	0.01 U	0.034	0.01 U	0.077	0.01 U	0.38	0.01 U	
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.044	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.047	0.01 U	
Benz(a)anthracene in mg/kg			0.019	0.023	0.01 U	0.012	0.013	0.01 U	0.012	0.046	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.018	0.011	0.028	0.01 U	0.15	0.01 U	
Benzo(a)pyrene in mg/kg			0.019	0.018	0.01 U	0.013	0.016	0.01 U	0.012	0.046	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.02	0.01 U	0.11	0.01 U	
Benzo(b)fluoranthene in mg/kg			0.026	0.022	0.012	0.017	0.02	0.011	0.015	0.061	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.026	0.01 U	0.12	0.01 U	
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.043	0.01 U	0.01 U	
Chrysene in mg/kg			0.021	0.028	0.01 U	0.011	0.011	0.016	0.014	0.059	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.034	0.01 U	0.2	0.01 U	
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.019	0.01 U	
Indeno(1,2,3-cd)pyrene in mg/kg			0.013	0.01 U	0.01 U	0.011	0.016	0.01 U	0.01 U	0.027	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01	0.01 U	0.065	0.01 U	0.01 U	
Total cPAHs TEQ in mg/kg	0.4	7.9	0.026	0.0243	0.00825	0.0181	0.022	0.00826	0.0163	0.0625	ND	ND	ND	ND	0.00976	ND	ND	ND	0.0171	0.00875	0.0282	ND	0.152	ND	
Volatile Organic Compounds (VOC)																									
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,2-Tetrachloroethane in mg/kg	660	660	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,2-Trichloroethane in mg/kg	2,300	2,300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloroethane in mg/kg	23,000	23,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloroethene in mg/kg	180,000	180,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2,3-Trichlorobenzene in mg/kg			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2,3-Trichloropropane in mg/kg	4.4	4.4	0.05 U	0.05 U	0.05 U	0.0																			

Table A-13 - Excavation Verification Soil Quality Data for UST 29/Latex Spill Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place				Overexcavated Samples													
			UST29-S38 1/9/14 (6 ft) SAT	UST29-S39 1/9/14 (9 ft) SAT	UST29-S40 1/9/14 (9 ft) SAT	UST29-S41 1/10/14 (6 ft) SAT	UST29-B07 12/30/13 (18 ft) OverEx SAT	UST29-B09 1/3/14 (15 ft) OverEx SAT	UST29-B11 1/3/14 (15 ft) OverEx SAT	UST29-S14 1/3/14 (9 ft) OverEx SAT	UST29-S23 1/7/14 (12 ft) OverEx SAT	UST29-S24 1/8/14 (3 ft) OverEx SAT	UST29-S25 1/8/14 (6 ft) OverEx SAT	UST29-S26 1/8/14 (9 ft) OverEx SAT	UST29-S27 1/8/14 (6 ft) OverEx SAT	UST29-S28 1/8/14 (3 ft) OverEx SAT	UST29-S35 1/8/14 (6 ft) OverEx SAT	UST29-S36 1/8/14 (3 ft) OverEx SAT	XY-TPSW2 9/10/13 (8 ft) OverEx	
Total Petroleum Hydrocarbons (TPH)																				
Gasoline Range Hydrocarbons in mg/kg	100	100	2 U	2 U	5.6	55	1,000	110	150	190	23	2 U	27,000	2 U	1,100	2 U	28	2 U		
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	260	50 U	830	50 U	50 U	160	1,100 x	50 U	610 x	50 U	50 U	50 U	2,100 x	50 U		
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	380	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U		
Total TPHs in mg/kg	2,000	2,000	ND	ND	640	ND	955	ND	ND	285	1,220	ND	735	ND	ND	ND	2,220	ND		
Metals																				
Arsenic in mg/kg	20	20												5.01			4.07		2.94	
Barium in mg/kg	700,000	700,000																	37.1	
Cadmium in mg/kg	3,500	3,500												1 U			1 U		1 U	
Chromium (Total) in mg/kg	5,300,000	5,300,000																	14.5	
Copper in mg/kg	36	36												11.5			7.67			
Lead in mg/kg	81	1,000												2.53			1.88		9.59	
Mercury in mg/kg	0.1	0.1												0.1 U			0.1 U		0.1 U	
Nickel in mg/kg	48	48												16.8			11.8			
Selenium in mg/kg	18,000	18,000																	1 U	
Silver in mg/kg	18,000	18,000																	1 U	
Zinc in mg/kg	85	100												18.6			11			
TCLP Metals																				
Arsenic in mg/L																			1 U	
Barium in mg/L																			1 U	
Cadmium in mg/L																			1 U	
Chromium (Total) in mg/L																			1 U	
Lead in mg/L																			1 U	
Mercury in mg/L																			0.1 U	
Selenium in mg/L																			1 U	
Silver in mg/L																			1 U	
Conventional Chemistry Parameters																				
Formaldehyde in mg/kg	700,000	700,000	3.6	4.5	10	2.2	0.86 J	14	6.6	2.2 J										
Total Solids in percent			72.8	79.4	83.4	90.8	85.7	83.3	82.2	76.6										
Polycyclic Aromatic Hydrocarbons (PAHs)																				
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.04	0.52	0.011	0.27	0.01 U	0.01 U	0.01 U	0.46	0.01 U	0.025	0.01 U	0.01 U	0.01 U	0.64	0.022		
Acenaphthylene in mg/kg			0.01 U	0.024	0.011	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.025	0.14	0.022	0.28	0.01 U	0.01 U	0.01 U	2.4	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.26	0.05		
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.079	0.039	0.053	0.16	0.01 U	0.01 U	0.017	1.2	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.075	0.066		
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.33	0.8	0.089	1.5	0.01 U	0.01 U	0.048	14	0.01 U	0.033	0.01 U	0.14	0.01 U	0.73	0.17		
Fluorene in mg/kg	140,000	140,000	0.01 U	0.029	0.26	0.011	0.22	0.01 U	0.01 U	0.01 U	0.38	0.01 U	0.038	0.01 U	0.014	0.01 U	0.57	0.022		
Phenanthrene in mg/kg			0.01 U	0.37	0.43	0.079	1.1	0.01 U	0.01 U	0.047	5.3	0.01 U	0.052	0.01 U	0.045	0.01 U	1.1	0.21		
Pyrene in mg/kg	110,000	110,000	0.01 U	0.31	0.75	0.11	1.2	0.01 U	0.01 U	0.048	12 J	0.01 U	0.03	0.01 U	0.13	0.01 U	0.63	0.22		
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.049	0.024	0.019	0.01 U	0.022	0.027	0.01 U	0.01 U	0.01 U	0.49	0.01 U	0.01 U	0.01 U	0.01 U	0.025		
Benz(a)anthracene in mg/kg			0.01 U	0.076	0.21	0.062	0.57	0.01 U	0.01 U	0.021	6.6 J	0.01 U	0.012	0.01 U	0.055	0.01 U	0.28	0.1		
Benzo(a)pyrene in mg/kg			0.01 U	0.1	0.08	0.062	0.43	0.01 U	0.01 U	0.022	4.2	0.01 U	0.01 U	0.01 U	0.035	0.01 U	0.17	0.098		
Benzo(b)fluoranthene in mg/kg			0.01 U	0.13	0.085	0.068	0.59	0.01 U	0.01 U	0.026	5.4	0.01 U	0.01 U	0.01 U	0.05	0.01 U	0.24	0.11		
Benzo(k)fluoranthene in mg/kg			0.01 U	0.05	0.023	0.02	0.19	0.01 U	0.01 U	0.01 U	1.5	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.084	0.033		
Chrysene in mg/kg			0.01 U	0.15	0.25	0.083	0.49	0.01 U	0.01 U	0.026	6.7 J	0.01 U	0.012	0.01 U	0.067	0.01 U	0.31	0.14		
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.012	0.013	0.012	0.043	0.01 U	0.01 U	0.01 U	0.4	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.016		
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.071	0.026	0.05	0.22	0.01 U	0.01 U	0.015	1.4	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.087	0.071		
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	0.135	0.118	0.084	0.596	ND	ND	0.0295	5.8 J	ND	0.00832	ND	0.0502	ND	0.244	0.132		
Volatile Organic Compounds (VOC)																				
1,1,1,2-Tetrachloroethane in mg/kg	5,000	5,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,1-Trichloroethane in mg/kg	7,000,000	7,000,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,2,2-Tetrachloroethane in mg/kg	660	660	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1,2-Trichloroethane in mg/kg	2,300	2,300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloroethane in mg/kg	23,000	23,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloroethene in mg/kg	180,000	180,000	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,1-Dichloropropene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2,3-Trichlorobenzene in mg/kg			0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	12 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2,3-Trichloropropane in mg/kg	4.4	4.4	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2,4-Trichlorobenzene in mg/kg	4,500	4,500	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	12 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	
1,2,4-Trimethylbenzene in mg/kg			0.05 U	0.05 U	0.05 U	0.05 U	0.28	0.27	0.2	0.05 U	0.05 U	0.05 U	0.05 U	20	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	
1,2-Dibromo-3-chloropropane in mg/kg	160	160	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
1,2-Dibromoethane (EDB) in mg/kg	66	66	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	

