Volume 1

Port Uplands and Marine Area As-Built Construction Completion Report

Former Scott Paper Mill Site
Anacortes, Washington
Ecology Consent Decree No. 09-2-01247

for

Washington State Department of Ecology on *Behalf of* Port of Anacortes

September 19, 2012

GeoEngineers
Earth Science + Technology

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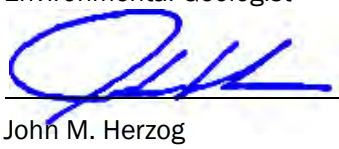

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1.0 INTRODUCTION

Cleanup actions were completed by the Port of Anacortes (Port) and Kimberly-Clark Corporation (K-C) at the Former Scott Paper Mill Site (the "Site") located in Anacortes, Washington (Site Plan, Figure 1). The Site was managed by the Washington State Department of Ecology (Ecology) as part of the Fidalgo and Padilla Bay component to the Puget Sound Initiative. Cleanup efforts at the Site were completed by the Port and K-C pursuant to Ecology's Consent Decree No. 09-2-01247-7 (Consent Decree; Ecology, 2009a), Former Scott Paper Company Mill Cleanup Action Plan (CAP; Ecology, 2009b) and the Engineering Design Report (EDR; GeoEngineers et al., 2009). In accordance with these documents, the Port is the lead respondent for the cleanup efforts within the northern upland portion of the Site (referred to as the Port Uplands Area) and the Marine Area which includes the portion of land located 75-feet mean higher-high water (MHHW; referred to as the 75-Foot Shoreline Buffer Zone). K-C is the lead respondent for the cleanup efforts on the southern upland portion of the Site (referred to as the MJB North Area). The Port Uplands, MJB North and Marine Areas are shown relative to the Site on Figure 2.

This Construction Completion Report has been prepared by the Port to document as-built conditions for cleanup and restoration activities completed within the Port Uplands and Marine Areas of the Site (Phases 1 through 3 of the cleanup action). Cleanup and restoration activities included remedial excavation and off-site permitted disposal of contaminated soil, dredging and off-site permitted disposal of contaminated sediment and wood debris, removal of a wooden breakwater, installation and construction of engineering controls including marine sediment cap and backfill, rock wave attenuation structures, rock revetment and block wall, shoreline habitat restoration and upland landscaping. Cleanup and restoration activities were completed in accordance with Ecology's CAP (Ecology, 2009b) and the Ecology reviewed EDR (GeoEngineers et al., 2010). Cleanup and restoration activities completed by K-C within the MJB North Area are documented in the MJB North Area As-Built Construction Completion Report (Anchor QEA, 2012; Phase 4 of the cleanup action).

2.0 BACKGROUND INFORMATION

Background information describing the Site including its known history, current uses, existing property features, soil and groundwater conditions and a summary of environmental investigations completed at the Site between 1993 and 2008 is presented in the Remedial Investigation (RI) Report (GeoEngineers et al., 2008) and CAP (Ecology, 2009b). The following sections provide general information on the location, history, subsurface conditions and results of previous cleanup actions completed at the Site.

2.1. Site Location

The Site is located in Anacortes, Washington and is bounded on the south by 20th Street, on the west by Q Avenue, on the east by Fidalgo Bay, and on the north by Cap Sante Boat Haven and 15th Street (Figure 2). The upland portion of the Site is approximately 42 acres in size and consists of the Port Uplands Area and the MJB North Area (Figure 2). The Marine Area comprises the contiguous aquatic lands adjacent to the Port Uplands and MJB North Areas and includes the

75-Foot Shoreline Buffer Zone. The 75-Foot Shoreline Buffer Zone is the interface between the Uplands and Marine Areas of the Site and is part of the Marine Area. The Marine Area is bounded by the Federal channel to the north, the inner harbor line to the east, and the MJB southern property line to the south (Figure 2).

2.2. Site History

Industrial development of the shoreline at the Site began in the late 1800s. Prior to development, the area was largely a shallow tideland. In 1892, a lumber mill was constructed on timber piling extending over Fidalgo Bay. The lumber mill was generally located within the Port Uplands Area. Within the northern Marine Area, wharves and offshore log rafts extended from the shoreline to approximately the inner harbor line until the late 1940s. Between approximately 1890 and 1940, approximately 5 to 20 feet of fill including sawdust and mill refuse were placed throughout the former Port Uplands Area tide flat beneath and adjacent to the wharves.

In 1925, a pulp mill was constructed south of the lumber mill within the MJB North Area. Pulp was produced using an acid-sulfate process using byproducts from the lumber mill. In 1940, the Scott Paper Company purchased the pulp and lumber mills, and operated these facilities until 1955. Process improvements by Scott Paper Company included the conversion to an ammonium sulfite process in 1952, the construction of a 16-inch effluent pipeline to Guemes Channel and an on-site surge pond for the pipeline in May 1951 (between 1925 to 1951, effluent from the mill was discharged directly into Fidalgo Bay), and the addition of pulp bleaching facilities in 1955. A knots and tailings pond was constructed in 1959 on the eastern portion of the Port Uplands Area to reduce settleable solids in the mill's effluent.

Materials known to have been utilized at the former pulp mill include petroleum, sulfur, anhydrous ammonia, ammonium hydroxide, and chlorine. Bunker C and diesel fuels were used to generate power and operate equipment. The pulp mill closed in 1978 and Scott Paper Company was acquired by K-C in December 1995.

2.3. Ownership and Current Land Use

The Port purchased the northern portion of the Site including Parcels 1, 2 and 3 (Figure 2) between 1978 and 1979. The southern portion of the Site was purchased by the Snelson-Anvil Corporation in 1979, and has been owned by MJB since 1990. In 1999, Sun Healthcare Systems, Inc. purchased Parcel 2 from the Port and, following initial cleanup and redevelopment activities, subdivided Parcel 2 into three sub-parcels which were later sold to the Northwest Educational Service District 189, Anacortes Concepts, LLC, and Seafarers' LLP. In 2008, the Port acquired a narrow strip of the Marine Area located between the Port and MJB properties.

Currently, Parcel 1 consists of a Marine Skills Center and, asphalt-paved and gravel parking areas. Parcel 2 is partially developed with office buildings, parking, and landscaped areas. Parcel 3 consists of Seafarers' Memorial Park (including landscaped areas and a Park Building). The Port-owned portion of the Marine Area is part of Seafarers' Memorial Park. The MJB-owned portion of the Marine Area is currently unused. The marine portion of the remediation area east of the inner harbor line is owned by the State of Washington and managed by the Port under a Port Management Agreement (PMA).

2.4. Previous Site Investigations

Detailed investigations of Port Parcel 2 were performed by ThermoRetec (ThermoRetec, 1999a), followed by preparation of a soil Cleanup Action Plan for this area (ThermoRetec, 1999b).

Between 2004 and 2008, the Port conducted environmental investigations of Port-owned property pursuant to Consent Decree No. 03-2-00492-1 dated March 21, 2003. The work required under this Consent Decree included, preparation of an remedial investigation/feasibility study (RI/FS) for soil at Parcels 1 and 3, groundwater throughout the Port Uplands Area, and marine sediments offshore of the Port Uplands Area.

Investigation of the MJB North Area was performed under Agreed Order No. DE 1783 dated January 27, 2005 between K-C and Ecology. The work required under this Agreed Order included preparation of an RI/FS for soil and groundwater at the MJB North Area and marine sediments offshore of the MJB North Area. K-C conducted the marine sediment investigation. MJB (pursuant to agreements with K-C) performed the upland soil and groundwater investigation.

To ensure that Site-wide issues were characterized and addressed, the Port, K-C, and MJB combined the various required elements of the Consent Decree and Agreed Order into a single site-wide RI/FS report. The final RI/FS report (GeoEngineers et al., 2008) was approved by Ecology on December 16, 2008. On May 8, 2009, the CAP (Ecology, 2009b) for the Former Scott Paper Mill Site was issued as a collaborative effort by Ecology, the Port, K-C and MJB and set forth the functional requirements for proposed site-wide cleanup action and the cleanup action objectives for the Site.

2.5. Subsurface Conditions (Prior to Site Cleanup)

2.5.1. Soil

Site soils prior to cleanup consisted of multiple layers of fill overlying native marine sediment and glacial deposits. Shallow soil is predominantly gravel and sand fill material with occasional mixed wood debris. The deeper subsurface fill contains a heterogeneous mixture of soil and wood debris. Extensive wood debris deposits, comprised of both dimensional lumber and sawdust of varying thickness, were identified throughout much of the Port Uplands Area, extending from approximately 5 to 20 feet below ground surface (bgs), and continuing into the intertidal and shallow sub-tidal areas of Fidalgo Bay. Fill material containing wood debris were also found in the MJB North Area along the shoreline. The thickness of the wood-containing fill material in the MJB North Area ranges from less than 1 foot near the former mill surge ponds to nearly 15 feet at the shoreline.

Prior to implementation of the site-wide cleanup actions, metals (antimony, arsenic, chromium (total), copper, lead, mercury, nickel, thallium and/or zinc), diesel-and heavy oil-range petroleum hydrocarbons, polychlorinated biphenyls (PCBs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs) and/or dioxins/furans were detected at concentrations greater than the site-specific soil cleanup levels in the fill and soil at the Site.

2.5.2. Groundwater

Two hydrogeologic units have been identified in the uplands area: a shallow water-bearing unit and a deeper confining unit. The shallow water-bearing unit occurs in the fill material, and the depth to

groundwater in this unit ranges from 3 to 12 feet bgs (7 to 15 feet saturated thickness) across the Site. The confining unit underlies the shallow water-bearing unit and consists of native marine silts and clays. The thickness of the confining unit is greater than 2 to 10 feet throughout the Site.

The predominant inferred groundwater flow direction is to the north toward Cap Sante Waterway in the northern portion of the Site, and to the east and southeast toward Fidalgo Bay in other areas of the Site. The existing hydrological information for the Site indicates that the groundwater flow directions in the interior (western portion) of the Site are not significantly affected by tidal fluctuations. However, groundwater monitoring data suggest that hydraulic gradients decrease, or possibly reverse temporarily, at high tide in the vicinity of the shoreline.

Prior to implementation of the Site-wide cleanup action, an isolated detection of dissolved arsenic was reported at a concentration marginally exceeding the site-specific groundwater cleanup level at MW-111 located within Parcel 1 (see Figure 2). Total and/or dissolved arsenic was also detected at concentrations exceeding the site-specific groundwater cleanup level during four monitoring events at MW-102 located at the southwest corner of Parcel 2 (see Figure 2). In addition, diesel-and heavy oil-range petroleum hydrocarbons were detected at concentrations above site-specific groundwater cleanup levels at MW-110 located in Parcel 3 (see Figure 2). At this location, free-phase petroleum product was observed during two monitoring events measuring in thicknesses of 0.03 and 0.6 feet.

2.5.3. Sediment

The sediment surface across the intertidal area extending from the northern Marine Area to the shoreline areas adjacent to the MJB North Area consisted of extensive debris of dimensional lumber, wood fragments, decaying timber piles and other debris such as brick and concrete. This debris fill was observed to be thickest near the shoreline and tapered out with distance from the shore. The wood debris content (based on visual observations) of surface sediments ranged from greater than 75 percent near the shoreline to less than 5 percent near the inner harbor line.

Prior to implementation of the Site-wide cleanup actions, metals and PCBs were detected in surface sediments at concentrations above the sediment quality standards (SQS) chemical criteria. The sediment sampling data defined a localized area of elevated metals and PCBs within the intertidal zone of the southern Marine Area. The likely source of these localized contaminated sediment deposits was attributed to historical erosion of adjacent upland fill material documented to contain elevated metal and PCB chemical concentrations.

2.6. Previous Cleanup Actions

Following the historical investigations of Parcel 2 (ThermoRetec, 1999a) and preparation of a soil Cleanup Action Plan for this area (ThermoRetec, 1999b), a partial cleanup of Parcel 2 (Excavation A and B) was completed by Sun Healthcare Systems, Inc. with oversight by Ecology under the MTCA Voluntary Cleanup Program (VCP). The Parcel 2 cleanup included removal and off-site landfill disposal of 3,469 tons of petroleum-contaminated soil, soil capping, and restrictive covenants to prevent future exposure to subsurface soil and to prevent groundwater use for drinking water. Work also included the installation of a sheet pile wall along the shoreline for containment of residual contaminated soil in the southeastern portion of Parcel 2. A completion report for the Parcel 2 cleanup action was submitted to Ecology in 2000 (ThermoRetec, 2000).

In 2000, Ecology issued a No Further Action (NFA) letter for diesel-and heavy oil-range petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), PCBs, dioxins/furans, wood debris, and metals in soil at the remediated part of Parcel 2 (Ecology, 2000). The NFA letter was contingent on long-term groundwater monitoring to ensure continued environmental protection. However, in 2005 Ecology modified the type of written opinions it provides under the VCP, and stopped providing NFA letters for a single medium such as soil (Ecology, 2005). Consequently, Ecology rescinded the NFA letter on September 26, 2006, as the Parcel 2 cleanup did not address the contamination in each media at the Site.

Storm-generated wave and current action had resulted in continuous erosion of the shoreline fill and had facilitated contaminant transport from the Uplands Area to the Marine Area (GeoEngineers et al., 2008). The shoreline along the portions of the Port Uplands Area and the MJB North Area were temporarily reinforced to prevent erosion, and the Port and MJB were required to conduct routine maintenance to ensure that the shoreline protection was intact. In February 2005, the Port completed a Bank Stabilization Interim Action along the Seafarers' Memorial Park shoreline under Consent Decree No. 03-2-00492-1 (Landau Associates, 2005).

In 2008, the Port installed two underground storage tanks at Parcel 3. An interim action was completed to address contaminated soil and wood debris excavated during the tank installation. An interim action completion report was prepared by the Port to document these activities (GeoEngineers, 2009a).

3.0 PORT UPLANDS AND MARINE AREA CLEANUP ACTION

The cleanup action for the Port Uplands and Marine Areas included soil remediation, sediment dredging and restoration activities. Soil cleanup activities were competed at seven remedial excavation areas (Remedial Excavation Area 1 through 7) within the Port Uplands Area and six remediation areas (Remedial Excavation Area 8 through 13) within the 75-Foot Shoreline Buffer Zone. Sediment cleanup activities included dredging of approximately 2 to 3 feet of near shore and off-shore sediments and wood debris from the Marine Area. Dredging activities in these locations were completed to remove sediments exceeding cleanup levels, wood debris and relic timber piles, and to accommodate the placement of the marine cap and backfill. Detailed descriptions of the Port Upland and Marine Area cleanup action is presented in the CAP (Ecology, 2009b). An overview of Remedial Excavation Areas 1 through 13 and the marine dredge area are shown on Figures 3 and 4, respectively.

Cleanup and restoration activities completed within the Port Uplands Area and Marine Area are summarized in Sections 4 through 6. Cleanup action objectives, permitting, cleanup standards and Site preparation activities for the Port Uplands and Marine Areas are summarized below. Details regarding the MJB North Area cleanup action are presented in the MJB North Area Construction Completion Report (Anchor QEA, 2012).

3.1. Cleanup Action Objectives

The objectives of the cleanup action, as defined in the EDR (GeoEngineers et al., 2010), were to:

- Prevent terrestrial ecological and human contact with soil containing contaminant concentrations exceeding site-specific cleanup levels based on risks to respective receptors;
- Prevent contamination of groundwater and surface water through potential transfer of contaminants from soil to groundwater (i.e., remove source of free-phase petroleum product at monitoring well MW-110 and contaminated soils exceeding MTCA cleanup levels at other locations);
- Remove contaminated source material in the 75-Foot Shoreline Buffer Zone with the potential to contaminate the Marine Area;
- Remove contaminated sediments and debris exceeding cleanup levels;
- Dredge portions of the intertidal and sub-tidal areas to accommodate placement of the marine cap;
- Place caps over remaining contaminated sediments to prevent aquatic ecological and associated food-web exposures to sediment containing contaminant concentrations exceeding sediment cleanup levels; and
- Prevent further erosion of the shoreline and limit the potential for sediment recontamination.

3.2. Cleanup Standards

Cleanup standards consist of: 1) cleanup levels that are protective of human health and the environment; and 2) the point of compliance at which the cleanup levels must be met.