Table A-14 - Excavation Verification Soil Quality Data for UST 70 Interim Action Area Verification Samples and Residual Exceedances

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place					Sidewall Samples in Place																
			UST70-B01 11/21/13 (11 ft) SAT	UST70-B02 11/21/13 (11 ft) SAT	UST70-B03 11/21/13 (11 ft) SAT	UST70-B04 11/21/13 (11 ft) SAT	UST70-B05 11/21/13 (11 ft) SAT	UST70-S01 11/21/13 (4 ft)	UST70-S02 11/21/13 (8 ft)	UST70-S03 11/21/13 (4 ft)	UST70-S04 11/21/13 (8 ft)	UST70-S05 11/21/13 (4 ft)	UST70-S06 11/21/13 (8 ft)	UST70-S11 11/21/13 (4 ft)	UST70-S12 11/21/13 (8 ft)	UST70-S13 11/21/13 (4 ft)	UST70-S13 FD 11/21/13 (4 ft)	UST70-S14 11/21/13 (8 ft)	UST70-S15 11/21/13 (4 ft)	UST70-S16 11/21/13 (8 ft)	UST70-S16 FD 11/21/13 (8 ft)	UST70-S20 1/3/14 (4 ft)	UST70-S22 1/6/14 (8 ft)	UST70-S22 FD 1/6/14 (8 ft)
Total Petroleum Hydrocarbons (TPH)																								
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	50 U	50 U	50 U	50 U	76 x	50 U	50 U	570	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	580	50 U	50 U
Oil Range Hydrocarbons in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPHs in mg/kg	2,000	2,000	ND	ND	ND	ND	201	ND	ND	695	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	705	ND	ND
Metals																								
Arsenic in mg/kg	20	20					3.66	3.48					3.14	8.92							5.36	5.97		
Cadmium in mg/kg	3,500	3,500					1 U	1 U					1 U	1 U							1 U	1 U		
Chromium (Total) in mg/kg	5,300,000	5,300,000																						
Copper in mg/kg	36	36					14.3	12.6					12.9	20.4							11.6	11.9		
Lead in mg/kg	81	1,000					23.4	8.67					7.14	49.4							10.2	9.83		
Mercury in mg/kg	0.1	0.1					0.1 U	0.1 U					0.1 U	0.1 U							0.1 U	0.1 U		
Nickel in mg/kg	48	48					11.7	12.7					11	15.3							14.3	14.8		
Zinc in mg/kg	85	100					27	36.4					22.2	52.9							21.6	24.4		
Polycyclic Aromatic Hydrocarbons (PAHs)																								
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.018	0.016	0.01 U	0.038	0.01 U	0.01 U	0.13	0.01 U	0.01 U	0.01 U	0.012	0.14	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.036	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.011	0.01 U	0.012	0.01 U	0.01	0.011	0.01 U	0.01 U	0.01 U	0.058	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.023 J	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.027	0.065	0.029	0.019	0.064	0.01	0.017	0.023 J	0.044	0.01 U	0.21	0.014	0.18	0.01 U	0.016	0.01 U	0.01 U	0.01 U	0.01 U	0.04 J	0.01 U	0.01 U
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.026	0.01 U	0.01 U	0.16	0.01 U	0.01 U	0.01 U	0.01 U	0.11	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene in mg/kg			0.01 U	0.019	0.01 U	0.011	0.045	0.01 U	0.01 U		0.031	0.01 U	0.19	0.011	0.14	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene in mg/kg	110,000	110,000	0.027	0.063	0.044	0.03	0.078	0.013	0.021	0.035 J	0.071	0.01 U	0.28	0.018	0.13	0.014	0.021	0.01 U	0.01 U	0.01 U	0.01 U	0.05 J	0.01 U	0.01 U
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.011	0.01 U	0.01 U	0.032	0.01 U	0.01 U	0.023	0.01 U	0.01 U	0.01 U	0.022	0.17	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.14	0.14
Benzo(a)anthracene in mg/kg			0.01 U	0.023	0.013	0.014	0.016	0.01 U	0.01 U	0.01 U	0.026	0.01 U	0.091	0.01 U	0.016	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.037 J	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 U	0.018	0.01 U	0.016	0.012	0.011	0.013	0.01 U	0.029	0.01 U	0.1	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.036 J	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.01 U	0.023	0.01 U	0.02	0.018	0.016	0.017	0.016 J	0.03	0.01 U	0.13	0.01 U	0.014	0.012	0.016	0.01 U	0.01 U	0.01 U	0.01 U	0.049 J	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.046	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.019 J	0.01 U	0.01 U
Chrysene in mg/kg			0.01 U	0.021	0.01 U	0.018	0.023	0.01	0.012	0.014 J	0.037	0.01 U	0.16	0.01 U	0.018	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.039 J	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.011	0.01 U	0.011	0.01 U	0.011	0.011	0.01 U	0.015	0.01 U	0.059	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.024 J	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	0.0249	0.00835	0.0217	0.0171	0.0153	0.0174	0.00874 J	0.0375	ND	0.136	ND	0.00968	0.00825	0.0167	ND	0.00805	ND	0.0498	ND	ND	ND
Polychlorinated Biphenyls (PCBs)																								
Aroclor 1016 in mg/kg																								
Aroclor 1221 in mg/kg																								
Aroclor 1232 in mg/kg																								
Aroclor 1242 in mg/kg																								
Aroclor 1248 in mg/kg																								
Aroclor 1254 in mg/kg																								
Aroclor 1260 in mg/kg																								
Total PCBs (Sum of Aroclors) in mg/kg	10	10																						