The site-specific cleanup levels and points of compliance for indicator hazardous substances were established by Ecology and are presented in the CAP (Ecology, 2009b) and are summarized in the following sections.

3.2.1. Soil

Cleanup levels for Site soils are derived based on soil cleanup levels for unrestricted land use developed in accordance with WAC 173-340-740 conservatively assuming potential future land use. The site-specific cleanup levels for soil indicator hazardous substances including metals (antimony, arsenic, total chromium, copper, lead, mercury, nickel, thallium and zinc), diesel-and heavy oil-range petroleum hydrocarbons, PCBs, cPAHs and dioxins/furans are presented in Table 1.

Within the Port Uplands Area (Remedial Excavation Areas 1 through 7), a conditional point of compliance was established throughout the soil column from 0 to 6 feet bgs (biologically active soil zone). However, unlike Remedial Excavation Areas 1, 2 and 4, the maximum excavation depth at Remedial Excavation Area 3 was dictated by clean verification samples because existing data at this location suggested that the complete removal of arsenic contaminated soil was likely achievable by extending the excavation to a depth of 10 feet bgs. Additionally, due to the risk of potential future impacts to groundwater from petroleum contamination observed at MW-110, the maximum excavation depth of Remedial Excavation Area 5 (and subsequently Remedial Excavation Area 8) was also dictated by clean verification samples.

Within the 75-Foot Buffer Zone (Remedial Excavation Areas 8 through 12), a conditional point of compliance was established throughout the soil column from 0 to 10 feet bgs to protect human

health, ecological receptors and aquatic/benthic life. However, as directed by Ecology, the maximum excavation depth of Remedial Excavation Area 11 was dictated by clean verification samples due to the risk of potential future impacts to groundwater and sediments from previously undocumented petroleum contamination encountered during remedial excavation activities at this location.

3.2.2. Sediment

Cleanup levels for Site sediments were developed according to Sediment Management Standards (SMS) requirements. The site-specific cleanup levels for sediment indicator hazardous substances including metals (copper, lead, and mercury), diesel-and heavy oil-range petroleum hydrocarbons, PCBs, total volatile solids (TVS), total organic carbon (TOC), and percentage of wood debris are presented in Table 2.

For marine sediments, the point of compliance for protection of the environment is surface sediments within the biologically active surface water habitat zone, represented by samples collected within the upper 10 cm (0 to 0.3 feet) of the mudline. However, to facilitate placement of the marine cap and accompanying habitat substrate, the target removal thickness for the beach/intertidal area is approximately 3 feet and approximately 2 feet for the sub-tidal area.

3.3. Permitting

Because the Site cleanup action was performed pursuant to the Model Toxics Control Act (MTCA) under the terms of Consent Decree No. 09-2-01247-7, the cleanup action met the permit exemption provisions of MTCA (WAC 173-340-710[9]), obviating the need to follow the procedural requirements of most State and local laws that would otherwise apply to the action. The project was however, required to comply with the substantive requirements of the applicable exempt permits.

The cleanup action did require a U.S. Army Corps of Engineers (Corps) 401/404 permit to complete the remedial actions below MHHW. Following Endangered Species Act consultation with the Federal Natural Resource Trustees, and incorporating Ecology's Section 401 Water Quality Certification, the Corps issued the following project permits:

- Nationwide permit 38 (Permit No. NWS-2009-203) approved by the United States Department of the Army, Seattle District, Corps of Engineers (Corps) on August 28, 2009 for dredging, capping/backfilling and placing structures at the Site below the MHHW line (USACE, 2009a; Attachment 1),
    - Modification to special condition "b" which provides a work window for Endangered Species Act compliance under Permit No. NWS-2009-203 granted by the Corps on January 27, 2010 (USACE, 2010a; Attachment 1),
    - A second modification to special condition "b" which provides a work window for Endangered Species Act compliance under Permit No. NWS-2009-203 granted by the Corps on March 10, 2010 (USACE, 2010b; Attachment 1), and
- Nationwide permit 38 (Permit No. NWS-2010-614) approved by the United States Department of the Army, Seattle District, Corps of Engineers on October 12, 2010 for dredging of the Swinomish Channel navigation lane (USACE, 2010c; Attachment 1).

In addition to the Corps permits for the completion of in-water work, the following permits and approvals were also obtained for the Site cleanup action:

- Suitability determination issued by the Dredged Material Management Program on June 24, 2009 (DMMP, 2009a; Attachment 2) for the Port of Anacortes, Former Scott Paper Mill Site to dispose dredge material at the Port Gardner Open-Water Disposal Site. The extent of dredge material approved for open-water disposal is described and shown in the approval letter included Attachment 2;
- Suitability determination issued by Dredged Material Management Program on August 19, 2009 (DMMP, 2009b; Attachment 2) for the City of Anacortes, Skyline Marina to dispose dredge material at the Rosario Strait Open-Water Disposal Site. The extent of dredge material approved for open-water disposal is described and shown in the approval letter included Attachment 2. Dredge material generated from the Skyline Marina was subsequently placed at the Former Scott Paper Mill Site within the Habitat Fill Area as described in Section 6.2;
- Suitability determination issued by Dredged Material Management Program on December 11, 2011 (DMMP, 2009c; Attachment 2) for the Federal Swinomish Channel Navigation Dredging Project. Dredge material generated from the Swinomish Channel was placed at the Former Scott Paper Mill Site within the Habitat Fill and Backfill Areas as described in Section 6.2; and
- Construction Stormwater General Permit (WAR-011650) issued by Ecology on May 4, 2009. The permit is included in the EDR (GeoEngineers et al., 2010).

In addition to the permits/approvals listed above, the substantive requirements of applicable State and local laws and other applicable regulatory requirements were also followed during implementation of the Site cleanup activities, including:

- Requirements of the State Environmental Policy Act (SEPA) (Revised Code of Washington [RCW] 43.21C; WAC 197-11) and the SEPA procedures (WAC 173-802);
- Substantive requirements of the City of Anacortes' (City's) shoreline master program applicable to the project;
- Substantive timing restriction and technical requirements of Washington Department of Fish and Wildlife under Washington Hydraulic Code (WAC 220-110) for project work, which included dredging and placement of backfill and capping material, conducted below the ordinary high water mark;
- The Clean Water Act (CWA) requirements for the discharge of dredged or fill material to waters of the United States;
- Ecology's water quality requirements under the State Water Quality Act (RCW 90.48);
- Washington State Dangerous Waste Regulations (WAC 173-303) for waste designation, storage, handling and disposal of dangerous waste soils generated at the Site;
- Northwest Clean Air Agency substantive restrictions for off-site transport of airborne particulates;

- Noise ordinance requirements under City's Municipal Code and State environmental noise standards (WAC 173-60);
- Requirements of the Washington Industrial Safety and Health Act (RCW 49.17) and the Federal Occupational Safety and Health Act (29 CFR 1910, 1926) for health and safety during construction activities;
- Requirements of WAC 173-160 (minimum standards for construction and maintenance of wells) for groundwater monitoring well decommissioning and construction;
- Substantive requirements of City of Anacortes building and construction permits;
- Requirements of City of Anacortes Wastewater Treatment Plan discharge criteria; and
- The National Historic Preservation Act (Section 106) and the Federal Archaeological and Historical Preservation Act (16 USCA 496a-1) requirements for archeological monitoring.

3.4. Site Preparation

3.4.1. Monitoring Well Abandonment

A total of nine monitoring wells MW-1, MW-2, MW-5, MW-106, MW-107, MW-109, MW-110, MW-112, and VM-4 were abandoned by a Washington State licensed driller in accordance with Ecology requirements WAC 173-160-460. In addition, monitoring well MW-108 was removed during excavation activities at the Site. Because this well was completely removed from the Site, Ecology granted a variance in accordance with WAC 173-160-106 for the decommissioning of this well.

Monitoring well decommissioning records and Ecology variance approval letter are included in Appendix A. Approximate locations of decommissioned monitoring wells are shown in Figure A-1.

3.4.2. Temporary Haul Road

As part of the traffic control and, erosion and sediment control measures for the Site, a temporary haul road was constructed as an extension of 17th Street to access the Site. The temporary haul road extended eastward from Q Avenue to the shoreline, and provided construction vehicle access during site-wide cleanup action activities. The temporary haul road was constructed using crushed rock and/or gravel. A layer of geotextile fabric was laid over the entire footprint of the haul road prior to laying crushed rock/gravel to prevent contamination of the underlying surface in accordance with the Ecology-approved EDR (GeoEngineers et al., 2010).

Prior to construction of temporary haul road, soil sampling activities were completed in June 2009 to characterize pre-use surface soil conditions of the haul road footprint. The results of this study are documented in GeoEngineers' "Temporary Haul Road Pre-Use Characterization Results" letter dated June 25, 2009 (GeoEngineers, 2009b; Attachment 3) and "Temporary Haul Road Pre-Use Characterization Follow-up Sampling and Analysis Results" letter dated June 25, 2009 (GeoEngineers 2009c; Attachment 3).

3.4.3. Wheel Wash Facility

As part of the erosion and sediment control measures for the Site, a truck wheel wash was installed in the westbound lane of the haul road to avoid off-site tracking of soil by truck and other

construction vehicle leaving the Site. Soil excavated as part of the wheel wash installation was stockpiled on Site for reuse chemical analytical characterization. In accordance with the EDR (GeoEngineers et al., 2010), archeological monitoring was completed during the wheel wash excavation activities. Archeological monitoring activities are described in Section 4.5.

3.4.4. Pier 2 Material Storage and Handling Facility

Sediment, wood waste, and debris generated from intertidal and sub-tidal areas was transported by barge to the Port's temporary material storage and handling facility at Pier 2 (the "Pier 2 Facility") for processing prior to transport to a permitted disposal facility. Wastewater generated by these activities was collected using a network of catch basins and transferred to portable storage tanks, sampled, treated (as necessary), and discharged to the local publicly owned treatment works (POTW) as approved by the City of Anacortes. A Solid Waste Facility Permit (for construction and operation of solid waste piles in accordance with WAC 173-350) was obtained by the Port from the Skagit County Public Health Department on January 1, 2010 (SCPHD, 2010) for operations at the Pier 2 Facility.

3.4.5. Soil Stockpile Areas

Soil stockpile containment areas were constructed prior to and during the cleanup action for managing soil generated during remedial excavation activities in accordance with the EDR (GeoEngineers et al., 2010). Areas on Site used for temporary soil stockpiling include eastern portions of Parcel 1, eastern and northeastern portions of Parcel 2 and 3, and 75-Foot Shoreline Buffer Zone adjacent to MJB North Area.

3.4.6. Site Demolition

Demolition activities within the Port Uplands Area and the 75-Foot Shoreline Buffer Zone was completed in general accordance with the EDR (GeoEngineers et al., 2010). These activities generally included the demolition of Port Uplands Area infrastructure, including utilities, and asphalt and concrete surfaces/pavements as needed. Demolition activities also included the temporary relocation of the Seafarers' Park Building and demolition of the Seafarers' Park Building foundation, as well as demolition of other buried concrete foundations and debris that were encountered during excavation activities.

Utilities in the vicinity of the remedial excavation areas were decommissioned and/or temporarily disconnected and rerouted as necessary prior to and during excavation activities. Existing sanitary sewer lift station north of the pre-cleanup location of Seafarer's Park Building was demolished to allow better access to the contaminated soil during remedial excavation activities in its vicinity. The sanitary sewer lift station was replaced and relocated. Water mains, gas mains, and electrical service were also rerouted to allow better access to the contaminated soil during the excavation activities. Utility restoration/replacement activities are summarized in Section 6.0.

Demolition activities completed within the Marine Area generally included demolition and removal of the small craft launch facility including a 200-foot-long dock/pier and associated 10 steel piles, approximately 600 exposed timber piles, riprap revetment along the Port property and MJB property shoreline, and the timber breakwater structure located in the northern portion of the Marine Area prior to cleanup action activities. Timber pile breakwater structure removal activities

were completed between June 22, 2010 and July 6, 2010 in accordance with the Corps Permit No. NWS-2009-203. Timber piles either were completely removed or were cut off at an elevation no higher than 3 feet below the final cap or backfill surface using a conventional barge based dredging equipment. Removed timber piles were loaded onto a barge and transported to the Pier 2 Facility. Off-site transportation and permitted disposal of timber piles, generated during timber pile breakwater structure removal, is described in Section 5.0.

3.4.6.1. PARK BUILDING RELOCATION

Seafarers' Park building located within eastern portion Parcel 3 (Figure 3) was temporarily relocated in September 2009 to a gravel parking lot owned by the Port located west of Q Avenue between 14th Street and 13th Street in Anacortes, Washington. The building foundation and associated utilities were demolished during the excavation activities to facilitate removal of contaminated soil located beneath the Park Building footprint. Restoration of the Seafarers' Park Building following the completion of the cleanup action is summarized in Section 6.0.

3.4.6.2. TEMPORARY EXCAVATION SHORING

Temporary excavation shoring consisting of interlocking metal sheet piles were installed by Pacific Pile and Marine (PPM) along the MHHW line at Remedial Excavation Area 8, 9, 11 and 12 to facilitate excavation activities within these areas and to minimize infiltration of water into excavation. Sheet pile shoring was also installed in the eastern portion of Remedial Excavation Area 5 at the 75-Foot Shoreline Buffer Line and in the northern portion of Remedial Excavation Area 5 to minimize infiltration of water into excavation and to facilitate excavation activities within Seafarers Way to avoid damage to underground fuel storage tanks and associated fuel supply lines. All temporary shoring was removed upon completion of the remedial excavation activities.

3.4.7. Temporary Site Controls

Temporary site controls including access control, traffic control, erosion control/stormwater pollution prevention, dust and noise control, and surface water quality control were implemented in accordance with the EDR (GeoEngineers et al., 2010).

4.0 SOIL CLEANUP ACTION

Remedial excavation activities within the Port Uplands Area and Marine Area Shoreline Buffer Zone portions of the Site (Remedial Excavation Areas 1 through 7 and 8 through 13, respectively) were completed between July 1, 2009 and December 1, 2010 in accordance with the EDR (GeoEngineers et al., 2010) to remove soil exceeding Site cleanup standards (Section 3.2). The Remedial Excavation Areas are shown relative to the Site on Figure 3.

A GeoEngineers field representative was on site to observe excavation activities and to field screen soil from the excavations for evidence of contamination and to assist Ram Construction (contractor for Remedial Excavation Areas 1 through 4) and Pacific Pile and Marine (contractor for Remedial Excavation Areas 5 through 13) in segregating the overburden soil layer from the underlying contaminated soil layer. In general, the overburden soil layer ranged in thickness between approximately 3 and 5 feet. The underlying contaminated soil layer was encountered at depths ranging in 3-to-21 feet bgs. Soil excavation activities continued until verification soil samples obtained from the final excavation limits (base and sidewalls) indicated that analyte concentrations

were less than the site-specific soil cleanup levels or until the point of compliance (excavation base) was reached. Verification soil samples were collected from the remedial excavation areas at the frequency specified by the EDR (GeoEngineers et al., 2010) and submitted to OnSite Environmental, Inc. of Redmond, Washington for chemical analysis for one or more of the following parameters:

- Diesel-and heavy oil-range petroleum hydrocarbons by NWTPH-Dx;
- Polycyclic Aromatic Hydrocarbons (PAHs) by Environmental Protection Agency (EPA) method 8270SIM;
- Polychlorinated Biphenyls (PCBs) by EPA method 8082; and
- Metals (antimony, arsenic, chromium, copper, lead, mercury, nickel and/or zinc) by EPA method 6000/7000 series.

In addition to the verification sample analysis, certain sidewall and base samples were analyzed for dioxin/furans by EPA method 1690, as required by Ecology to document the soil quality condition relative to this parameter at the excavation limit.

Chemical analytical results and field screening data for verification soil samples obtained from the final limits of excavation are summarized in Tables 3 through 13. Field screening and soil sampling procedures are described in Appendix B. Copies of the chemical analytical reports are presented in Appendix C. Laboratory validation reports are presented in Appendix D.

Based on field screening results, visual observations and the results of verification samples obtained during remedial excavation activities, a total of approximately 82,551 cubic yards (100,371.26 tons) of contaminated soil was removed from the Port Uplands Area and Marine Area Shoreline Buffer Zone for permitted landfill disposal. Contaminated soil generated from the Site was either transported from the Site to Waste Management's Columbia Ridge Landfill located in Arlington, Oregon (a Subtitle D facility) and Allied Waste's Roosevelt Regional Landfill located in Klickitat County, Washington (a Subtitle D facility) or Waste Management's Chemical Waste Management Landfill located in Arlington, Oregon (Subtitle C facility). Certificates of disposal from Waste Management and Allied Waste are presented in Appendix E. Detailed tipping receipts are available upon request.

Details regarding the Port Uplands Area cleanup action (Remedial Excavation Areas 1 through 7) are summarized in Section 4.1. Details regarding the Marine Area Shoreline Buffer Zone cleanup action (Remedial Excavation Areas 8 through 13) are summarized in Section 4.2. Soil segregation, stockpiling and characterization activities are summarized in Section 4.3.

In accordance of The National Historic Preservation Act (Section 106) and the Federal Archaeological and Historical Preservation Act (16 USCA 496a-1), archeological monitoring activities were completed during excavation activities within the Port Uplands Area and 75-Foot Shoreline Buffer Zone. No historical artifacts of significance were identified in any of the remedial excavations completed (see Attachment 4, Archeological Monitoring Reports). Archeological monitoring activities are further described in Section 4.5.

4.1. Port Upland Area Cleanup Action

Soil cleanup action within the Port Uplands Area were completed to remove soil and wood debris/sawdust in which diesel-and heavy oil-range hydrocarbons, cPAHs, metals (arsenic, copper, lead and/or zinc) and/or dioxins/furans were detected at concentrations exceeding site-specific soil cleanup levels from Remedial Excavation Areas 1 through 7. Port Upland Area cleanup activities are summarized in the following sections.

4.1.1. Remedial Excavation Area 1 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 1 between July 1, 2009 and July 8, 2009 to remove soil in which cPAHs and metals (copper, lead and zinc) were detected at concentrations exceeding site-specific soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 124 cubic yards were removed from Remedial Excavation Area 1 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis. Overburden stockpile characterization activities are summarized in Section 4.3. The excavated underlying contaminated soil either was temporarily stockpiled on Site pending permitting landfill disposal or transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 1 are shown on Figure 5.

A total of 11 verification soil samples were obtained from Remedial Excavation Area 1 and submitted for chemical analysis of cPAHs and metals (copper, lead and zinc). Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 3. Final excavation limit soil sample locations are shown on Figure 5. Verification soil samples removed during excavation activities are summarized in Table F-1 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 1 on Figure F-1 (Appendix F).

4.1.2. Remedial Excavation Area 2 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 2 on July 13, 2009 to remove soil in which arsenic was detected at concentrations exceeding site-specific soil cleanup levels. Based on field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 4 cubic yards were excavated from Remedial Excavation Area 2 to complete the cleanup action at this area. All soil generated from Remedial Excavation Area 2 either was temporarily stockpiled on Site pending permitted landfill disposal or was transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final excavation limits of Remedial Excavation Area 2 are shown on Figure 6.

A total of six verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 2 and submitted for chemical analysis of arsenic. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the

final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 4. Final excavation limit soil sample locations are shown on Figure 6.

4.1.3. Remedial Excavation Area 3 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 3 on July 6, 2009 to remove soil in which arsenic was detected at concentrations exceeding site-specific soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 169 cubic yards of soil were excavated from Remedial Excavation Area 3 to complete cleanup activities at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis. Overburden stockpile characterization activities are summarized in Section 4.3. The excavated underlying contaminated soil either was temporarily stockpiled on Site pending permitting landfill disposal or excavated and transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 3 are shown on Figure 7.

A total of five verification soil samples were obtained from Remedial Excavation Area 3 and submitted for chemical analysis of arsenic. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 5. Final excavation limit soil sample locations are shown on Figure 7.

4.1.4. Remedial Excavation Area 4 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 4 between July 7, 2009 and August 3, 2009 to remove soil in which cPAHs were detected at concentrations exceeding site-specific soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 432 cubic yards were removed from Remedial Excavation Area 4 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis. Overburden stockpile characterization activities are summarized in Section 4.3. The excavated underlying contaminated soil either was temporarily stockpiled on Site pending permitting landfill disposal or excavated and transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 4 are shown on Figure 8.

A total of 17 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 4 and submitted for chemical analysis of cPAHs. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 6. Final excavation limit soil sample locations are shown on Figure 8. Verification soil samples removed during excavation activities are summarized in Table F-2 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 4 on Figure F-2 (Appendix F).

4.1.5. Remedial Excavation Area 5 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 5 between May 20, 2010 and November 19, 2010 to remove soil in which diesel-and heavy oil-range petroleum hydrocarbons, cPAHs, metals (copper, lead and zinc) and/or dioxins/furans were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 56,228 cubic yards were removed from Remedial Excavation Area 5 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis. Based on the results from initial verification samples obtained from Remedial Excavation Area 5, the excavated contaminated soil was temporarily stockpiled on Site for disposal characterization/waste designation. Overburden and contaminated stockpile characterization activities are summarized in Section 4.3. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 5 are shown on Figures 9 through 11.

A total of 227 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 5 and submitted for chemical analysis of diesel-and heavy oil-range petroleum hydrocarbons, cPAHs and/or metals (copper, lead and/or zinc). Because the eastern sidewall of Remedial Excavation Area 5 merged with Remedial Excavation Areas 8 and 9, sidewall samples at these locations were not obtained. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit, with one exception. Heavy oil-range petroleum hydrocarbons were detected in soil sample RA5-EX-185-6.0. Soil represented by this sample remains in-place at the northern Remedial Excavation Area 5 sidewall. As approved by Ecology, soil represented by this sample was not removed to avoid the risk of damaging two 10,000 gallon underground storage tanks (USTs) and associated product piping at this location. However, because the detected concentration of hydrocarbons in this sample is not greater than two times the site-specific soil cleanup level (WAC 173-340-740(7)(e)(i)) and less than 10 percent of the sample concentrations exceed the site-specific soil cleanup level (WAC 173-340-740(7)(e)(ii)), soil represented by this sample is statistically insignificant. Therefore, the cleanup action objectives for Remedial Excavation Area 5 were met. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 7. Final excavation limit soil sample locations are shown on Figures 9 through 11. Verification soil samples removed during excavation activities are summarized in Table F-3 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 5 on Figure F-3 (Appendix F).

In addition to the verification soil samples submitted for chemical analysis, composite sidewall samples RA5-EX-88-3.0, RA5-EX-89-3.0 RA5-EX-211-4.0 and RA5-EX-212-3.0 obtained from the northwestern, southwest, southern and northern sidewalls, respectively, and base sample RA5-EX-82-0.0 were submitted for chemical analysis of dioxins and furans to document concentrations left in-place at the final excavation limits. Dioxins and/or furans calculated using the toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD were detected at concentrations less than the site-specific cleanup levels in samples RA5-EX-82-0.0 and RA5-EX-89-3.0. Calculated TEQ concentrations of dioxins and/or furans exceeded site-specific cleanup levels in samples

RA5-EX-88-3.0, RA5-EX-211-4.0 and RA5-EX-212-3.0. Dioxin and furan chemical analytical results are summarized in Table 7.

During soil removal within Remedial Excavation Area 5, approximately 200 linear feet of asbestos containing pipe measuring 8-inches in diameter were encountered at a depth of approximately six feet in the eastern portion of Remedial Excavation Area 5. Asbestos containing materials encountered at this location were removed and transported from the Site on September 8, 2010 for permitted disposal to Northern Wasco County Landfill in The Dalles, Oregon by a licensed asbestos abatement contractor (Environmental Abatement Service [EAS]). Copies of the disposal receipts are presented in Appendix G.

4.1.6. Remedial Excavation Area 6 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 6 between December 16, 2009 and December 22, 2009 to remove soil in which metals (copper and zinc) and/or dioxins/furans were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 60 cubic yards were removed from Remedial Excavation Area 6 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis. Overburden stockpile characterization activities are summarized in Section 4.3. The excavated contaminated soil either was temporarily stockpiled on Site pending permitting landfill disposal or excavated and transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this area, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement.

A total of five verification soil samples were obtained from Remedial Excavation Area 6 and submitted for chemical analysis of copper and zinc. Contaminants of concern were not detected at the final excavation limit.

In addition to the verification soil samples submitted for chemical analysis, one composite sidewall sample and one base sample were submitted for chemical analysis of dioxins and furans to document concentrations left in-place at the final excavation limits. Dioxins and/or furans calculated using the toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD were detected at concentrations less than the site-specific cleanup levels in both the composite sidewall and base samples.

Remedial Excavation Area 6 was subsequently incorporated into Remedial Excavation Area 5 to access deeper petroleum hydrocarbon contamination soil at this location. As a result, verification soil samples and soil samples submitted for dioxin and furan analysis obtained at the final excavation limit were removed. Soil represented by these samples was subsequently stockpiled on site pending reuse. Soil samples obtained to characterize soil conditions at the final limits of excavation which were subsequently removed are summarized in Table F-4. Final excavation limit soil sample locations which were subsequently removed are shown relative to Remedial Excavation Area 6 on Figure F-4.

4.1.7. Remedial Excavation Area 7 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 7 on December 16, 2009 to remove soil in which dioxins/furans were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 30 cubic yards were removed from Remedial Excavation Area 7 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis. Overburden stockpile characterization activities are summarized in Section 4.3. The excavated contaminated soil either was temporarily stockpiled on Site pending permitting landfill disposal or excavated and transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement.

Soil samples RA7-EX-1-9.0 (based sample) and RA7-EX-2-12.0 (composite sample from the north, east, south and west sidewalls) were obtained from Remedial Excavation Area 7 and submitted for chemical analysis of dioxins and furans to document concentrations left in-place at the final excavation limit. Dioxins and/or furans calculated using the toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD were detected at concentrations exceeding site-specific cleanup levels in both the composite sidewall and base samples.

Remedial Excavation Area 7 was subsequently incorporated into Remedial Excavation Area 5 to access deeper petroleum hydrocarbon contamination soil at this location. As a result, verification soil samples obtained at the final excavation limit were subsequently removed and transported from the Site for permitted landfill disposal. Chemical analytical results for verification soil samples which were subsequently removed from Remedial Excavation Area 7 are summarized in Table F-5 (Appendix F). Verification soil sample locations which were subsequently removed from Remedial Excavation Area 7 are shown on Figure F-5 (Appendix F).

4.2. Marine Area Shoreline 75-foot Buffer Zone Cleanup Action

Soil cleanup action within the Marine Area Shoreline 75-Foot Buffer Zone was completed to remove soil and wood debris/sawdust in which diesel-and heavy oil-range hydrocarbons, cPAHs, PCBs, metals (antimony, arsenic, chromium, copper, lead, mercury, nickel, thallium and/or zinc) and/or dioxins/furans were detected at concentrations exceeding site-specific soil cleanup levels from Remedial Excavation Areas 8 through 13. Marine Area Shoreline Buffer Zone cleanup activities are summarized in the following sections.

4.2.1. Remedial Excavation Area 8 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 8 between January 7, 2010 and November 19, 2010 to remove soil in which diesel-and heavy oil-range petroleum hydrocarbons, metals (arsenic, copper and/or lead) and/or dioxins/furans were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 13,133 cubic yards were removed from Remedial Excavation Area 8 to complete the cleanup action at this area. Contaminated soil generated from Remedial Excavation Area 8 was temporarily stockpiled on Site for disposal characterization/waste designation. Contaminated stockpile characterization activities

are summarized in Section 4.3. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 8 are shown on Figure 12.

A total of 92 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 8 and submitted for chemical analysis of diesel-and heavy oil-range petroleum hydrocarbons and/or metals (arsenic and/or copper). Because the western and southern sidewalls of Remedial Excavation Area 8 merged with Remedial Excavation Areas 5 and 9 (respectively), sidewall samples at these locations were not obtained for chemical analysis. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 8. Final excavation limit soil sample locations are shown on Figure 12. Verification soil samples removed during excavation activities are summarized in Table F-6 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 8 on Figure F-6 (Appendix F).

In addition to the verification soil samples submitted for chemical analysis, composite sidewall sample RA8-EX-57-8.0 obtained from the northern and eastern excavation sidewalls and base sample RA8-EX-46-(-4.0) were submitted for chemical analysis of dioxins and furans to document concentrations left in-place at the final excavation limits. Dioxins and/or furans calculated using the toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD were detected at concentrations less than the site-specific cleanup levels in sample RA8-EX-46-(-4.0). Calculated TEQ concentrations of dioxins and/or furans exceeded site-specific cleanup levels in sample RA8-EX-57-8.0. Dioxin and furan chemical analytical results are summarized in Table 8.

During soil removal within Remedial Excavation Area 8, asbestos containing materials (tiles and insulation) were encountered at depths ranging from approximately 3 to 6 feet in the southern portion of Remedial Excavation Area 8. Asbestos containing materials encountered at this location were removed and transported from the Site between August 22 and 23, 2010 for permitted disposal to Northern Wasco County Landfill in The Dalles, Oregon by a licensed asbestos abatement contractor (EAS). Copies of the disposal receipts are presented in Appendix G.

4.2.2. Remedial Excavation Area 9 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 9 between April 12, 2010 and June 7, 2010 to remove soil in which diesel-and heavy oil-range petroleum hydrocarbons, cPAHs, metals (arsenic, copper and/or lead) and/or dioxins/furans were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 5,338 cubic yards were removed from Remedial Excavation Area 9 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis for reuse potential. The underlying contaminated soil was temporarily stockpiled on Site for disposal characterization/waste designation. Overburden and contaminated stockpile characterization activities are summarized in Section 4.3. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to

backfill placement. The final limits of excavation for Remedial Excavation Area 9 are shown on Figure 13.

A total of 30 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 9 and submitted for chemical analysis of diesel-and heavy oil-range petroleum hydrocarbons, cPAHs and/or metals (arsenic, copper and/or lead). As a result of dredging activities completed to depths of 6 feet bgs east of Remedial Excavation Area 9, sidewall verification soil samples were not obtained in the 0-6 foot range along the eastern excavation sidewall with the exception of sample RA9-EX-4-5.25. In addition, because the northern and western sidewalls of Remedial Excavation Area 9 merged with Remedial Excavation Areas 8 and 5 (respectively), sidewall samples at these locations also were not obtained for chemical analysis. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 9. Final excavation limit soil sample locations are shown on Figure 13. Verification soil samples removed during excavation activities are summarized in Table F-7 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 9 on Figure F-7 (Appendix F).

In addition to the verification soil samples submitted for chemical analysis, composite sidewall samples RA9-EX-30-11.0 obtained from the eastern and southern excavation sidewalls and base sample RA9-EX-8-3.5 were submitted for chemical analysis of dioxins and furans to document concentrations left in-place at the final excavation limits. Dioxins and/or furans calculated using the toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD were detected at concentrations less than the site-specific cleanup levels in sample RA9-EX-8-3.5. Calculated TEQ concentrations of dioxins and/or furans exceeded site-specific cleanup levels in samples RA9-EX-30-11.0. Dioxin and furan chemical analytical results are summarized in Table 9.

During soil removal within Remedial Excavation Area 9, asbestos containing materials (tiles and insulation) were encountered at depths ranging from approximately 3 to 6 feet in the northern portion of Remedial Excavation Area 9. Asbestos containing materials encountered at this location were removed and transported from the Site between August 22 and 23, 2010 for permitted disposal to Northern Wasco County Landfill in The Dalles, Oregon by a licensed asbestos abatement contractor (EAS). Copies of the disposal receipts are presented in Appendix G.

4.2.3. Remedial Excavation Area 10 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 10 between November 3, 2010 and December 1, 2010 to remove soil in which diesel-and heavy oil-range petroleum hydrocarbons, carcinogenic PAHs, PCBs and/or metals (antimony, chromium, copper, lead, mercury, nickel and/or zinc) were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 4,008 cubic yards were removed from Remedial Excavation Area 10 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis for reuse potential. The excavated contaminated soil was temporarily stockpiled on Site for disposal characterization/waste designation. Overburden and contaminated stockpile characterization activities are summarized in Section 4.3. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the

final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 10 are shown on Figure 14.