Notes
 Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate.
 x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-14 - Excavation Verification Soil Quality Data for UST 70 Interim Action Area Verification Samples and Residual Exceedances

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Overexcavated Samples									
			UST70-S07	UST70-S08	UST70-S09	UST70-S10	UST70-S17	UST70-S18	UST70-S19	UST70-S21	UST70-TP1	
			11/21/13 (4 ft) OverEx	11/21/13 (8 ft) OverEx	11/21/13 (4 ft) OverEx	11/21/13 (8 ft) OverEx	12/19/13 (4 ft) OverEx	12/19/13 (8 ft) OverEx	12/19/13 (8 ft) OverEx	1/3/14 (8 ft) OverEx	8/30/13 (7 ft) OverEx	
Total Petroleum Hydrocarbons (TPH)												
Diesel Range Hydrocarbons in mg/kg	2,000	2,000	29,000	15,000	50 U	4,100	50 U	2,100	5,000	2,800	250	
Oil Range Hydrocarbons in mg/kg	2,000	2,000	1,000 x	250 U	250 U	250 U	250 U	910 x	250 U	250 U	250 U	
Total TPHs in mg/kg	2,000	2,000	30,000	15,100	ND	4,220	ND	2,220	5,910	2,920	375	
Metals												
Arsenic in mg/kg	20	20									4.77	
Cadmium in mg/kg	3,500	3,500									1 U	
Chromium (Total) in mg/kg	5,300,000	5,300,000									7.59	
Copper in mg/kg	36	36									21.3	
Lead in mg/kg	81	1,000									29	
Mercury in mg/kg	0.1	0.1									0.1 U	
Nickel in mg/kg	48	48									13	
Zinc in mg/kg	85	100									55.4	
Polycyclic Aromatic Hydrocarbons (PAHs)												
Acenaphthene in mg/kg	210,000	210,000	11	7.1	0.01 U	1.1	0.01 U	0.38	0.01 U			
Acenaphthylene in mg/kg			0.1 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U			
Anthracene in mg/kg	1,100,000	1,100,000	0.1 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U			
Benzo(g,h,i)perylene in mg/kg			0.1 U	0.1 U	0.01 U	0.1 U	0.016	0.01 U	0.026			
Fluoranthene in mg/kg	140,000	140,000	0.6	0.43	0.014	0.44	0.017	0.061	0.01 U			
Fluorene in mg/kg	140,000	140,000	11	6.6	0.01 U	1.2	0.01 U	0.14	0.01 U			
Phenanthrene in mg/kg			9.8	6.7	0.01 U	1.2	0.013	0.16	0.01 U			
Pyrene in mg/kg	110,000	110,000	1	0.56	0.025	0.4	0.021	0.092	0.093			
Naphthalene in mg/kg	70,000	70,000	0.1 U	0.1 U	0.01 U	0.1 U	0.014	0.01 U	0.01 U			
Benz(a)anthracene in mg/kg			0.14	0.1	0.01 U	0.11	0.01	0.02	0.01 U			
Benzo(a)pyrene in mg/kg			0.1 U	0.1 U	0.01 U	0.1 U	0.016	0.01	0.024			
Benzo(b)fluoranthene in mg/kg			0.1 U	0.1 U	0.011	0.1 U	0.023	0.019	0.036			
Benzo(k)fluoranthene in mg/kg			0.1 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U			
Chrysene in mg/kg			0.22	0.14	0.01 U	0.11	0.015	0.027	0.035			
Dibenzo(a,h)anthracene in mg/kg			0.1 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U			
Indeno(1,2,3-cd)pyrene in mg/kg			0.1 U	0.1 U	0.01 U	0.1 U	0.014	0.01 U	0.019			
Total cPAHs TEQ in mg/kg	0.4	7.9	0.0862	0.0814	0.00815	0.0821	0.0219	0.0157	0.0314			
Polychlorinated Biphenyls (PCBs)												
Aroclor 1016 in mg/kg											0.1 U	
Aroclor 1221 in mg/kg											0.1 U	
Aroclor 1232 in mg/kg											0.1 U	
Aroclor 1242 in mg/kg											0.1 U	
Aroclor 1248 in mg/kg											0.1 U	
Aroclor 1254 in mg/kg											0.1 U	
Aroclor 1260 in mg/kg											0.1 U	
Total PCBs (Sum of Aroclors) in mg/kg	10	10									ND	

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.

Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.

SAT = Sample of saturated soil; samples without this designation are unsaturated soil.

J = Analyte was positively identified. The reported result is an estimate.

U = Analyte was not detected at or above the reported result.

UJ = Analyte was not detected at or above the reported estimate.