A total of 42 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 10 and submitted for chemical analysis of diesel-and heavy oil-range petroleum hydrocarbons, carcinogenic PAHs, PCBs and/or metals (antimony, chromium, copper, lead, mercury, nickel and/or zinc). Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 10. Final excavation limit soil sample locations are shown on Figure 14. Verification soil samples removed during excavation activities are summarized in Table F-8 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 10 on Figure F-8 (Appendix F).

4.2.4. Remedial Excavation Area 11 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 11 between October 26, 2009 and February 11, 2010 to remove soil in which diesel-and heavy oil-range petroleum hydrocarbons, carcinogenic PAHs and/or metals (antimony, arsenic, chromium, copper, lead, thallium and/or zinc) were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 6,332 cubic yards were removed from Remedial Excavation Area 11 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis for reuse potential. The excavated contaminated soil was temporarily stockpiled on Site for disposal characterization/waste designation. Overburden and contaminated stockpile characterization activities are summarized in Section 4.3. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 11 are shown on Figure 15.

A total of 106 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 11 and submitted for chemical analysis of diesel-and heavy oil-range petroleum hydrocarbons, carcinogenic PAHs and/or metals (antimony, arsenic, chromium, copper, lead, thallium and/or zinc). Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit, with the following exceptions. Contaminants detected exceeding site-specific cleanup levels remain in-place at the final limits of Remedial Excavation Area 11 east of MHHW and west of the 75-foot shoreline buffer. Contaminants east of MHHW are isolated by the marine cap. Contaminants west of the 75-foot shoreline buffer are located below the 6-foot conditional point of compliance for upland area soils. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 11. Final excavation limit soil sample locations are shown on Figure 15.

Soil represented by RA-11-EX-21-A-10.5, AR-11-22-A-5.5, RA-11-EX-23-A-10.5 and RA-11-24-A-5.5 obtained from the western limit of Remedial Excavation Area 11 was subsequently removed and transported from the Site by K-C during excavation of RA-11B completed as part of the MJB North Area cleanup action. Excavation activities at this location are documented the MJB North Area Construction Completion Report (Anchor QEA, 2012).

Verification soil samples removed during excavation activities are summarized in Table F-9 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 11 on Figure F-9 (Appendix F).

4.2.5. Remedial Excavation Area 12 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 12 between October 30, 2009 and December 18, 2009 to remove soil in which metals (antimony, arsenic, copper, lead, thallium and/or zinc) were detected at concentrations exceeding soil cleanup levels. Based on the field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 510 cubic yards were removed from Remedial Excavation Area 12 to complete the cleanup action at this area. Excavated overburden soil was segregated and stockpiled on Site pending chemical analysis for reuse potential. The excavated contaminated soil was temporarily stockpiled on Site for disposal characterization/waste designation. Overburden and contaminated stockpile characterization activities are summarized in Section 4.3. Upon completion of the cleanup action at this location, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final limits of excavation for Remedial Excavation Area 12 are shown on Figure 16.

A total of 18 verification soil samples (including duplicate samples) were obtained from Remedial Excavation Area 12 and submitted for chemical analysis of metals (antimony, arsenic, copper, lead, thallium and/or zinc). Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit, with the following exceptions. Contaminants (detected exceeding site-specific cleanup levels remain in-place at the base of Remedial Excavation Area 12 below the 10-foot shoreline buffer zone point of compliance. Verification soil samples obtained to characterize soil conditions at the final limits of excavation are summarized in Table 12. Final excavation limit soil sample locations are shown on Figure 16. Verification soil samples removed during excavation activities are summarized in Table F-10 (Appendix F). Removed verification soil sample locations are shown relative to Remedial Excavation Area 12 on Figure F-10 (Appendix F).

4.2.6. Remedial Excavation Area 13 and Soil Verification Sample Results

Excavation activities were completed at Remedial Excavation Area 13 on October 30, 2009 to remove soil in which arsenic and copper were detected at concentrations exceeding site-specific soil cleanup levels. Based on field screening results, visual observations and chemical analytical results of verification soil samples obtained, approximately 27 cubic yards were excavated from Remedial Excavation Area 13 to complete the cleanup action at this location. All soil generated from Remedial Excavation Area 13 either was temporarily stockpiled on Site pending permitted landfill disposal or was transported directly from the Site for permitted landfill disposal. Upon completion of the cleanup action at this area, the excavation was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. The final excavation limits of Remedial Excavation Area 13 are shown on Figure 17.

A total of five verification soil samples were obtained from Remedial Excavation Area 13 and submitted for chemical analysis of arsenic and copper. Contaminants of concern either were not detected or were detected at concentrations less than site-specific cleanup levels at the final excavation limit. Verification soil samples obtained to characterize soil conditions at the final limits

of excavation are summarized in Table 13. Final excavation limit soil sample locations are shown on Figure 17.

4.3. Soil Segregation and Stockpiling

Segregation and stockpiling of excavated soil during cleanup activities were completed to evaluate the reuse potential of overburden soil generated from Remedial Excavation Areas 1, 3 through 7 and 9 through 12. Contaminated soil generated from Remedial Excavation Areas 5 and 8 through 12 were stockpiled on site to evaluate the potential for dangerous waste designation as specified in the EDR (GeoEngineers et al., 2010). Soil was segregated for stockpiling as follows:

- Shallow overburden soil which was deemed geotechnically suitable for reuse on site as backfill, was temporarily stockpiled and sampled to confirm that contaminant concentrations were below the backfill soil reuse criteria presented in Table 1;
- Deeper overburden soil which was deemed geotechnically suitable for reuse on site as backfill, was temporarily stockpiled on site separately from the shallow overburden soil and sampled to assess contaminant concentrations relative to the backfill soil reuse criteria presented in Table 1;
- Soil and debris known to contain contaminant concentrations exceeding cleanup levels based on the results of previous chemical analytical data and/or soils that were determined to be geotechnically unsuitable for use as backfill were loaded directly into trucks from the remedial excavations and transported off site for permitted disposal, with the exception of material that was identified as potential dangerous waste based on historic chemical analytical data; and
- Soil and debris identified as potential dangerous waste based on existing chemical analytical data was temporarily stockpiled and sampled for waste designation purposes. Material designating as non-hazardous waste based on supplemental stockpile sample results was transported from the Site for permitted landfill disposal. Material designating as a dangerous waste based on supplemental stockpile sample results was managed in accordance with WAC 173-303.

In accordance with the EDR (GeoEngineers et al., 2010) segregation of excavated soils was based primarily on the depth of the soils relative to the original (pre-excavation) ground surface. Elevation (depth) control during excavation was achieved using standard land survey equipment. Stockpiled materials were covered and secured from wind, rain, and other disturbances (as appropriate) to control erosion and dust. Details regarding stockpile sampling for chemical characterization are discussed in Sections 4.3.1 and 4.3.2.

4.3.1. Chemical Characterization of Excavated Overburden Soil for Disposal or Reuse

Overburden soil generated from Remedial Excavation Areas 1, 3 through 7 and 9 through 12 were stockpiled on site for reuse or disposal characterization. Approximately 10,410 cubic yards of shallow overburden soil generally consisting sand and gravel and approximately 9,416 cubic yards of deep overburden soil generally consisting silty sand and sandy silt with occasional gravel and wood debris was generated during the course of the cleanup action. Shallow and deep overburden soil was stockpiled in separate areas for chemical analytical characterization. Discrete samples were obtained from these stockpiles from locations that were generally representative of the soils

and where field screening indicated contamination may be present. Soil samples were collected from the shallow and deep overburden stockpiles at the frequency and distribution specified by the EDR (GeoEngineers et al., 2010) and submitted to OnSite Environmental, Inc. of Redmond, Washington for chemical analysis for one or more of the following parameters:

- Diesel-and heavy oil-range petroleum hydrocarbons by NWTPH-Dx,
- Polycyclic Aromatic Hydrocarbons (PAHs) by EPA method 8270SIM,
- Polychlorinated Biphenyls (PCBs) by EPA method 8082,
- Metals (antimony, arsenic, chromium, copper, lead, mercury, nickel and/or zinc) by EPA method 6000/7000 series, and/or
- Dioxin/Furans by EPA method 1690.

Chemical analytical results for shallow overburden stockpile samples and deep overburden stockpile samples are summarized in Tables 14 and 15, respectively. Chemical analytical results for deep overburden stockpile samples are summarized in Table 14. Soil sampling procedures are described in Appendix B. Copies of the chemical analytical reports are presented in Appendix C. Laboratory validation reports are presented in Appendix D.

In consultation with Ecology, discrete stockpile samples which did not meet the chemical analytical reuse criteria listed in Table 1 were removed from the overburden stockpiles for permitted landfill disposal. At the limit of the soil removal, supplemental stockpile samples were obtained to verify that the contaminant exceedances were successfully removed and that the remaining portion of the stockpile met the chemical analytical backfill requirements.

4.3.1.1. SHALLOW OVERBURDEN STOCKPILE RESULTS

A total of 132 stockpile soil samples (summarized in Table 14) were obtained from shallow overburden soil stockpiles. Based on the field screening results, visual observations and chemical analytical results of stockpile soil samples obtained, approximately 1,300 cubic yards of shallow overburden soil did not meet the chemical analytical backfill reuse criteria (Table 1) and was subsequently removed from the Site for permitted landfill disposal. The remaining volume of shallow overburden soil which met the reuse criteria (approximately 9,110 cubic yards) was used as backfill at the Site.

4.3.1.2. DEEP OVERBURDEN STOCKPILE RESULTS

A total of 105 stockpile soil samples (summarized in Table 15) were obtained from deep overburden soil stockpiles. Based on the field screening results, visual observations and chemical analytical results of stockpile soil samples obtained, approximately 8,436 cubic yards of deep overburden soil did not meet the chemical analytical backfill reuse criteria (Table 1) and/or were not geotechnically suitable for use as backfill and was subsequently removed from the Site for permitted landfill disposal. The remaining volume of deep overburden soil which met the reuse criteria (approximately 980 cubic yards) was used as backfill at the Site.

4.3.2. Contaminated Soil Stockpile Dangerous Waste Evaluation

Contaminated soil generated from Remedial Excavation Areas 5 and 8 through 12 were stockpiled on site for disposal characterization because detected contaminant concentrations in historic soil

samples (and initial verification soil samples in the case of Remedial Excavation Area 5) exceeded the toxicity characteristic leaching procedure (TCLP) trigger value for arsenic, chromium, lead and/or mercury, or exceeded the toxicity criteria for copper. Approximately 26,821 cubic yards of contaminated soil silty sand and gravel and wood debris was generated during the course of the cleanup action. Discrete samples were obtained within the contaminated soil stockpiles from locations that were generally representative of the soils and where field screening indicated contamination may be present. Soil samples were collected from the stockpiles at the frequency and distribution specified by the EDR (GeoEngineers et al., 2010) and submitted to OnSite Environmental, Inc. of Redmond, Washington for chemical analysis for one or more of the following parameters:

- Total metals (arsenic, chromium, copper, lead and/or mercury) by EPA method 6000/7000 series, and
- TCLP analysis of arsenic, chromium, copper, lead and/or mercury by EPA method 1311/6010B.

Chemical analytical results for contaminated stockpile samples are summarized in Table 16. Soil sampling procedures are described in Appendix B. Copies of the chemical analytical reports are presented in Appendix C. Laboratory validation reports are presented in Appendix D.

In consultation with Ecology, discrete stockpile samples which designated as a dangerous waste were removed from the contaminated stockpiles for permitted landfill disposal. At the limit of the removal, supplemental stockpile samples were obtained to verify that soil designating as a dangerous waste were successfully removed and that the remaining portion of the stockpile met the chemical analytical requirements for Subtitle D landfill disposal. Soil designating as a dangerous waste was managed pursuant to WAC 173-303 while on site an in transport to the landfill disposal facility.

4.3.2.1. CONTAMINATED STOCKPILE RESULTS

A total of 215 stockpile soil samples (summarized in Table 16) were obtained from contaminated soil stockpiles. Based on chemical analytical results of stockpile soil samples obtained, approximately 885 cubic yards of soil designated as a dangerous waste and was subsequently removed from the Site for permitted landfill disposal. The remaining volume of contaminated soil designated as a non-hazardous waste and was removed from the Site for permitted landfill disposal.

4.4. Excavation Wastewater Management and Disposal

Excavation wastewater generated during cleanup activities resulting from wheel wash operations, groundwater infiltration, seawater seepage, accumulation of precipitation were managed by the contractor to maintain clean roadways resulting from truck traffic, and to maintain a dry excavation to facilitate soil sampling activities and to minimize the potential for cross-contamination. An excavation dewatering system consisting of pumps connected to polyvinyl chloride (PVC) pipes and hoses, above ground storage tanks, activated carbon vessels, ion resin vessel and particulate filter were operated on an as-needed based throughout the course of the cleanup action to treat wastewater generated prior to discharge to the City of Anacortes (City) sanitary sewer. Periodic checks of the water treatment system were completed to evaluate performance of the equipment.

During treatment system operation, water quality samples representative of the treated water were obtained from the treatment system to document compliance with the City's dewatering discharge authorization for the project and for the City to determine acceptable wastewater discharge rates. Daily (or as requested by the City) field measurements of salinity, pH, settable solids and turbidity were used by the City to determine the maximum daily acceptable discharge rate to the sanitary sewer. Chemical analytical results of water quality samples were obtained to confirm compliance with the City's discharge requirements for petroleum contaminated sites (Table 17). In accordance with Wastewater Treatment and Sampling Plan and subsequent plan updates (GeoEngineers, 2009d; GeoEngineers, 2009f and GeoEngineers, 2010), water quality samples were analyzed for the following parameters:

- Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA method 8021B,
- Gasoline-range hydrocarbons by NWTPH-G,
- Diesel-and heavy oil-range hydrocarbons by NWTPH-Dx,
- Total metals (lead and sodium) by EPA method 6010B/200.8,
- Acidity (pH) by EPA method 150.1,
- Suspended solids (SS) by EPA method SM 2540 D, and
- Total settleable solids (TSS) by EPA Method 160.5.

To document baseline conditions, water quality samples DW-081409 and DW-PH2-RA-111009 were obtained prior to discharge to determine the level of water treatment necessary to comply with the City's wastewater discharge requirements. Sample DW-081409 was obtained to characterize batched wastewater generated from Remedial Excavation Areas 1 through 4. Sample DW-PH2-RA-111009 was obtained to characterize wastewater being generated from Remedial Excavation Areas 5 through 12. Based on these results, wastewater was treated by ion resin and/or particulate filters prior to discharge.

To document compliance with the City's wastewater discharge requirements, a total of 20 water quality samples were obtained on a weekly basis during active discharging. Analytical results of these samples indicated that the treated water was suitable for discharge to the City's sanitary sewer, with five exceptions. Detected levels of lead and/or TSS in samples DW-PH2-RA-010710, DW-PH2-RA-011510, DW-PH2-RA-030210, DW-PH2-RA-032410 and DW-PH2-RA-060310 exceeded the City's discharge criteria. In accordance with the City's discharge requirements, discharge to the City sewer was temporarily halted pending additional characterization activities. Results of follow up wastewater samples subsequently met the City's discharge requirement and discharging activities resumed. Chemical analytical results for water quality samples obtained are summarized in Table 18.

A total of 1,318,624 gallons of construction wastewater generated from Port Uplands Area, Marine Area Shoreline Buffer Zone and wheel wash were discharged to the City's sanitary sewer. A detailed construction wastewater disposal summary table is included in Appendix H. Copies of the wastewater discharge request letter and wastewater treatment and sampling plans are presented in Attachment 5.

4.5. Archeological Monitoring

In accordance with Corps approved (USACE, 2009a) archeological monitoring was completed during cleanup activities in the Port Uplands Area and Marine Area Shoreline Buffer Zone in accordance with the approved Archaeological Monitoring Plan dated April 2009 (HRA, 2009a). As stipulated by this plan, archeological monitoring activities were completed during the following:

- Excavation activities conducted west of R Avenue that extended deeper than 5 feet bgs (i.e., below historical fill), which included Remedial Excavation Areas 1 and 3;
- Excavation activities conducted at any location that extended deeper than 13 feet bgs (i.e., below historical fill), which included the excavation completed for the new sanitary sewer lift station located within the limits of Remedial Excavation Area 4 and Remedial excavation Areas 5 and 8 through 10; and
- Excavation activities conducted south of R Avenue that extended deeper than 3 feet bgs (i.e., below historical fill). This includes the excavation conducted to install the wheel wash facility located within the western portion of the temporary haul road and Remedial Excavation Areas 11 and 12.

Archeological monitoring was competed by Historical Research Associates, Inc (HRA) and Columbia Geotechnical Associates (CGA). Archeological monitoring reports documenting Site observations are presented in Attachment 4. Based on their observations, no historic findings of significance were identified during the cleanup action.

5.0 SEDIMENT CLEANUP ACTION

Cleanup activities (dredging) within the Marine Area were completed to remove sediment, wood, and other debris exceeding site-specific sediment cleanup levels (see Table 2). In addition, dredging activities were also completed to accommodate the placement of the marine cap and backfill. Dredging for the marine cap included the removal of sediment, dimensional lumber, and wood debris and relic piles within the beach /intertidal area to a depth of approximately 3 feet below the mudline. Dredging for the marine backfill included the removal of sediment, dimensional lumber, wood debris and relic timber piles within the sub-tidal area to a depth of approximately 2 feet below the mudline with a 1-foot over dredge allowance. The sediment cleanup action was completed in accordance with the CAP (Ecology, 2009b) and EDR (GeoEngineers et al., 2010) between September 14, 2009 and July 15, 2010 to achieve the following:

- Sediment, exposed relic timber piles, dimensional wood and other debris removal including surface sediment exceeding the cleanup criteria from beach/intertidal portions of the Marine Area and to accommodate placement of the post-dredge marine cap to contain sediments exceeding the cleanup levels and deeper wood debris deposits, and
- Sediment, wood and other debris removal including surface sediment exceeding SQS criteria from the sub-tidal portions of the Marine Area, to accommodate construction of the wave attenuation structures and to accommodate placement of the post-dredging marine backfill to contain sediments exceeding the cleanup levels and deeper wood debris deposits.

Intertidal and sub-tidal dredging activities are summarized in the following sections.

5.1. Intertidal Area Dredge

Dredging within beach/intertidal area was generally performed using conventional barge based dredging equipment with the exception of portions of beach/intertidal areas adjacent to MHHW line where tidal conditions/shallow water prevented barge access. At these locations, land-based excavation equipment was used to complete the sediment/debris removal.

Dredging within the intertidal area was completed to a depth of approximately three feet below the mudline (design depth), with one exception. Extensive sawdust deposits exposed at the design depth in the central portion of the intertidal dredge area were determined to be unsuitable to support the marine cap at this location. As a result, the dredge depth was extended to depths ranging between four and seven feet below the mudline to remove the sawdust and provide more stable subsurface conditions to support the marine cap.

Approximately 20,253 cubic yards of material were removed from the marine area as the result of the intertidal dredge activities. Dredge material handling and disposal are summarized in Section 5.3. The beach/intertidal dredge area is shown relative to the dredge area on Figure 18.

5.2. Sub-Tidal Dredge Area

Dredging within sub-tidal area was generally performed using conventional barge based dredging equipment. Dredging within the sub-tidal area was completed to a depth approximately three feet (design depth) below the mudline, with one exception. Native silt and clay were encountered at approximately 1-foot below the mudline in the northern portion of the sub-tidal dredge area. At this location, the dredging depth extended only to the upper horizon of the native sediments.

Approximately 29,734 cubic yards of sediment and wood debris were generated from the sub-tidal dredge area. Dredge material handling and disposal are summarized in Section 5.3. The sub-tidal dredge area is shown relative to the dredge area on Figure 18.

5.3. Dredged Material Handling, Segregation, Storage and Disposal

5.3.1. Dredged Material for Open-Water Disposal

Approximately 19,673 cubic yards of dredged sediment was transported to Port Gardner open-water disposal site located near Everett, Washington in accordance with the Dredged Material Management Office (DMMO) open-water suitability determination (DMMP, 2009) between September 15, 2009 and October 31, 2009. A copy of the DMMO's open-water suitability determination is presented in Attachment 6.

Dredged material suitable for open-water disposal either was transported directly to the Port Gardner open-water disposal site or were transported to the Port's Pier 2 Facility for processing prior to transport and disposal at Port Gardner. Material processing at the Port's Pier 2 Facility included sediment screening to remove debris greater than 2-feet in any dimension, as required by the project permit. Following processing, the dredged material was reloaded to the disposal barge and transported to the Port Gardner open-water disposal site. The screened material was transported from the site by truck for disposal to Waste Management's Greater Wenatchee

Regional Landfill located in Wenatchee, Washington. Copies of the weekly open-water disposal reports are presented in Appendix I. Landfill certificates of disposal are presented in Appendix E.

5.3.2. Dredged Material for Upland Landfill Disposal

Materials dredged from intertidal sub-tidal areas that were unsuitable for open-water disposal were transported to the Port's Pier 2 Facility and offloaded for processing. Material processing included dewatering and amendment with diatomaceous earth, as necessary to pass the landfill's required paint filter test, and screening of the material to separate gravel from dredged sediments. A total of 20,722 tons of contaminated sediment and wood debris generated from the Site were transported either to Waste Management's Greater Wenatchee Regional Landfill located in Wenatchee, Washington or Waste Management's Columbia Ridge Landfill located in Arlington, Oregon for permitted disposal. A total of 846 tons of creosote timber piling generated from the demolition of the timber pile breakwater were transported to Waste Management's Columbia Ridge Landfill located in Arlington, Oregon for permitted disposal. Gravel separated from dredged sediments were subsequently washed and transported back to the Site for placement over the pre-cap dredge surface. Landfill certificates of disposal are presented in Appendix E.

5.4. Pier 2 Facility Wastewater Management and Disposal

Wastewater generated during the processing of sediments at the Pier 2 Facility was managed by the Port. Wastewater generated was collected and transferred to a wastewater treatment system which consisted of above ground storage tanks, activated carbon vessels, and particulate filter. The wastewater treatment system operated on an as-needed based throughout the course of the cleanup action and discharged to the City of Anacortes sanitary sewer system. Periodic checks of the water treatment system were required by the City to monitor performance of the treatment system. Water quality samples were obtained prior to, and during wastewater discharge to the City's sanitary sewer system.

During treatment system operation, water quality samples representative of the treated water were obtained from the treatment system to document compliance with the City's dewatering discharge authorization for the project and for the City to determine acceptable wastewater discharge rates. Daily (or as requested by the City) field measurements of salinity, pH, settable solids and turbidity were used by the City to determine the maximum daily acceptable discharge rate to the sanitary sewer. Chemical analytical results of water quality samples were obtained to confirm compliance with the City's discharge requirements (Table 17). In accordance with Wastewater Treatment and Sampling Plan and subsequent plan updates (GeoEngineers, 2009d; GeoEngineers, 2009f and GeoEngineers, 2010), water quality samples were analyzed for the following parameters:

- Benzene, ethylbenzene, toluene and xylenes (BETX) by EPA method 8021B,
- Gasoline-range hydrocarbons by NWTPH-G,
- Diesel-and heavy oil-range hydrocarbons by NWTPH-Dx,
- Total metals (copper, lead, sodium and zinc) by EPA method 6010B/200.8,
- Acidity (pH) by EPA method 150.1,
- Suspended solids (SS) by EPA method SM 2540 D, and

- Total settleable solids (TSS) by EPA Method 160.5.

To document baseline conditions, water quality sample DW-PH2-P2-101609 was obtained prior to discharge to determine the level of water treatment necessary to comply with the City's wastewater discharge requirements. Based on these results, wastewater was treated by adding a flocculent followed by particulate filtration prior to discharge.

To document compliance with the City's wastewater discharge requirements, a total of 25 water quality samples were obtained on a weekly basis during active discharging. Analytical results of these samples indicated that the treated water was suitable for discharge to the City's sanitary sewer, with two exceptions. Detected levels of lead and in samples DW-PH2-P2-020210 and DW-PH2-P2-052710 exceeded the City's discharge criteria. In accordance with the City's discharge requirements, discharge to the City sewer was temporarily halted pending additional characterization activities. Results of follow up wastewater samples subsequently met the City's discharge requirement and discharging activities resumed. Chemical analytical results for water quality samples obtained are summarized in Table 19.

A total of 1,631,535 gallons of construction wastewater generated from Port's Pier 2 Facility were discharged to the City's sanitary sewer. A detailed construction wastewater disposal summary table is included in Appendix H. Copies of the wastewater discharge request letter and wastewater treatment and sampling plans are presented in Attachment 5.

5.5. Verification Sediment Sampling

Verification sediment samples were collected from the final dredge surface to document the sediment quality and contaminants concentrations remaining on Site beneath the marine backfill and cap. A total of 11 sediment verification samples (GEI-SED-1 through GEI-SED-11) and one duplicate sample (P2-DUP-50) were collected from the Site. Samples were submitted to OnSite Environmental, Inc. for chemical analyses of the following sediment indicator hazardous substance:

- Diesel-and heavy oil-range petroleum hydrocarbons by NWTPH-Dx,
- PCBs by EPA method SW8082,
- Metals (copper, lead and mercury) by EPA method 6000/7000 series,
- Total Organic Carbon (TOC) by EPA method 9060, and
- Total Volatile Solids (TVS) by EPA method SM 245-G.

In addition, the percentage of wood debris (based on visual observations) was documented at the time of sample collection.

Contaminants of concern either were not detected or were detected at concentrations less than site-specific sediment cleanup levels in the samples submitted for chemical analysis with the following exceptions. Detected levels mercury and/or PCBs and percentage of TVS and/or wood

content exceeded site-specific cleanup or Puget Sound Lowest Applicable Effects Threshold (LAET)[1] levels in sediment samples GEI-SED-1, GEI-SED-6, GEI-SED-7, GEI-SED-8, GEI-SED-10 and GEI-SED-11. Sediment represented by these samples is either isolated by protective caps (marine cap or habitat backfill) measuring approximately two to three feet in thickness.

Approximate locations of sediment verification samples are shown on Figure 18 and their chemical analytical results are summarized in Table 20. Copies of sediment sample chemical analytical laboratory reports for are presented in Appendix C. Chemical analytical data validation reports are presented in Appendix D.

5.6. Water Quality Monitoring

Water quality monitoring activities were completed during in-water construction activities including dredging, shoreline excavation, timber breakwater removal, capping/backfilling of intertidal/sub-tidal areas, wave attenuator construction, and during the dredged sediment open-water disposal at Port Gardner Open-Water Disposal Site in accordance with Nationwide Permit 38 No. NWS-2009-203 issued to Port by the Corps on August 28, 2009 (USACE, 2009b) and Water Quality Protection and Monitoring Plan (WQPMP) for Former Scott Paper Company Mill Site dated August 13, 2009 (GeoEngineers, 2009e). Water quality monitoring activities were also completed during dredging activities within the Swinomish Channel in accordance with Nationwide Permit 38 No. NWS-2010-614 issued to Port by the Corps on October 10, 2010 (USACE, 2010c).

Water quality monitoring for the Site was completed during in-water activities at the frequency specified in the Water Quality Protection and Monitoring Plan (WQPMP). A submersible-probe (Horiba U-52) was used to document turbidity levels within the water column at 150-foot early warning point and 300-foot point of compliance. In addition, visual observations of petroleum sheen, floating debris and silt plume were also documented. As specified by the WQPMP, water quality monitoring was to be completed during block wall and riprap revetment construction activities. However, the block wall and riprap revetment were not constructed in water and therefore, water quality monitoring was not conducted during these construction activities. A copy of the Water Quality Protection and Monitoring Plan is presented in Attachment 6.

Water quality exceedances were not observed during any of the in-water work activities at the 300-foot point of compliance at the Site. Water quality monitoring results for in-water construction activities are summarized in Appendix J.

Water quality monitoring for the Swinomish Channel dredging activities were completed at the frequency specified by Ecology under Section 401 of the Water Quality Act. Water Quality during these activities was visually monitored at the 150-foot point of compliance for turbid water. Water quality exceedances were not observed during in-water work at the 150-foot point of compliance at

[1] The percentages of TOC in samples GEI-SED-1, GEI-SED-5 through GEI-SED-8, GEI-SED-10, and GEI-SED-11 were outside the range of typical Puget Sound marine sediments (i.e. 0.5 to 3%), therefore, PCB concentrations were not normalized to organic carbon in accordance with Ecology guidance and the dry weight concentrations in these samples were compared to the Puget Sound Lowest Applicable Effects Threshold (LAET) for PCBs.

the Swinomish Channel during dredging. Water quality monitoring results for in-water construction activities are summarized in Appendix J.

Water quality monitoring during dredged sediment open-water disposal activities at Port Gardner Open-Water disposal site was completed during disposal activities. Water Quality monitoring consisted of visual observation of petroleum sheen, floating debris and silt plume. In accordance with open water disposal authorization, weekly disposal summary reports were provided to the Washington State Department of Natural Resources (DNR). Copies of the weekly disposal summary reports are presented in Appendix I.

6.0 SITE RESTORATION AND ENGINEERING CONTROLS

6.1. Uplands Area and 75-foot Shoreline Buffer

6.1.1. Temporary Haul Road Decommissioning

The temporary haul road constructed on Site to facilitate cleanup action activities was decommissioned between December 2010 and April 2011 following completion of the contaminated soil excavation activities. Haul road decommissioning included removal of materials used to construct the haul road including crushed rock/gravel and underlying geotextile fabric, and grading of the loose surficial soils within the footprint of the haul road down to underlying hard surfaces. Post-use soil sampling was performed on December 28, 2010 and April 25, 2011 to characterize surface soil conditions of the haul road footprint on completion of the removal. The results of the post-use sampling and analysis are documented in letter "Temporary Haul Road Post-Use Characterization Results – East Haul Road" dated February 2, 2011 (GeoEngineers, 2011b) and letter "Temporary Haul Road Post-Use Characterization Results – West Haul Road" dated August 23, 2011 (GeoEngineers, 2011c). These letters are included in Attachment 3.

Exceedances of the cleanup levels identified by the haul road pre-and post-use sampling were addressed as part of the MJB North Area cleanup action. Remedial activities completed to address these identified exceedances described in the MJB North Area Construction Completion Report (Anchor QEA, 2012).

6.1.2. Stockpile Area Decommissioning

Stockpile areas used to temporary stockpile soil generated during the remedial excavation activities were decommissioned following the completion of their intended use. Decommissioning activities included removal of the contaminated soils, under-liners and blocks used to construct the storage bunkers, visual inspection of the underlying surfaces, grading and removal of the loose surficial soils within the stockpile area down to the underlying hard surfaces. Soil sampling activities were completed on December 22, 2010 to characterize post-use surface soil conditions of the soil stockpile area located within the Shoreline Buffer Zone east of the MJB North Area. These soil sampling activities are documented in the Post-Construction MJB Stockpile Area Characterization Results letter dated February 2, 2011 (GeoEngineers, 2011a). This letter is included in Attachment 3.

An evaluation of the post-construction stockpile area surface soil sample results, field screening results and visual observations indicate that the post-stockpile surface conditions were not

adversely impacted by the use of this area for temporarily stockpiling soil (i.e., none of the samples collected and analyzed for the purposes of documenting the post-use condition exceeded site cleanup levels and no visual indications of contamination were observed).

6.1.3. Utilities

Utilities relocation/restoration and new utilities installation activities were completed as described in the EDR (GeoEngineers et al., 2010). Utilities such as water mains, gas mains, and electrical services rerouted to facilitate remedial excavation activities were restored. Sanitary sewer lift station demolished to facilitate remedial excavation was replaced and relocated at the location of Remedial Excavation Area 4, near the center of Parcel 2 within the Port Uplands Area, and sewer lines were rerouted to the location of the new sewer lift station. Approximate locations of utilities that were rerouted and restored, as well as utilities that were replaced during and/or following the completion of the cleanup action are shown in the as-built drawings included in Appendix K.