x = The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table A-15 - Excavation Verification Soil Quality Data for USTs 71, 72, 73 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place																				
			BUST-B01 11/7/13 (8 ft)	BUST-B02 11/7/13 (8 ft)	BUST-B03 11/7/13 (16 ft) SAT	BUST-B04 11/7/13 (16 ft) SAT	BUST-B05 11/8/13 (18 ft) SAT	BUST-B06 11/8/13 (18 ft) SAT	BUST-B07 11/8/13 (19 ft) SAT	BUST-B08 11/8/13 (19 ft) SAT	BUST-B09 11/8/13 (21 ft) SAT	BUST-B10 11/8/13 (19 ft) SAT	BUST-B11 11/8/13 (19 ft) SAT	BUST-B20 11/12/13 (6 ft)	BUST-B21 11/13/13 (18 ft) SAT	BUST-B22 11/15/13 (5 ft)	BUST-B24 11/15/13 (4 ft)	BUST-B26 11/15/13 (6 ft)	BUST-B29 11/19/13 (12 ft) SAT	BUST-B30 11/19/13 (12 ft) SAT	BUST-B31 11/19/13 (12 ft) SAT	BUST-B32 11/19/13 (12 ft) SAT	
Total Petroleum Hydrocarbons (TPH)																							
Bunker C in mg/kg	2,000	2,000	420	250 U	250 U	250 U	250 U	250 U	250 U	1,200	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	
Metals																							
Antimony in mg/kg	1,400	1,400															1 U	1 U	1 U	1 U	1 U	1 U	
Arsenic in mg/kg	20	20	4.3						2.8								3.81	2.23	3.99	1.53	2.85	2.1	1.86
Cadmium in mg/kg	3,500	3,500	1 U						1 U								1 U	1 U	1 U	1 U	1 U	1 U	
Chromium (Total) in mg/kg	5,300,000	5,300,000																					
Copper in mg/kg	36	36	12.6						4.2								12.5	18.5	14.2	3.29	3.8	5.48	4.19
Lead in mg/kg	81	1,000	1.96						1.23								2.07	8.66	2.14	1 U	1 U	6.64	1.36
Mercury in mg/kg	0.1	0.1	0.1 U						0.1 U								0.1 U	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel in mg/kg	48	48	15.1						10.2								18.8	11	17.9	9.67	11.1	10.6	11.4
Zinc in mg/kg	85	100	18.8						8.06								26.4	21.5	24.2	3.92 J	6.09 J	10.1 J	7.72 J
Polycyclic Aromatic Hydrocarbons (PAHs)																							
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.46	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.7	0.013	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.25	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.95	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Pyrene in mg/kg	110,000	110,000	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	1.2	0.023	0.019	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.46	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.22	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.52	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.2 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	ND	ND	ND	ND	ND	0.311	ND	0.0142	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00767	ND
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1016 in mg/kg																							
Aroclor 1221 in mg/kg																							
Aroclor 1232 in mg/kg																							
Aroclor 1242 in mg/kg																							
Aroclor 1248 in mg/kg																							
Aroclor 1254 in mg/kg																							
Aroclor 1260 in mg/kg																							
Total PCBs (Sum of Aroclors) in mg/kg	10	10																					

Notes

- Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
- Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
- SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
- J = Analyte was positively identified. The reported result is an estimate.
- U = Analyte was not detected at or above the reported result.
- UJ = Analyte was not detected at or above the reported estimate

Table A-15 - Excavation Verification Soil Quality Data for USTs 71, 72, 73 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Bottom Samples in Place								Sidewall Samples in Place												
			BUST-B33 11/19/13 (12 ft) SAT	BUST-B34 11/21/13 (12 ft) SAT	BUST-B35 11/21/13 (12 ft) SAT	BUST-B37 11/21/13 (10 ft) SAT	BUST-B38 11/21/13 (8 ft)	BUST-B40 12/3/13 (12 ft) SAT	BUST-B41 12/3/13 (12 ft) SAT	BUST-S04 11/7/13 (10 ft) SAT	BUST-S05 11/7/13 (7 ft)	BUST-S05 FD 11/7/13 (7 ft)	BUST-S06 11/7/13 (8 ft)	BUST-S07 11/7/13 (4 ft)	BUST-S08 11/7/13 (10 ft) SAT	BUST-S09 11/7/13 (5 ft)	BUST-S10 11/7/13 (10 ft) SAT	BUST-S11 11/7/13 (5 ft)	BUST-S12 11/7/13 (10 ft) SAT	BUST-S13 11/7/13 (5 ft)	BUST-S14 11/7/13 (9 ft) SAT	BUST-S15 11/7/13 (5 ft)	
Total Petroleum Hydrocarbons (TPH)																							
Bunker C in mg/kg	2,000	2,000	250 U	250 U	250 U	1,700	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	380	250 U	250 U	710	250 U	250 U	250 U	250 U
Metals																							
Antimony in mg/kg	1,400	1,400	1 U	1 U	1 U	1 U	1 U	1 U	1 U														
Arsenic in mg/kg	20	20	2.87	4.19	6.12	4.54	3.42	1 U	1 U		1 U	1 U	1 U						3.79				
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U		1 U	1 U	1 U						1 U				
Chromium (Total) in mg/kg	5,300,000	5,300,000																					
Copper in mg/kg	36	36	3.92	16.6	21	26.5	9.28	5.36	4.5		5.23	5.09	5.17						12.2				
Lead in mg/kg	81	1,000	1.33	2.23	3.49	21.2	1.53	1.65	1.76		4.58	4.85	2.38						2.12				
Mercury in mg/kg	0.1	0.1	0.1 U	0.1 U	0.1 U	0.17	0.1 U	0.1 U	0.11		0.1 U	0.1 U	0.1 U						0.1 U				
Nickel in mg/kg	48	48	10.5	20.3	20.1	20.4	15.8	16.4	9.93		7.98	9.09	11.3						12.6				
Zinc in mg/kg	85	100	6.73	33.4	32.8	43.9	26.8	13.9	7.63		11.3	11.4	31.4						18.4				
Polycyclic Aromatic Hydrocarbons (PAHs)																							
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.1	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.088	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.045	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.023	0.01 U	0.01 U	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.03	0.01 U	0.12	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.043	0.01 U	0.019	0.01 U	0.01 U
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.058	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.068	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene in mg/kg			0.01 U	0.026	0.01 U	0.15	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.28	0.01 U	0.011	0.01 U	0.01 U
Pyrene in mg/kg	110,000	110,000	0.01 U	0.03	0.01 U	0.35	0.01 U	0.01 U	0.01 U	0.023	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.034	0.014	0.01 U	0.2	0.01 U	0.025	0.015	0.01 U
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene in mg/kg			0.01 U	0.015	0.01 U	0.11	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.077	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 U	0.012	0.01 U	0.064	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.038	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.01 U	0.016	0.01 U	0.062	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.017	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene in mg/kg			0.01 U	0.016	0.01 U	0.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.01 U	0.11	0.01 U	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	0.0168	ND	0.0867	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00828	ND	ND	0.05	ND	ND	ND	ND
Polychlorinated Biphenyls (PCBs)																							
Aroclor 1016 in mg/kg																							
Aroclor 1221 in mg/kg																							
Aroclor 1232 in mg/kg																							
Aroclor 1242 in mg/kg																							
Aroclor 1248 in mg/kg																							
Aroclor 1254 in mg/kg																							
Aroclor 1260 in mg/kg																							
Total PCBs (Sum of Aroclors) in mg/kg	10	10																					

Notes

- Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
- Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
- SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
- J = Analyte was positively identified. The reported result is an estimate.
- U = Analyte was not detected at or above the reported result.
- UJ = Analyte was not detected at or above the reported estimate

Table A-15 - Excavation Verification Soil Quality Data for USTs 71, 72, 73 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place																			
			BUST-S18 11/12/13 (8 ft)	BUST-S19 11/12/13 (5 ft)	BUST-S20 11/12/13 (8 ft)	BUST-S24 11/15/13 (3 ft)	BUST-S30 11/15/13 (3 ft)	BUST-S31 11/15/13 (3 ft)	BUST-S32 11/21/13 (8 ft) SAT	BUST-S33 11/21/13 (12 ft) SAT	BUST-S34 11/21/13 (4 ft)	BUST-S35 11/21/13 (8 ft) SAT	BUST-S36 11/21/13 (12 ft) SAT	BUST-S37 11/19/13 (4 ft)	BUST-S38 11/19/13 (8 ft) SAT	BUST-S39 11/19/13 (12 ft) SAT	BUST-S40 11/19/13 (4 ft)	BUST-S41 11/19/13 (8 ft) SAT	BUST-S42 11/19/13 (12 ft) SAT	BUST-S43 11/19/13 (4 ft)	FD 11/19/13 (4 ft)	BUST-S44 11/19/13 (8 ft)
Total Petroleum Hydrocarbons (TPH)																						
Bunker C in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	1,400	560	1,200	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Metals																						
Antimony in mg/kg	1,400	1,400				1.16	1 U	1.43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Arsenic in mg/kg	20	20				1.47	6.01	8.34	5.13	7.97	5.98	4.67	4.53	1.22	1 U	1 U	1 U	1 U	2.88	1 UJ	2.44 J	1 U
Cadmium in mg/kg	3,500	3,500				1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium (Total) in mg/kg	5,300,000	5,300,000																				
Copper in mg/kg	36	36				9.82	23.6	33.3	17.8	74.5	36.9	62.5	16.1	7.9	4.76	8.23	2.44	3.12	7.8	19.1 J	3.62 J	6.01
Lead in mg/kg	81	1,000				1.46	17.3	26.5	3.62	32.6	6.39	2.28	2.39	3.04	1.91	1.68	1.51	1 U	7.59	6.16 J	1 UJ	1.94
Mercury in mg/kg	0.1	0.1				0.1 U	0.19	0.21	0.1 U	0.13	0.1 U	0.1 U	0.1 U	0.1 U	0.17	0.22	0.1 U	0.1 U	0.17	0.1 U	0.1 U	0.1 U
Nickel in mg/kg	48	48				20.9	12	15	46.1	19.2	15.3	14.6	16.4	5.21	6.03	6.9	5.99	7.97	15.5	22.3 J	10.4 J	7.65
Zinc in mg/kg	85	100				13.3	30	45.2	46.1	71.4	27.1	27.4	24.3	5.92	5.03	6.78	3 J	3.98 J	18 J	25.6 J	6.46 J	7.22 J
Polycyclic Aromatic Hydrocarbons (PAHs)																						
Acenaphthene in mg/kg	210,000	210,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.1	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzo(g,h,i)perylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.029	0.37	0.012	0.26	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.023	0.01 U	0.01 U	0.01 U
Fluoranthene in mg/kg	140,000	140,000	0.01 U	0.012	0.01 U	0.01 U	0.057	0.81	0.035	0.34	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.038	0.01 U	0.01 U	0.01 U
Fluorene in mg/kg	140,000	140,000	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.05	0.74	0.01 U	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U
Pyrene in mg/kg	110,000	110,000	0.01 U	0.023	0.01 U	0.01 U	0.074	1.4	0.049	0.31	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.027	0.01 U	0.01 U	0.053	0.01 U	0.01 U	0.01 U
Naphthalene in mg/kg	70,000	70,000	0.01 U	0.011	0.01 U	0.01 U	0.029	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benz(a)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.024	0.35	0.022	0.17	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.023	0.01 U	0.01 U	0.01 U
Benzo(a)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.026	0.47	0.018	0.18	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.01 U	0.01 U	0.01 U
Benzo(b)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.04	0.41	0.024	0.22	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.037	0.01 U	0.01 U	0.01 U
Benzo(k)fluoranthene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.12	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chrysene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.043	0.6	0.023	0.18	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.032	0.01 U	0.01 U	0.01 U
Dibenzo(a,h)anthracene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U	0.1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.022	0.24	0.01	0.14	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.01 U	0.01 U
Total cPAHs TEQ in mg/kg	0.4	7.9	ND	ND	ND	ND	0.036	0.593	0.0248	0.245	ND	ND	ND	ND	ND	ND	ND	ND	0.0311	ND	ND	ND
Polychlorinated Biphenyls (PCBs)																						
Aroclor 1016 in mg/kg																						
Aroclor 1221 in mg/kg																						
Aroclor 1232 in mg/kg																						
Aroclor 1242 in mg/kg																						
Aroclor 1248 in mg/kg																						
Aroclor 1254 in mg/kg																						
Aroclor 1260 in mg/kg																						
Total PCBs (Sum of Aroclors) in mg/kg	10	10																				