Excavation activities conducted outside the limits of remedial excavation to reroute/replace utilities generated a total of approximately 2,900 cubic yards of soil. Approximately 400 cubic yards of shallow overburden soil predominantly consisting sand and gravel was stockpiled on Site for reuse chemical analytical characterization. Overburden soil stockpiling and reuse chemical analytical characterization activities are discussed in Section 4.3. Approximately 2,500 cubic yards of deeper fill material predominantly consisting excessive wood debris and heterogeneous mixture soil and wood was deemed unsuitable for backfilling based on its physical properties and was transported from the Site to an off-site permitted disposal facility. Soil disposal activities are described in Section 4.3.

6.1.4. Backfill and Compaction

Backfilling activities were completed to restore surface grades to the design elevations following completion of the cleanup actions and utility restoration activities using either imported material or overburden soil which met the chemical analytical or geotechnical requirements for reuse. In accordance with the project specifications, imported material was chemically and geotechnically evaluated. Approved sources for import material included the following:

- Aggregates West's Pit No. M239 located in Anacortes, Washington,
- Aggregates West's Lummi Island Quarry located in Lummi Island, Washington,
- Lake Erie Trucking Pit No. 1 located in Anacortes, Washington,
- Concrete Nor'West's Butler Pit Located in Burlington, Washington,
- Concrete Nor'West's Boulder Pit located in Burlington, Washington, and
- Lakeside Industries' Pit M131 located in Anacortes, Washington.

Upon completion of the cleanup actions at the Site, each remedial excavation area was lined with a geotextile fabric to demarcate the final excavation limits prior to backfill placement. Approximately 10,090 cubic yards of stockpiled overburden soil meeting the geotechnical and chemical analytical reuse criteria was used as backfill at the Site. The remaining volume of backfill was imported from one or more of the project approved material sources. Chemical analytical results for the approved material sources are presented Appendix L.

Backfill was placed in lifts and compacted with a vibratory roller or plate compactor. Representatives from GeoTest were on site during backfilling activities to verify that project specified compaction densities were met.

6.1.5. Surface Restoration and Landscaping

Seafarers' Park Building was relocated back to the Site following the completion of cleanup action activities and the other elements of the Seafarers Memorial Park that were disturbed by the cleanup action were restored. New concrete sidewalks, benches and other features as described in the EDR (GeoEngineers et al., 2010) were constructed. Areas to the south, west and north of the Seafarers' Park Building and parking areas were landscaped with grass and other plants. Site restoration landscaping also included planting areas adjacent to street frontages, within and adjacent to parking areas, and along pedestrian walkways. These plantings generally consisted of drought-tolerant and low-growing shrubs. In addition, focused areas of riparian vegetation were installed along the Port shoreline between a new small-boat launching facility and the southern property boundary. This permit-required riparian area will provide shade for surf smelt spawning habitat anticipated to exist at approximately +8 feet MLLW (i.e., the toe of the shoreline stabilization).

The location of Seafarers' Park Building and other site restoration elements are shown on as-built drawings included in Appendix K.

6.1.6. Block Retaining Wall

A concrete block retaining wall was constructed during the site restoration activities along the Port Uplands Area shoreline to provide long-term shoreline erosion control, to allow the shoreline to be graded at a shallower grade than the adjacent uplands area and to create low-sloped fine sediment habitat in the upper intertidal area. The block retaining wall separates the Port Uplands portions from the shoreline/habitat restoration area. The location and construction details of block retaining wall is shown in the in the as-built drawings included in Appendix K.

Construction of block retaining wall required excavation of soil for placement of a base course foundation beneath the wall. The subsurface soil condition at the design foundation depth was observed to consist predominantly sawdust and excessive wood debris, and was determined to not be adequate foundational material for supporting the block retaining wall. Consequently, additional excavation was completed along the alignment of Block Retaining Wall foundation to remove the softer subsurface material. Trenching was completed down to the native hard material and the trench was backfilled with quarry spalls to provide stable hard subsurface required for the Block Retaining Wall foundation. A geotextile fabric was placed on top of the quarry spalls as a separation layer between the coarse spalls and finer foundation base course material. A total of approximately 2,500 cubic yards of material predominantly consisting sawdust and wood debris was removed during the trenching activities. This material was transported from the Site to an off-site permitted disposal facility. Soil disposal activities are described in Section 4.3

6.1.7. Riprap Revetment

A riprap revetment was constructed as part of the site restoration activities along the MJB North Area shoreline as a long-term shoreline erosion control feature. The riprap revetment was

constructed using several types of rock, including an outer armor layer sized to resist wave impacts during extreme storm events and an inner bedding layer composed of smaller rock to support the outer armor layer. The location and construction detail of riprap revetment is shown in the in the as-built drawings included in Appendix K. Import material used to construct the riprap revetment was from Aggregates West's Lummi Island Quarry.

Excavation activities were conducted to prepare subgrade for construction of the riprap revetment. A total of approximately 800 cubic yards of material predominantly consisting sawdust and wood debris was removed during excavation activities for riprap revetment subgrade preparation. This material was determined to be unsuitable for backfilling based on its physical properties and was transported to an off-site permitted disposal facility. Soil disposal activities are described in Section 4.3.

6.2. Marine Area Restoration

Site restoration and mitigation measures for the Marine Area included construction of wave attenuation structures, replacement of the pier structure, backfilling/capping, placement of marine habitat fill in areas outside of dredged areas in preparation for mitigation eelgrass planting. These measures are described below.

6.2.1. Wave Attenuators

Two wave attenuation structures were constructed offshore of the Port Uplands Area. The purpose of the wave attenuators is to reduce wave energy along the Port Uplands Area shoreline; thereby, limiting erosion of exposed sediment and soil, preventing erosion of the engineered sediment caps containing contaminated sediments and providing conditions for the development of eelgrass and other appropriate types of aquatic habitat. Placement of the wave attenuation structures also allowed the removal of the creosote treated timber pile breakwater structure as discussed in Section 3.4.

The wave attenuators were constructed of several types of rock, including an outer armor layer sized to resist wave impacts during extreme storm events and an inner bedding layer composed of smaller rock to support the outer armor layer. On the landward slop of the armor surface of the constructed wave attenuators, Marine Backfill Type 3 material was placed to create pockets of sandy gravelly material within the surface of the armor stone layer, Water quality monitoring activities as described in Section 5.6 were completed during the wave attenuator construction activity. The location and construction details of wave attenuators are shown on as-built drawings included in Appendix K. Import material used to construct the wave attenuation structures was from Aggregates West's Lummi Island Quarry. Marine Backfill Type 3 was imported from Aggregates West's Pit No. M239.

6.2.2. Small Craft Pier

A pier and float structure was constructed to replace the dock system that was demolished to complete the Marine Area remediation activities. The small craft pier replacement consists of a concrete and steel pier connected by gangway to a float. The location and construction details of small craft pier and boat launch facility are shown in the in the as-built drawings included in Appendix K.

6.2.3. Marine Area Backfill and Cap

Marine and shoreline cap and backfill materials were placed across the areas of dredging and shoreline excavation to restore original grades. Elements of the Marine Area capping and backfilling activities are summarized below and described in greater detail in the as-built drawings included in Appendix K. Water quality monitoring activities as described in Section 5.6 were completed during the Marine Area cap and backfill placement activities.

6.2.3.1. BEACH/INTERTIDAL AREAS

Beach/intertidal areas were capped following dredging with an approximately 3-foot-thick cap. As shown in the attached as-built drawings included in Appendix K, four different capping material identified as Marine Cap Type 1 through 4 were utilized to construct the caps. Marine Cap Types 1, 2 and 3 were used to cap the intertidal areas adjacent to the Port Uplands Area shoreline within the shadow of the wave attenuation structure. Marine Cap Type 4 was used to cap intertidal regions adjacent to the MJB North Area shoreline. Following the installation of Marine Cap Type 4, as requested by regulatory agencies, a smaller gravel material (identified as MJB Ecology Fill) was installed to fill the interstitial voids in the Marine Cap Type 4 and effectively soften the cap to provide a more favorable habitat substrate. Import material used to construct the marine cap was from Aggregates West's Pit No. M239 (Marine Cap Types 1 through 3) and Lummi Island Quarry (Marine Cap Type 4).

Intertidal areas dredged deeper than the design depth of 3 feet as discussed in Section 5.1 were filled with an under-cap material up to the base elevation of the cap and completed with the designed cap section. Washed rock and gravel salvaged from the dredged material processing at Pier 2 Facility as discussed in Section 5.3 was imported back to the Site and was used as the under-cap.

6.2.3.2. SUB-TIDAL AREAS

Sub-tidal areas were backfilled following dredging with approximately 3-foot-thick backfill layer. As detailed in the attached as-built drawings included in Appendix K, two different backfill materials identified as Marine Backfill Type 1 and 2 were used for backfilling dredged portions of sub-tidal areas. Marine Backfill Type 1 was used to backfill sub-tidal regions adjacent to the Port Uplands Area shoreline and Marine Backfill Type 2 was used to backfill sub-tidal regions adjacent to the MJB North Area shoreline. Import material for the marine backfill area sourced from dredged sediment within the Swinomish Channel (Marine Backfill Type 1) and from the Aggregates West's Pit No. M239 (Marine Backfill Type 2). An as-built drawing documented the final dredge surface for the Swinomish Channel is presented in Appendix K.

6.2.3.3. MARINE HABITAT AREA

To improve substrate quality for eelgrass planting, a thin lift of marine habitat fill was placed in areas outside of the dredge area. The fine-grained fill material used for backfilling of the sub tidal dredge areas was placed at a thickness of approximately 1 to 2 feet across the mitigation areas in preparation for eelgrass planting. Backfill material used to backfill Mitigation Areas is identified as Marine Habitat Fill in attached as-built drawings included in Appendix K. Dredge material sourcing from the Skyline Marina and Swinomish Channel were imported to the Site to create the marine habitat area.

6.2.4. Eelgrass Planting/Mitigation Measures

Eelgrass beds disturbed during dredging activities were replanted as part of the Site restoration activities. Eelgrass was planted within the Marine Area to replace and supplement eelgrass removed during dredging and to provide for Natural Resources Damages restoration. The eelgrass planting activities are provided in the Ecology-approved Eelgrass Transplant and Long-Term Monitoring Work Plan (Grette, 2011a) and Natural Resources Damages Restoration and Long-Term Monitoring Work Plan (Grette, 2011b)

7.0 CONCLUSIONS

The cleanup actions completed within the Port Uplands Area and Marine Area of the Former Scott Paper Mill Site successfully met the cleanup action objectives established in the CAP (Ecology, 2009b) as described below.

7.1. Port Upland Area

The successful completion of remedial actions to remove contaminated soil within the Port Upland Area of the Site achieved the following cleanup action objectives:

- Prevention of terrestrial ecological and human contact with contaminated soil within the Port Uplands Area.
- Removal of the source of free-phase petroleum product observed in groundwater prior to cleanup action activities.

7.2. Marine Area

The successful completion of remedial actions to remove and cap contaminated sediments and to remove contaminated soil in Marine Area of the Site achieved the following cleanup action objectives:

- Removal of contaminated sediments and debris exceeding the site-specific sediment cleanup levels from within the points of compliance.
- Removal of relic timber piles and the treated pile breakwater structure.
- Removal of the contaminated soil from the Shoreline Buffer Zone identified as the source of contamination for the Marine Area.
- Prevention of terrestrial ecological and human contact with contaminated soil and sediment within the Marine Area.
- Containment of sediment with contaminant concentrations exceeding site-specific sediment cleanup levels that were left in place at the limits of dredging to prevent aquatic ecological and associated food-web exposures.
- Enhancement of habitat through placement of suitable cap and backfill materials in addition to planting of eelgrass and establishment of a shoreline riparian area.

The successful installation of engineering controls including the concrete block retaining wall along the shoreline of the Port Uplands Area, shoreline revetment along the shoreline of the MJB North

Area, the wave attenuation structures, marine caps and backfill, at the Site achieved the following cleanup action objectives:

- Prevention of future erosion of the shoreline thereby, limiting the potential for sediment recontamination.
- Post-construction monitoring of the site, as required and approved by Ecology will be used to evaluate the near-term and long-term effectiveness of the completed remedial actions at the Site.

8.0 LIMITATIONS

We have prepared this report for the exclusive use of the Port of Anacortes and the Washington State Department of Ecology. Any use of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and written authorization by GeoEngineers, Inc., shall be at the user's sole risk. Any unauthorized use of (or reliance on) this report shall release GeoEngineers from any liability resulting from such use (or reliance).

Within the limitations of scope, schedule, and budget, GeoEngineers, Inc.'s respective services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. GeoEngineers, Inc. assume no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available.

Any electronic form, facsimile, or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

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TABLES

GeoEngineers

Table 1

Site-Specific Soil Cleanup Levels for Indicator Hazardous Substances[1]

Former Scott Paper Mill Site
Anacortes, Washington

Area	Uplands Area		Shoreline Buffer Zone			Overburden Soil Stockpile Reuse Criteria
	Port	MJB	Port	MJB	Port & MJB	
Depth	All Depths		0 - 6 feet bgs		6 - 10 feet bgs	
Constituent of Concern	Site-Specific MTCA Method B Cleanup Level		Lowest of Site-Specific MTCA Method B Cleanup Level or Sediment CSL		Sediment CSL	
Total Petroleum Hydrocarbons (mg/kg)						
Diesel-Range	2,000	2,000	2,000	2,000	2,000	2,000
Heavy Oil-Range	2,000	2,000	2,000	2,000	2,000	2,000
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) (µg/kg)						
Total cPAHs TEQ	140	140	140	140	NA	140
Polychlorinated Biphenyls (PCBs) (mg/kg)						
Total PCBs	1	1	1	1	1.3	1
Metals (mg/kg)						
Antimony	32	32	32	32	NA	32
Arsenic	20	20	20	20	NA	20
Total Chromium	117	117	117	117	NA	117
Copper	100	366	100	366	390	100
Lead	220	220	220	220	530	220
Mercury	9	9	0.59	0.59	0.59	0.59
Nickel	100	977	100	977	NA	100
Thallium	5.6	5.6	5.6	5.6	NA	5.6
Zinc	270	662	270	662	NA	270
Dioxins and Furans (ng/kg)						
Total Dioxins/Furans - Human Health TEQ	11	11	11	11	NA	11
Total Dioxins - Ecological (Mammal) TEQ	5	5	5	5	NA	5
Total Furans - Ecological (Bird) TEQ	3	3	3	3	NA	3

Notes:

[1]Site-specific soil cleanup level is referenced from Table 1 of the Former Scott Mill Site Cleanup Action Plan (CAP) (Ecology, 2009b).

MTCA = Model Toxics Control Act

CSL = Cleanup Screening Level (WA Sediment Management Standards)

TEQ = Toxicity Equivalent Quotient

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

ng/kg = monograms per kilogram

NA = Not applicable (not a sediment constituent of concern)

Table 2

Site-Specific Sediment Cleanup Levels for Sediment Constituents of Concern[1]

Former Scott Paper Mill Site
Anacortes, Washington

Constituents of Concern	Sediment Cleanup Level[1]
Total Petroleum Hydrocarbons (mg/kg)	
Diesel-Range	2,000
Heavy Oil-Range	2,000
Polychlorinated Biphenyls (PCBs)	
Total PCBs (mg/kg oc)	12
Metals (mg/kg)	
Copper	390
Lead	450
Mercury	0
Conventionals (%)	
Wood debris (by volume)	25
Total volatile solids (by weight)	12.2

Notes:

[1]Site-specific sediment cleanup level is referenced from Table 3 of the Former Scott Mill Site Cleanup Action Plan (CAP; Ecology, 2009b).

mg/kg = milligrams per kilogram

mg/kg OC = milligrams per kilogram normalized to organic carbon

Table 3

Summary of Soil Chemical Analytical Results
Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 1
Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA1-EX-7-8.0	RA1-EX-8-9.5	RA1-EX-9-8.0	RA1-EX-10-7.0	RA1-EX-11-8.5
Laboratory ID	0907-029-07	0907-029-08	0907-059-11	0907-059-12	0907-059-13
Sample Elevation (feet)[2]	8	9.5	8	7	8.5
Sample Depth (feet bgs)	4.5	6.5	5.5	6.5	6
Sample Date	7/2/2009	7/2/2009	7/8/2009	7/8/2009	7/8/2009
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)					
Benzo(a)anthracene	9.4 U	57	12 U	8.3 U	66
Chrysene	9.4 U	62	12 U	8.3 U	120
Benzo(b)fluoranthene	9.4 U	68	12 U	8.3 U	130
Benzo(k)fluoranthene	9.4 U	19	12 U	8.3 U	36
Benzo(a)pyrene	9.4 U	64	12 U	8.3 U	86
Indeno(1,2,3-cd)pyrene	9.4 U	39	12 U	8.3 U	43
Dibenzo(a,h)anthracene	9.4 U	12	12 U	8.3 U	16
Total cPAH TEQ[3]	7.097 U	84.12	9.06 U	6.2665 U	116.3
Total Metals by EPA 6000/7000 Series (mg/kg)					
Copper	22	24	33	7.2	25
Lead	8.7	15	9.1 U	6.3 U	150
Zinc	60	68	55	22	56

Notes:

[1]The approximate sample locations are shown in Figure 5.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

bgs = below ground surface

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 4

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 2

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA2-EX-1-8.5	DUP-7 (RA2-EX-1-8.5)	RA2-EX-2-10.0	RA2-EX-3-10.0	RA2-EX-4-10.0	RA2-EX-5-10.0
Laboratory ID	0907-095-03	0907-095-04	0907-095-05	0907-095-06	0907-095-07	0907-095-08
Sample Elevation (feet)[2]	8.5	8.5	10	10	10	10
Sample Depth (feet bgs)	7	7	5.5	5.5	5.5	5.5
Sample Date	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	12 U	14 U	19 U	12 U	13 U	15

Notes:

[1]The approximate sample locations are shown in Figure 6.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

mg/kg = milligrams per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 5

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 3

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA3-EX-1-7.5	RA3-EX-2-7.5	RA3-EX-3-7.5	RA3-EX-4-7.5	RA3-EX-5-6.0
Laboratory ID	0907-037-01	0907-037-02	0907-037-03	0907-037-04	0907-037-05
Sample Elevation (feet)[2]	7.5	7.5	7.5	7.5	6
Sample Depth (feet bgs)	7.5	8	8.5	8	9
Sample Date	7/6/2009	7/6/2009	7/6/2009	7/6/2009	7/6/2009
Total Metals by EPA 6000/7000 Series (mg/kg)					
Arsenic	11 U	11 U	11 U	12 U	13 U

Notes:

[1]The approximate sample locations are shown in Figure 7.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

mg/kg = milligrams per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 6

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 4

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA4-EX-1-16.0	RA4-EX-2-16.0	RA4-EX-3-16.0	RA4-EX-4-16.0	RA4-EX-5-15.0	RA4-EX-6-12.0	RA4-EX-7-12.0
Laboratory ID	0907-059-01	0907-059-02	0907-059-03	0907-059-04	0907-059-05	0907-059-06	0907-059-07
Sample Elevation (feet)[2]	16	16	16	16	15	12	12
Sample Depth (feet bgs)	5	5	5	5	6	5	5
Sample Date	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	110	32
Chrysene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	190	56
Benzo(b)fluoranthene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	150	50
Benzo(k)fluoranthene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	45	13
Benzo(a)pyrene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	96	34
Indeno(1,2,3-cd)pyrene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	42	18
Dibenzo(a,h)anthracene	7 U	7.2 U	6.9 U	7.9 U	7.1 U	15	10 U
Total cPAH TEQ[3]	5.285	5.436	5.2095	5.9645	5.3605	134.1	46.36

Sample ID[1]	RA4-EX-9-12.0	RA4-EX-10-11.0	RA4-EX-12-12.0	RA4-EX-14-10.5	RA4-EX-15-12.0	DUP-8 (RA4-EX-15-12.0)
Laboratory ID	0907-059-09	0907-059-10	0907-176-01	0907-176-03	0908-012-01	0908-012-02
Sample Elevation (feet)[2]	12	11	12	10.5	12	12
Sample Depth (feet bgs)	5	6	4.5	6	4.5	4.5
Sample Date	7/7/2009	7/7/2009	7/23/2009	7/23/2009	8/3/2009	8/3/2009
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	69	52	73	110	32	69
Chrysene	140	93	160	190	56	140
Benzo(b)fluoranthene	110	120	140	150	50	110
Benzo(k)fluoranthene	35	30	42	45	13	35
Benzo(a)pyrene	66	85	85	96	34	66
Indeno(1,2,3-cd)pyrene	32	51	47	42	18	32
Dibenzo(a,h)anthracene	12 U	14	17	15	10 U	12 U
Total cPAH TEQ[3]	92.6	112.63	118.5	134.1	46.36	92.6

Notes:

[1]The approximate sample locations are shown in Figure 8.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

µg/kg = micrograms per kilogram

Shading indicates that the analyte was detected at a concentration exceeding site-specific cleanup level (refer to Table 1).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 7

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 5

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA5-EX-5-(-0.5)	RA5-EX-11-1.0	RA5-EX-12-1.0	P2-DUP-26 (RA5-EX-12-1.0)	RA5-EX-23-(-0.5)	RA5-EX-24-(-0.5)	RA5-EX-26-0.0
Laboratory ID	1007-144-03	1006-027-05	1006-086-01	1006-086-02	1006-160-01	1006-160-02	1006-160-04
Sample Elevation (feet)[2]	-0.5	1	1	1	-0.5	-0.5	0
Sample Depth (feet bgs)	16	12	15	15	15	15	15
Sample Date	7/15/2010	6/2/2010	6/10/2010	6/10/2010	6/17/2010	6/17/2010	6/17/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	130 U	120 U	100 UJ	100 UJ	330 U	170 U	89 U
Heavy Oil-Range	470	640 J	230 J	240 J	860	550	260
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	28 U	34	28 UJ	45 J	68	37 U	24
Chrysene	28 U	32	28 UJ	44 J	90	37 U	24 U
Benzo(b)fluoranthene	28 U	27 U	28 UJ	29 J	27 U	37 U	24 U
Benzo(k)fluoranthene	28 U	27 U	28 UJ	27 J	27 U	37 U	24 U
Benzo(a)pyrene	28 U	27 U	28 UJ	43 J	27	37 U	24 U
Indeno(1,2,3-cd)pyrene	28 U	27 U	28 UJ	27 UJ	27 U	37 U	24 U
Dibenzo(a,h)anthracene	28 U	27 U	28 UJ	27 UJ	27 U	37 U	24 U
Total cPAH TEQ[3]	21.14	22.62	21.14 J	56.24 J	40.1	27.935	19.32
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.2 U	8.8	20	21	6.7	4.8	3.8
Lead	21 U	20 U	130	140	20 U	28 U	18 U
Zinc	11 U	17	14	17	10 U	14 U	8.9 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-27-3.0	RA5-EX-28-2.0	RA5-EX-29-2.0	RA5-EX-30-3.0	RA5-EX-32-0.0	RA5-EX-33-0.5	RA5-EX-34-0.5
Laboratory ID	1006-196-01	1006-196-02	1006-196-03	1006-208-02	1007-114-02	1006-296-02	1006-296-03
Sample Elevation (feet)[2]	3	2	2	3	0	0.5	1
Sample Depth (feet bgs)	15	13	13	15	16	16	16
Sample Date	6/21/2010	6/21/2010	6/21/2010	6/22/2010	7/15/2010	6/29/2010	6/29/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	110 U	140 U	120 U	110 U	150 U	270	290
Heavy Oil-Range	360	280 U	250 U	220 U	410	610	960
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	67	37 U	76	14 U	46	96	48
Chrysene	68	37 U	86	14 U	39	98	34
Benzo(b)fluoranthene	40	37 U	66	14 U	30 U	50	29 U
Benzo(k)fluoranthene	47	37 U	73	14 U	30 U	48	29 U
Benzo(a)pyrene	63	37 U	90	14 U	30 U	72	29 U
Indeno(1,2,3-cd)pyrene	30	37 U	53	14 U	30 U	32	29 U
Dibenzo(a,h)anthracene	29 U	37 U	33 U	14 U	30 U	28 U	29 U
Total cPAH TEQ[3]	83.53	27.935	119.31	10.57	25.99	96.98	25.44
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	11	14	60	16	4.6 U	19	5
Lead	41	68	180	86	26	96	22 U
Zinc	22	14 U	61	120	11 U	28	11 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-35-0.0	RA5-EX-36-(-1.0)	RA5-EX-37-0.0	RA5-EX-38-0.0	RA5-EX-39-1.0	RA5-EX-40-0.0	RA5-EX-42-(-0.5)
Laboratory ID	1006-296-04	1007-114-01	1006-296-06	1006-296-07	1007-114-12	1007-114-04	1007-114-06
Sample Elevation (feet)[2]	0	-1	0	0	1	0	-1
Sample Depth (feet bgs)	15	16	15	15	16	16	16
Sample Date	6/29/2010	7/15/2010	6/29/2010	6/29/2010	7/15/2010	7/15/2010	7/15/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	97	110N	150	450	170N	110 U	130N
Heavy Oil-Range	390	580	390	1100	670	430	690
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	33	57	30 U	120	31 U	64	33
Chrysene	26 U	47	30 U	100	31 U	44	50
Benzo(b)fluoranthene	26 U	27 U	30 U	26	31 U	28 U	45
Benzo(k)fluoranthene	26 U	27 U	30 U	24 U	31 U	28 U	28
Benzo(a)pyrene	26 U	27 U	30 U	30	31 U	28 U	29
Indeno(1,2,3-cd)pyrene	26 U	27 U	30 U	24 U	31 U	28 U	26 U
Dibenzo(a,h)anthracene	26 U	27 U	30 U	24 U	31 U	28 U	26 U
Total cPAH TEQ[3]	21.63	25.07	22.65	49.2	23.405	26.44	42.7
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.3	4.1 U	4.5 U	5.1	4.6 U	4.3	5.2
Lead	19 U	21 U	23 U	18 U	23 U	21 U	19 U
Zinc	9.6 U	10 U	11 U	9 U	11 U	11 U	9.7 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-43-(-0.5)	RA5-EX-44-0.0	RA5-EX-45-0.0	RA5-EX-46-1.0	RA5-EX-47-1.0	RA5-EX-48-1.0	RA5-EX-49-3.0
Laboratory ID	1007-114-07	1007-114-08	1007-114-09	1007-114-10	1007-114-11	1007-114-13	1007-114-14
Sample Elevation (feet)[2]	-0.5	0	0	1	1	1	3
Sample Depth (feet bgs)	17	16	16	16	16	15	14
Sample Date	7/15/2010	7/15/2010	7/15/2010	7/15/2010	7/15/2010	7/15/2010	7/15/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	110N	160N	160 U	270N	110 U	140N	130 U
Heavy Oil-Range	510	620	570	730	340	830	460
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	29 U	64	33 U	110	29 U	30 U	35 U
Chrysene	29 U	71	33 U	100	29 U	30 U	35 U
Benzo(b)fluoranthene	29 U	88	33 U	45	29 U	30 U	35 U
Benzo(k)fluoranthene	29 U	66	33 U	26 U	29 U	30 U	35 U
Benzo(a)pyrene	29 U	89	33 U	57	29 U	30 U	35 U
Indeno(1,2,3-cd)pyrene	29 U	60	33 U	26 U	29 U	30 U	35 U
Dibenzo(a,h)anthracene	29 U	30 U	33 U	26 U	29 U	30 U	35 U
Total cPAH TEQ[3]	21.895	119.01	24.915	77.4	21.895	22.65	26.425
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	5.8	9.1	5.5	4	6.1	7.1	27
Lead	22 U	22 U	24 U	20 U	21 U	23 U	81
Zinc	11 U	50	13	9.9 U	45	33	74
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-50-3.0	RA5-EX-54-3.0	RA5-EX-57-(2.0)	P2-DUP-30 (RA5-EX-57-(2.0))	RA5-EX-58-(2.0)	RA5-EX-59-(-1.0)	RA5-EX-60-(-1.0)
Laboratory ID	1007-114-15	1007-150-04	1008-047-01	1008-047-08	1008-047-02	1008-047-03	1008-047-04
Sample Elevation (feet)[2]	3	3	-2	-2	-2	-1	-1
Sample Depth (feet bgs)	13	12	21	21	20	18	18
Sample Date	7/15/2010	7/20/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	52 U	150 U	32 U	32 U	250 U	110 U	160
Heavy Oil-Range	110 U	780	64 U	64 U	740	220 U	300
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Chrysene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Benzo(b)fluoranthene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Benzo(k)fluoranthene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Benzo(a)pyrene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Indeno(1,2,3-cd)pyrene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Dibenzo(a,h)anthracene	14 U	40 U	8.5 U	8.5 U	36 U	30 U	30 U
Total cPAH TEQ[3]	10.57	30.2	6.4175	6.4175	27.18	22.65	22.65
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	28	27	6.2	6.4	5.3 U	4.4 U	6.6
Lead	18	30 U	6.4 U	6.4 U	27 U	22 U	22 U
Zinc	98	63	18	19	13 U	21	27
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	P2-DUP-32 (RA5-EX-60-(-1.0))	RA5-EX-61-(-1.0)	P2-DUP-33 (RA5-EX-61-(-1.0))	RA5-EX-62-(-3.0)	RA5-EX-63-(-1.0)	RA5-EX-64-(-1.0)	RA5-EX-65-3.0
Laboratory ID	1008-047-10	1008-047-05	1008-047-11	1008-140-01	1008-047-07	1008-047-12	1008-047-13
Sample Elevation (feet)[2]	-1	-1	-1	-3	-1	-1	3
Sample Depth (feet bgs)	18	18	18	20	18	18	14
Sample Date	8/4/2010	8/4/2010	8/4/2010	8/18/2010	8/4/2010	8/5/2010	8/5/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	210	190	150	32 U	130 U	150 U	130 U
Heavy Oil-Range	630	520	440	65 U	340	670	280
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Chrysene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Benzo(b)fluoranthene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Benzo(k)fluoranthene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Benzo(a)pyrene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Indeno(1,2,3-cd)pyrene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Dibenzo(a,h)anthracene	33 U	31 U	31 U	8.6 U	35 U	40 U	35 U
Total cPAH TEQ[3]	24.915	23.405	23.405	6.493	26.425	30.2	26.425
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	6.9	4.7 U	4.7 U	10	5.2 U	7.5	9.6
Lead	25 U	23 U	23 U	6.5 U	26 U	30 U	26 U
Zinc	29	12 U	12 U	29	13 U	27	59
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-66-(2.0)	RA5-EX-67-(-1.0)	RA5-EX-68-0.0	RA5-EX-70-0.0	RA5-EX-71-0.0	RA5-EX-72-3.0	RA5-EX-73-0.0
Laboratory ID	1008-047-14	1008-047-15	1008-140-02	1008-140-03	1008-090-04	1008-090-05	1008-090-06
Sample Elevation (feet)[2]	-2	-1	0	4	0	3	0
Sample Depth (feet bgs)	19	18	17	17	17	14	17
Sample Date	8/5/2010	8/5/2010	8/18/2010	8/18/2010	8/11/2010	8/11/2010	8/11/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	32 U	140	120 U	130 U	190 U	81	200 U
Heavy Oil-Range	63 U	480	390	360	720	450	680
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	8.4 U	37 U	36	35 U	28 U	16 U	35 U
Chrysene	8.4 U	37 U	32 U	35 U	28 U	16 U	35 U
Benzo(b)fluoranthene	8.4 U	37 U	32 U	35 U	28 U	16 U	35 U
Benzo(k)fluoranthene	8.4 U	37 U	32 U	35 U	28 U	16 U	35 U
Benzo(a)pyrene	8.4 U	37 U	32 U	35 U	28 U	16 U	35 U
Indeno(1,2,3-cd)pyrene	8.4 U	37 U	32 U	35 U	28 U	16 U	35 U
Dibenzo(a,h)anthracene	8.4 U	37 U	32 U	35 U	28 U	16 U	35 U
Total cPAH TEQ[3]	6.342	27.935	26.16	26.425	21.14	12.08	26.425
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	6.4	5.5 U	7.7	5.9	11	24	5.3 U
Lead	6.3 U	28 U	24 U	26 U	36	12 U	27 U
Zinc	20	14 U	71	30	23	66	13 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-74-0.0	RA5-EX-75-0.0	RA5-EX-76-7.0 (re-extract)	RA5-EX-77-0.0	RA5-EX-78-0.0	RA5-EX-79-0.0	RA5-EX-80-(-1.0)
Laboratory ID	1008-090-07	1008-090-08	1008-098-01	1008-108-01	1008-108-02	1008-140-04	1008-140-05
Sample Elevation (feet)[2]	0	0	7	0	0	0	-1
Sample Depth (feet bgs)	17	16	10	17	17	17	18
Sample Date	8/11/2010	8/11/2010	8/12/2010	8/17/2010	8/17/2010	8/18/2010	8/18/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	410 U	130 U	66	270 U	430 U	420 U	120 U
Heavy Oil-Range	1900	480	250	970	1700	1400	300
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	29 U	39	23	27 U	73	32 U	31 U
Chrysene	29 U	41	34	27 U	58	32 U	31 U
Benzo(b)fluoranthene	29 U	28	19	27 U	28 U	32 U	31 U
Benzo(k)fluoranthene	29 U	29	19	27 U	28 U	32 U	31 U
Benzo(a)pyrene	29 U	46	26	27 U	29	32 U	31 U
Indeno(1,2,3-cd)pyrene	29 U	26 U	15	27 U	28 U	32 U	31 U
Dibenzo(a,h)anthracene	29 U	26 U	13 U	27 U	28 U	32 U	31 U
Total cPAH TEQ[3]	21.895	58.61	34.59	20.385	42.48	24.16	23.405
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	9	12	29	8.1	6.2	12	5.3
Lead	34	19 U	18	59	53	24 U	23 U
Zinc	17	23	63	25	20	58	15
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-81-(-1.0)	RA5-EX-82-0.0	RA5-EX-83-0.0	RA5-EX-84-0.0	RA5-EX-85-3.0	RA5-EX-86-4.0	RA5-EX-87-0.0
Laboratory ID	1008-108-03	1008-140-06	1008-140-07	1008-140-08	1008-140-09	1008-140-10	1008-140-12
Sample Elevation (feet)[2]	-1	0	0	0	3	4	0
Sample Depth (feet bgs)	18	17	15	17	14	13	17
Sample Date	8/17/2010	8/18/2010	8/18/2010	8/17/2010	8/18/2010	8/18/2010	8/18/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	220 U	120 U	130 U	120 U	120 U	200 U	95 U
Heavy Oil-Range	590	370	210	260	370	810	190 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Chrysene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Benzo(b)fluoranthene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Benzo(k)fluoranthene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Benzo(a)pyrene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Indeno(1,2,3-cd)pyrene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Dibenzo(a,h)anthracene	28 U	31 U	28 U	33 U	33 U	30 U	25 U
Total cPAH TEQ[3]	21.14	23.405	21.14	24.915	24.915	22.65	18.875
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	11	11	4.5	5 U	7.6	11	8.2
Lead	37	23 U	21 U	25 U	25 U	55	19 U
Zinc	48	12	110	12 U	12 U	11 U	37
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	1.386845 J	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	0.9557	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	2.312715 J	--	--	--	--	--