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate

Table A-15 - Excavation Verification Soil Quality Data for USTs 71, 72, 73 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place																			
			BUST-S46 11/19/13 (4 ft)	BUST-S46A 11/19/13 (8 ft)	BUST-S47 11/19/13 (12 ft) SAT	BUST-S48 11/19/13 (4 ft)	BUST-S49 11/19/13 (8 ft)	BUST-S50 11/19/13 (12 ft) SAT	BUST-S51 11/19/13 (4 ft)	BUST-S52 11/19/13 (8 ft)	BUST-S53 11/19/13 (12 ft) SAT	BUST-S54 11/20/13 (8 ft) SAT	BUST-S55 11/20/13 (12 ft) SAT	BUST-S56 11/20/13 (8 ft) SAT	BUST-S57 11/20/13 (12 ft) SAT	BUST-S59 12/3/13 (12 ft) SAT	BUST-S60 12/3/13 (6 ft)	BUST-S61 12/3/13 (12 ft) SAT	BUST-S63 12/12/13 (3 ft)	BUST-S64 12/12/13 (6 ft)	BUST-S65 12/12/13 (9 ft) SAT	BUST-S66 12/12/13 (3 ft)
Total Petroleum Hydrocarbons (TPH)																						
Bunker C in mg/kg	2,000	2,000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	550
Metals																						
Antimony in mg/kg	1,400	1,400	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Arsenic in mg/kg	20	20	2.65	1.55	1.55	7.65	1.75	1 U	1 U	1.05	1 U	6.77	4.15	3.36	1.7	1 U	1 U	1 U	3.46	3.97	3.35	4.54
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium (Total) in mg/kg	5,300,000	5,300,000																				
Copper in mg/kg	36	36	9.71	7.06	4.73	10	4.33	4.22	3.91	4.46	3.43	20	6.36	14.1	4.98	5.05	3.62	6.71	25.3	12.8	8.85	34.1
Lead in mg/kg	81	1,000	7.4	1.98	1 U	2.09	1 U	1 U	1.81	1.11	1 U	2.24	1 U	3.76	1.22	1.37	1.13 J	2.76	2.66	2.21	1.62	9.95
Mercury in mg/kg	0.1	0.1	0.11	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel in mg/kg	48	48	10.4	7.59	17	11.2	7.77	7.06	7.1	7.7	6.57	18.8	15.2	20.4	10.9	9.71	7.65	11	11.3	17.3	16.5	22.7
Zinc in mg/kg	85	100	86 J	6.8 J	7.2 J	16	7.09	10.8	7.14	5.74	5.89	30.3	10.3	39.1	9.21	6.13	5.08	10.6	90.7	21.8	21	36.5
Polycyclic Aromatic Hydrocarbons (PAHs)																						
Acenaphthene in mg/kg	210,000	210,000	0.25	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acenaphthylene in mg/kg			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Anthracene in mg/kg	1,100,000	1,100,000	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02
Benzo(g,h,i)perylene in mg/kg			0.048	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.044
Fluoranthene in mg/kg	140,000	140,000	0.32	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.11
Fluorene in mg/kg	140,000	140,000	0.17	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.021	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Phenanthrene in mg/kg			0.72	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.063	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	0.01 U	0.01 U	0.065
Pyrene in mg/kg	110,000	110,000	0.3	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.027	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.01 U	0.28
Naphthalene in mg/kg	70,000	70,000	0.12	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.084
Benz(a)anthracene in mg/kg			0.11	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.075
Benzo(a)pyrene in mg/kg			0.089	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.062
Benzo(b)fluoranthene in mg/kg			0.11	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.059
Benzo(k)fluoranthene in mg/kg			0.035	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025
Chrysene in mg/kg			0.13	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.12
Dibenzo(a,h)anthracene in mg/kg			0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene in mg/kg			0.05	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.028
Total cPAHs TEQ in mg/kg	0.4	7.9	0.122	ND	ND	ND	ND	ND	ND	ND	ND	0.0077	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0824
Polychlorinated Biphenyls (PCBs)																						
Aroclor 1016 in mg/kg																						
Aroclor 1221 in mg/kg																						
Aroclor 1232 in mg/kg																						
Aroclor 1242 in mg/kg																						
Aroclor 1248 in mg/kg																						
Aroclor 1254 in mg/kg																						
Aroclor 1260 in mg/kg																						
Total PCBs (Sum of Aroclors) in mg/kg	10	10																				

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate

Table A-15 - Excavation Verification Soil Quality Data for USTs 71, 72, 73 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Sidewall Samples in Place		Soils Beneath Monolith Foundations							Overexcavated Samples												
			BUST-S68 12/19/13 (3 ft)	BUST-S69 1/3/14 (3 ft)	BUST-B39 12/3/13 (12 ft) SAT	BUST-S16 11/12/13 (8 ft)	BUST-S16 FD 11/12/13 (8 ft)	BUST-S17 11/12/13 (8 ft)	BUST-S21 11/12/13 (10 ft) SAT	BUST-S22 11/12/13 (10 ft) SAT	BUST-S58 12/3/13 (12 ft) SAT	BUST-B23 11/15/13 (6 ft) OverEx	BUST-B23 FD 11/15/13 (6 ft) OverEx	BUST-B25 11/15/13 (4 ft) OverEx	BUST-B27 11/15/13 (6 ft) OverEx	BUST-B36 11/21/13 (6 ft) OverEx	BUST-S01 11/7/13 (6 ft) OverEx	BUST-S02 11/7/13 (10 ft) OverEx SAT	BUST-S03 11/7/13 (10 ft) OverEx SAT	BUST-S23 11/13/13 (16 ft) OverEx SAT	BUST-S25 11/15/13 (3 ft) OverEx	BUST-S26 11/15/13 (5 ft) OverEx		
Total Petroleum Hydrocarbons (TPH)																								
Bunker C in mg/kg	2,000	2,000	500	250 U	17,000	8,400	8,600	6,400	3,800	250 U	28,000	250 U	380	4,200	250 U	8,000	250 U	250 U	670	250 U	2,200	7,100		
Metals																								
Antimony in mg/kg	1,400	1,400	1.6		1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U	1 U					1 U	2.33	1 U		
Arsenic in mg/kg	20	20	7.05		1 U	3.62	4.37			4.8	1 U	3.29	3.6	6.46	4.6	5.01				2.98	6.71	5.2		
Cadmium in mg/kg	3,500	3,500	1 U		1 U	1 U	1 U			1 U	1 U	1 U	1 U	1 U	1 U					1 U	1 U	1 U		
Chromium (Total) in mg/kg	5,300,000	5,300,000																						
Copper in mg/kg	36	36	54 J		5.07	8.35	9.96			16.6	3.44	9.71	10.4	35.2	194	27.7				7.51	36.1	27		
Lead in mg/kg	81	1,000	29.5		2.17	2.26	3.42			3.42	1.58	1.79	1.91	39.9	1.92	43.8				1.73	58.4	30.4		
Mercury in mg/kg	0.1	0.1	0.14		0.11	0.1 U	0.1 U			0.1 U	0.1 U	0.1 U	0.1 U	0.3	0.1 U	0.18				0.1 U	0.69	0.3		
Nickel in mg/kg	48	48	13.1		13.4	16.3	17.6			20	8.78	14.2	16.1	20.2	16.2	19				11.4	17.7	17.7		
Zinc in mg/kg	85	100	47.4		12.3	18.5	22.4			40.7	7.99	18.2	22.6	55.8	31.3	77				13.1	118	43.6		
Polycyclic Aromatic Hydrocarbons (PAHs)																								
Acenaphthene in mg/kg	210,000	210,000	0.023		0.2 U	0.76	0.59	0.77	0.21	0.01 U	0.5 U	0.067 J	0.01 UJ	0.039	0.01 U	0.077	0.01 U	0.011	0.14	0.01 U	0.24	0.18		
Acenaphthylene in mg/kg			0.012		0.2 U	0.1 U	0.1 U	0.1 U	0.01 U	0.01 U	0.5 U	0.01 UJ	0.01 UJ	0.023	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.1 U	0.01 U		
Anthracene in mg/kg	1,100,000	1,100,000	0.033		0.2 U	1.2	1.1	1.2	0.24	0.01 U	1.8	0.11 J	0.01 UJ	0.091	0.01 U	0.01 U	0.01 U	0.01 U	0.19	0.01 U	0.43	0.11		
Benzo(g,h,i)perylene in mg/kg			0.032		0.28	0.28	0.26	0.25	0.083	0.01 U	0.52	0.038 J	0.01 UJ	0.088	0.01 U	0.11	0.01 U	0.01 U	0.053	0.01 U	0.3	0.07		
Fluoranthene in mg/kg	140,000	140,000	0.049		0.24	0.36	0.35	0.38	0.21	0.01 U	0.86	0.29 J	0.01 UJ	0.15	0.01 U	0.22	0.01 U	0.01 U	0.083	0.01 U	1.4	0.12		
Fluorene in mg/kg	140,000	140,000	0.01 U		0.2 U	0.59 J	0.37 J	0.54	0.01 U	0.01 U	0.5 U	0.057 J	0.01 UJ	0.026	0.01 U	0.019	0.01 U	0.01 U	0.17	0.01 U	0.19	0.018		
Phenanthrene in mg/kg			0.022		0.2 U	1.8 J	1 J	1.9	0.01 U	0.01 U	3	0.35 J	0.01 UJ	0.081	0.01 U	0.01 U	0.012	0.01 U	0.59	0.01 U	1.5	0.057		
Pyrene in mg/kg	110,000	110,000	0.099		1.7	2.2	2.1	2.1	0.97	0.01 U	5.9	0.27 J	0.01 UJ	0.44	0.01 U	0.8	0.01 U	0.015	0.44	0.01 U	1.6	0.4		
Naphthalene in mg/kg	70,000	70,000	0.01 U		0.2 U	0.12	0.1 U	0.1 U	0.01 U	0.01 U	0.5 U	0.026 J	0.01 UJ	0.047	0.01 U	0.038	0.01 U	0.01 U	0.013	0.01 U	0.18	0.07		
Benz(a)anthracene in mg/kg			0.046		1.1	0.99	0.86	0.84	0.28	0.01 U	2.1	0.11 J	0.01 UJ	0.18	0.01 U	0.28	0.01 U	0.01 U	0.15	0.01 U	0.56	0.16		
Benzo(a)pyrene in mg/kg			0.044		0.51	0.52	0.48	0.47	0.17	0.01 U	0.86	0.087 J	0.01 UJ	0.1	0.01 U	0.17	0.01 U	0.01 U	0.09	0.01 U	0.49	0.095		
Benzo(b)fluoranthene in mg/kg			0.059		0.4	0.17	0.16	0.17	0.03	0.01 U	0.7	0.097 J	0.01 UJ	0.079	0.01 U	0.12	0.01 U	0.01 U	0.035	0.01 U	0.55	0.067		
Benzo(k)fluoranthene in mg/kg			0.012		0.2 U	0.1 U	0.1 U	0.1 U	0.085	0.01 U	0.5 U	0.043 J	0.01 UJ	0.017	0.01 U	0.023	0.01 U	0.01 U	0.039	0.01 U	0.21	0.012		
Chrysene in mg/kg			0.078		1.9	1.7 J	1 J	1	0.69	0.01 U	4.5	0.12 J	0.01 UJ	0.33	0.01 U	0.2	0.01 U	0.01 U	0.19	0.01 U	0.68	0.25		
Dibenzo(a,h)anthracene in mg/kg			0.01 U		0.2 U	0.1 U	0.1 U	0.1 U	0.051	0.01 U	0.5 U	0.01 UJ	0.01 UJ	0.016	0.01 U	0.01 U	0.01 U	0.01 U	0.016	0.01 U	0.1 U	0.021		
Indeno(1,2,3-cd)pyrene in mg/kg			0.027		0.2 U	0.1 U	0.1 U	0.1 U	0.043	0.01 U	0.5 U	0.041 J	0.01 UJ	0.052	0.01 U	0.06	0.01 U	0.01 U	0.018	0.01 U	0.28	0.044		
Total cPAHs TEQ in mg/kg	0.4	7.9	0.0597		0.709	0.668	0.607	0.596	0.226	ND	1.26	0.118	ND	0.138	ND	0.221	ND	ND	0.118	ND	0.662	0.128		
Polychlorinated Biphenyls (PCBs)																								
Aroclor 1016 in mg/kg																								
Aroclor 1221 in mg/kg																								
Aroclor 1232 in mg/kg																								
Aroclor 1242 in mg/kg																								
Aroclor 1248 in mg/kg																								
Aroclor 1254 in mg/kg																								
Aroclor 1260 in mg/kg																								
Total PCBs (Sum of Aroclors) in mg/kg	10	10																						

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
 J = Analyte was positively identified. The reported result is an estimate.
 U = Analyte was not detected at or above the reported result.
 UJ = Analyte was not detected at or above the reported estimate

Table A-15 - Excavation Verification Soil Quality Data for USTs 71, 72, 73 Interim Action Area

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Saturated Soil	Interim Action Cleanup Level - Unsaturated Soil	Overexcavated Samples								UST71-H06TP7 8/30/13 (1 ft) OverEx
			BUST-S27 11/15/13 (5 ft) OverEx	BUST-S28 11/15/13 (3 ft) OverEx	BUST-S29 11/15/13 (5 ft) OverEx	BUST-S45 11/19/13 (12 ft) OverEx SAT	BUST-S62 12/12/13 (3 ft) OverEx	BUST-S62 FD 12/12/13 (3 ft) OverEx	BUST-S67 12/12/13 (3 ft) OverEx	BUST-S67 12/12/13 (3 ft) OverEx	
Total Petroleum Hydrocarbons (TPH)											
Bunker C in mg/kg	2,000	2,000	470	250 U	250 U	37,000	3,100	7,100	82,000 J	1,800	
Metals											
Antimony in mg/kg	1,400	1,400	1 U	1 U	1 U	1 U	1 U	1 U	1 U		
Arsenic in mg/kg	20	20	4.29	3.59	2.07	1.25	2.57	3.14	1.82	1 U	
Cadmium in mg/kg	3,500	3,500	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Chromium (Total) in mg/kg	5,300,000	5,300,000								8.2	
Copper in mg/kg	36	36	40.7	35.9	40.4	5.21	18.6	15.7	9.66	9.63	
Lead in mg/kg	81	1,000	34.2	3.82	3.03	4.79	35.5	27	3.55	3.68	
Mercury in mg/kg	0.1	0.1	0.13	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.1 U	0.1 U	
Nickel in mg/kg	48	48	25.1	22	16.7	8.72	18.1	16.6	9.33	11.7	
Zinc in mg/kg	85	100	134	38.1	30.9	12.9 J	46.5	62.4	22	13.9	
Polycyclic Aromatic Hydrocarbons (PAHs)											
Acenaphthene in mg/kg	210,000	210,000	0.059	0.01 U	0.01 U	0.45	0.053 J	0.14 J	0.1 U		
Acenaphthylene in mg/kg			0.016	0.01 U	0.01 U	0.1 U	0.01 U	0.01 U	0.1 U		
Anthracene in mg/kg	1,100,000	1,100,000	0.03	0.01 U	0.01 U	0.1 U	0.068 J	0.13 J	0.1 U		
Benzo(g,h,i)perylene in mg/kg			0.1	0.01 U	0.01 U	0.35	0.059 J		0.1 U		
Fluoranthene in mg/kg	140,000	140,000	0.15	0.01 U	0.01 U	0.61	0.12 J	0.29 J	0.1 U		
Fluorene in mg/kg	140,000	140,000	0.013	0.01 U	0.01 U	0.72	0.01 U	0.01 U	0.1 U		
Phenanthrene in mg/kg			0.1	0.01 U	0.01 U	0.89	0.077 J	0.2 J	0.18		
Pyrene in mg/kg	110,000	110,000	0.3	0.01 U	0.01 U	3.6	0.33 J	0.7 J	0.1 U		
Naphthalene in mg/kg	70,000	70,000	0.026	0.01 U	0.01 U	0.1 U	0.012 J	0.033 J	0.86		
Benzo(a)anthracene in mg/kg			0.1	0.01 U	0.01 U	1.4	0.11 J	0.26 J	0.1 U		
Benzo(a)pyrene in mg/kg			0.11	0.01 U	0.01 U	0.4	0.08 J		0.1 U		
Benzo(b)fluoranthene in mg/kg			0.14	0.01 U	0.01 U	0.46	0.083 J		0.1 U		
Benzo(k)fluoranthene in mg/kg			0.031	0.01 U	0.01 U	0.1 U	0.019	0.015 J	0.1 U		
Chrysene in mg/kg			0.17	0.01 U	0.01 U	3.4	0.21 J	0.43 J	0.1 U		
Dibenzo(a,h)anthracene in mg/kg			0.021	0.01 U	0.01 U	0.12	0.014	0.017 J	0.1 U		
Indeno(1,2,3-cd)pyrene in mg/kg			0.078	0.01 U	0.01 U	0.12	0.037 J	0.075 J	0.1 U		
Total cPAHs TEQ in mg/kg	0.4	7.9	0.149	ND	ND	0.649	0.108	0.214	ND		
Polychlorinated Biphenyls (PCBs)											
Aroclor 1016 in mg/kg										0.1 U	
Aroclor 1221 in mg/kg										0.1 U	
Aroclor 1232 in mg/kg										0.1 U	
Aroclor 1242 in mg/kg										0.1 U	
Aroclor 1248 in mg/kg										0.1 U	
Aroclor 1254 in mg/kg										0.1 U	
Aroclor 1260 in mg/kg										0.1 U	
Total PCBs (Sum of Aroclors) in mg/kg	10	10								ND	

Notes

Concentrations in shaded cells indicate value exceeds Interim Action Cleanup Level - Saturated Soil.
 Concentrations in bold text indicate value exceeds Interim Action Cleanup Level - Unsaturated Soil.
 SAT = Sample of saturated soil; samples without this designation are unsaturated soil.
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 UJ = Analyte was not detected at or above the reported estimate

Table A-16 - Excavation Verification Extractable and Volatile Petroleum Hydrocarbons (EPH/VPH) Soil Quality Data for All Areas

K-C Worldwide Site Upland Area 110207

Chemical Name	Interim Action Cleanup Level - Unsat. Soil	Interim Action Cleanup Level - Sat. Soil	Soil Beneath Warehouse			Bottom Sample in Place	Sidewall Samples in Place				Overexcavated Samples		
			BAST-EPH-03 10/21/13 (2 ft) SAT	BAST-EPH-04 10/21/13 (2 ft) SAT	BAST-S059 1/21/14 (7 ft) SAT	BUST-B39 12/3/13 (12 ft) SAT	BAST-S075 2/17/14 (4 ft)	BUST-S16 11/12/13 (8 ft)	BUST-S17 11/12/13 (8 ft)	BUST-S58 12/3/13 (12 ft) SAT	BAST-EPH-01 10/21/13 (2 ft) OverEx	BAST-EPH-02 10/21/13 (2 ft) OverEx	NRU-B05 1/27/14 (16 ft) OverEx SAT
Extractable Petroleum Hydrocarbons													
Aliphatics C10-C12 (EPH) in mg/kg			123	41.4 J	123	14.6	625	32.2	73.4	19.9	24.6 J	15.3 J	118
Aliphatics C12-C16 (EPH) in mg/kg			450	242	322	385	710	256	756	507	284	175	484
Aliphatics C16-C21 (EPH) in mg/kg			317	217	71.2	666	286	352	1,050	892	418	230	273
Aliphatics C21-C34 (EPH) in mg/kg			477	285	16	753	560	514	1,450	1,050	530	361	329
Aliphatics C8-C10 (EPH) in mg/kg			11.9 J	103 U	18.3 J	1.04 J	181	6.34 U	6.92	1.18 J	97.7 U	111 U	10 J
Aromatics C10-C12 (EPH) in mg/kg			102 U	103 U	5.57	5.63 UJ	50.5 J	6.34 U	5.53 U	5.64 UJ	97.7 U	111 U	32.1
Aromatics C12-C16 (EPH) in mg/kg			95 J	47.2 J	59.3	10.4	285	73.9	161	24.4	12.5 J	26.9 J	342
Aromatics C16-C21 (EPH) in mg/kg			315	276	58.5	422	840	388	870	583	166	181	560
Aromatics C21-C34 (EPH) in mg/kg			382	257	18.2	543	1,620	573	1,250	662	252	212	413
Aromatics C8-C10 (EPH) in mg/kg			5.32 J	103 U	1.06 J	2.85 J	52.5 U	6.34 UJ	5.53 UJ	3.76 J	97.7 U	111 U	5.99 U
Volatile Petroleum Hydrocarbons													
Aliphatics C10-C12 (VPH) in mg/kg					33		20.7						12.2 J
Aliphatics C5-C6 (VPH) in mg/kg					1.2		1.5 U						0.235 U
Aliphatics C6-C8 (VPH) in mg/kg					7.38		1.5 U						0.235 U
Aliphatics C8-C10 (VPH) in mg/kg					10.4		5.21						1.22
Aromatics C10-C12 (VPH) in mg/kg					106		50.4						65.6 J
Aromatics C12-C13 (VPH) in mg/kg					202		106						212
Aromatics C8-C10 (VPH) in mg/kg					18.1		6.98						2.82
Benzene in mg/kg					0.212 U		0.374 U						0.235 U
Ethylbenzene in mg/kg					0.212 U		0.374 U						0.235 U
m,p-Xylenes in mg/kg	700,000	700,000			0.212 U		0.374 U						0.235 U
Methyl tert-butyl ether (MTBE) in mg/kg					0.212		0.374 U						0.235 U
Naphthalene in mg/kg					2.59		0.374 U						3.97
o-Xylene in mg/kg					0.154 J		0.374 U						0.235 U
Toluene in mg/kg					0.212 U		0.374 U						0.235 U

Notes

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