Sample ID[1]	RA5-EX-88-3.05	RA5-EX-89-3.05	RA5-EX-90-(2.0)	PH2-DUP-34 (RA5-EX-90-(2.0))	RA5-EX-91-(0.0)	RA5-EX-92-(-1.0)	RA5-EX-93-0.0
Laboratory ID	1009-250-01	1009-250-02	1008-200-01	1008-200-04	1008-200-02	1009-053-01	1008-200-03
Sample Elevation (feet)[2]	3	3	-2	-2	0	-1	0
Sample Depth (feet bgs)	16	16	20	20	18	18	18
Sample Date	9/2/2010	9/2/2010	8/26/2010	8/26/2010	8/26/2010	9/7/2010	8/26/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	--	--	31 U	31 U	120 U	110 U	110 U
Heavy Oil-Range	--	--	62 U	63 U	230 U	220 U	220 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Chrysene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Benzo(b)fluoranthene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Benzo(k)fluoranthene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Benzo(a)pyrene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Indeno(1,2,3-cd)pyrene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Dibenzo(a,h)anthracene	--	--	8.3 U	8.4 U	31 U	30 U	29 U
Total cPAH TEQ[3]	--	--	6.2665	6.342	23.405	22.65	21.895
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	--	--	4.2	5	2.3	9.3	5
Lead	--	--	6.2 U	6.3 U	23 U	22 U	22 U
Zinc	--	--	14	17	12 U	14	19
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	10.461	1.655	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	**7.327**	1.161	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	**13.723**	1.595	--	--	--	--	--

Sample ID[1]	RA5-EX-95-0.0	RA5-EX-96-0.0	RA5-EX-97-0.0	RA5-EX-98-0.0	RA5-EX-99-0.0	RA5-EX-100-0.0	RA5-EX-101-0.0
Laboratory ID	1009-015-01	1009-015-02	1009-015-03	1009-015-04	1009-015-05	1009-015-06	1009-015-07
Sample Elevation (feet)[2]	0	0	0	0	0	0	0
Sample Depth (feet bgs)	15	15	15	15	15	17	15
Sample Date	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010	8/31/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	230 U	180 U	170 U	150 U	160 U	120 U	110 U
Heavy Oil-Range	580	570	570	470	490	350	230 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	30 U	34	25	32 U	38	40	30 U
Chrysene	30 U	31	24 U	32 U	38	42	30 U
Benzo(b)fluoranthene	30 U	31 U	24 U	32 U	34 U	37	30 U
Benzo(k)fluoranthene	30 U	31 U	24 U	32 U	34 U	37	30 U
Benzo(a)pyrene	30 U	31 U	24	32 U	44	51	30 U
Indeno(1,2,3-cd)pyrene	30 U	31 U	24 U	32 U	34	42	30 U
Dibenzo(a,h)anthracene	30 U	31 U	24 U	32 U	34 U	31 U	30 U
Total cPAH TEQ[3]	22.65	25.41	31.42	24.16	56.68	68.57	22.65
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	9.9	18	25	7.9	12	7	12
Lead	22 U	23 U	18 U	24 U	26 U	24 U	23 U
Zinc	19	33	41	12 U	13 U	12 U	11 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-102-0.0	PH2-DUP-35 (RA5-EX-102-0.0)	RA5-EX-103-0.0	RA5-EX-104-0.0	RA5-EX-106-(-1.0)	RA5-EX-108-2.0	RA5-EX-110-3.0
Laboratory ID	1009-053-02	1009-053-06	1009-053-03	1009-053-04	1009-053-05	1009-054-02	1010-112-01
Sample Elevation (feet)[2]	0	0	0	0	-1	2	3
Sample Depth (feet bgs)	15	15	15	15	18	15	16
Sample Date	9/7/2010	9/7/2010	9/7/2010	9/7/2010	9/7/2010	9/2/2010	10/12/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	130 U	210 U	110 U	590 U	130 U	130 U	29 U
Heavy Oil-Range	290	560	240	1500	260 U	300	58 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	35 U	40	32	33 U	35 U	35 U	7.8 U
Chrysene	35 U	34	32	33 U	35 U	35 U	7.8 U
Benzo(b)fluoranthene	35 U	34 U	28 U	33 U	35 U	35 U	7.8 U
Benzo(k)fluoranthene	35 U	34 U	28 U	33 U	35 U	35 U	7.8 U
Benzo(a)pyrene	35 U	40	43	33 U	35 U	37	7.8 U
Indeno(1,2,3-cd)pyrene	35 U	34 U	32	33 U	35 U	35 U	7.8 U
Dibenzo(a,h)anthracene	35 U	34 U	28 U	33 U	35 U	35 U	7.8 U
Total cPAH TEQ[3]	26.425	51.14	53.92	24.915	26.425	45.925	5.889
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	16	20	22	7.4	11	52	10
Lead	26 U	25 U	21 U	25 U	26 U	26 U	5.8 U
Zinc	19	26	23	13	13 U	47	21
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-112-3.0	RA5-EX-115-0.0	RA5-EX-116-(-1.0)	RA5-EX-117-0.0	RA5-EX-118-0.0	RA5-EX-119-0.0	RA5-EX-120-0.0
Laboratory ID	1010-112-03	1010-215-01	1010-231-11	1010-215-03	1010-215-04	1010-215-05	1010-215-06
Sample Elevation (feet)[2]	3	0	-1	0	0	0	0
Sample Depth (feet bgs)	13	15	16	15	15	15	15
Sample Date	10/12/2010	10/25/2010	10/27/2010	10/25/2010	10/26/2010	10/26/2010	10/26/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	130 U	35 U	76 U	290 U	340 U	150 U	170 U
Heavy Oil-Range	420	71 U	150 U	740	720	430	330
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	55	9.4 U	63	33 U	37	31	38
Chrysene	110	9.4 U	80	33 U	30 U	33	40
Benzo(b)fluoranthene	37	9.4 U	61	33 U	30 U	29 U	30
Benzo(k)fluoranthene	36 U	9.4 U	51	33 U	30 U	29 U	28
Benzo(a)pyrene	68	9.4 U	63	33 U	30 U	29 U	34
Indeno(1,2,3-cd)pyrene	36 U	9.4 U	36	33 U	30 U	29 U	20
Dibenzo(a,h)anthracene	36 U	9.4 U	20 U	33 U	30 U	29 U	19 U
Total cPAH TEQ[3]	83.7	7.097	85.9	24.915	24.85	23.73	46.95
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	56	9.1	15	14	8	6.4	23
Lead	27 U	7.1 U	15 U	25 U	23 U	22 U	24
Zinc	100	19	39	33	16	16	31
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-121-0.0	RA5-EX-122-0.0	RA5-EX-123-(-0.5)	RA5-EX-124-(-0.5)	RA5-EX-125-(-1.0)	RA5-EX-126-1.5	RA5-EX-127-1.5
Laboratory ID	1010-215-07	1010-215-08	1010-231-09	1010-231-10	1010-231-01	1010-231-02	1010-231-03
Sample Elevation (feet)[2]	0	0	-1	-1	-1	2	2
Sample Depth (feet bgs)	15	15	15	15	16	14	15
Sample Date	10/26/2010	10/26/2010	10/26/2010	10/26/2010	10/26/2010	10/26/2010	10/26/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	130 U	170 U	480 U	150 U	37 U	350 U	130 U
Heavy Oil-Range	310	500	1200	480	75 U	940	250 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	26 U	35 U	35 U	35 U	56	33 U	33 U
Chrysene	26 U	35 U	35 U	35 U	68	33 U	33 U
Benzo(b)fluoranthene	26 U	35 U	35 U	35 U	48	33 U	33 U
Benzo(k)fluoranthene	26 U	35 U	35 U	35 U	47	33 U	33 U
Benzo(a)pyrene	26 U	35 U	35 U	35 U	58	33 U	33 U
Indeno(1,2,3-cd)pyrene	26 U	35 U	35 U	35 U	35	33 U	33 U
Dibenzo(a,h)anthracene	26 U	35 U	35 U	35 U	11	33 U	33 U
Total cPAH TEQ[3]	19.63	26.425	26.425	26.425	78.38	24.915	24.915
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.7	9.7	8.5	7.9	11	5.6	8.1
Lead	19 U	94	27 U	26 U	7.5 U	37	25 U
Zinc	9.7 U	46	21	67	20	12 U	44
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-128-1.0	RA5-EX-129-(-1.0)	RA5-EX-130-1.5	RA5-EX-131-1.0	RA5-EX-132-1.0	RA5-EX-133-(-1.0)	RA5-EX-134-(-3.0)
Laboratory ID	1010-231-04	1010-231-05	1010-231-06	1010-231-07	1010-231-08	1010-231-12	1010-231-13
Sample Elevation (feet)[2]	1	-1	2	1	1	-1	-3
Sample Depth (feet bgs)	16	16	15	15	17	16	18
Sample Date	10/26/2010	10/26/2010	10/26/2010	10/26/2010	1/17/1900	10/27/2010	10/27/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	120 U	50 U	220 U	120 U	170 U	180 U	51 U
Heavy Oil-Range	250	100 U	910	240 U	460	470	100 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Chrysene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Benzo(b)fluoranthene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Benzo(k)fluoranthene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Benzo(a)pyrene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Indeno(1,2,3-cd)pyrene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Dibenzo(a,h)anthracene	31 U	13 U	34 U	32 U	36 U	34 U	14 U
Total cPAH TEQ[3]	23.405	9.815	25.67	24.16	27.18	25.67	10.57
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.6 U	22	12	4.7 U	5.4 U	7.9	27
Lead	23 U	10 U	26 U	24 U	27 U	25 U	10 U
Zinc	21	37	180	18	13 U	13 U	58
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1] Laboratory ID	RA5-EX-135-(-4.0) 1010-231-14	RA5-EX-136-(-3.0) 1010-231-15	RA5-EX-137-(-4.0) 1010-231-16	RA5-EX-138-1.0 1010-247-01	RA5-EX-139-1.0 1010-247-02	RA5-EX-140-0. RA5-EX-141-0.0	RA5-EX-141-0.0 1010-247-04
Sample Elevation (feet)[2]	**-4**	**-3**	**-4**	**1**	**1**	**0**	**0**
Sample Depth (feet bgs)	**19**	**18**	**20**	**14**	**14**	**15**	**15**
Sample Date	**10/27/2010**	**10/27/2010**	**10/27/2010**	**10/28/2010**	**10/28/2010**	**10/28/2010**	**10/28/2010**
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	36 U	38 U	36 U	200 U	120 U	100 U	120 U
Heavy Oil-Range	72 U	76 U	73 U	570	240 U	200 U	250 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	9.5 U	10 U	9.7 U	33 U	31 U	27 U	33 U
Chrysene	9.5 U	12	9.7 U	33 U	31 U	27 U	33 U
Benzo(b)fluoranthene	9.5 U	10 U	9.7 U	33 U	31 U	27 U	33 U
Benzo(k)fluoranthene	9.5 U	10 U	9.7 U	33 U	31 U	27 U	33 U
Benzo(a)pyrene	9.5 U	12	9.7 U	33 U	31 U	27 U	33 U
Indeno(1,2,3-cd)pyrene	9.5 U	10 U	9.7 U	33 U	31 U	27 U	33 U
Dibenzo(a,h)anthracene	9.5 U	10 U	9.7 U	33 U	31 U	27 U	33 U
Total cPAH TEQ[3]	7.1725	14.62	7.3235	24.915	23.405	20.385	24.915
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	10	12	10	5 U	4.7 U	7.6	4.9 U
Lead	7.2 U	7.6 U	7.3 U	25 U	23 U	20 U	25 U
Zinc	31	25	33	12 U	12 U	10 U	12 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-142-0.0	RA5-EX-143-(-1.0)	RA5-EX-144-4.0	RA5-EX-145-(-1.0)	RA5-EX-146-(-3.0)	RA5-EX-147-1.0	RA5-EX-148-1.0
Laboratory ID	1010-247-05	1010-246-01	1010-246-02	1010-261-01	1011-045-01	1010-261-03	1010-261-04
Sample Elevation (feet)[2]	0	-1	4	-1	-3	1	1
Sample Depth (feet bgs)	14	18	13	18	20	16	15
Sample Date	10/28/2010	10/28/2010	10/28/2010	10/28/2010	11/4/2010	10/28/2010	10/28/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	120 U	32 U	130 U	32 U	28 U	270 U	120 U
Heavy Oil-Range	340	63 U	260 U	64 U	56 U	690	230 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Chrysene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Benzo(b)fluoranthene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Benzo(k)fluoranthene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Benzo(a)pyrene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Indeno(1,2,3-cd)pyrene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Dibenzo(a,h)anthracene	32 U	8.4 U	35 U	8.5 U	7.5 U	32 U	31 U
Total cPAH TEQ[3]	24.16	6.342	26.425	6.4175	5.6625	24.16	23.405
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.8 U	6.4	20	9.2	4.8	5.6	8.8
Lead	24 U	6.3 U	26 U	6.4 U	5.6 U	24 U	23 U
Zinc	12 U	19	85	17	14	12 U	250
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-149-0.0	RA5-EX-150-(-1.0)	RA5-EX-151-(-1.0)	RA5-EX-152-0.0	RA5-EX-153-0.0	RA5-EX-154-1.0	RA5-EX-155-0.0
Laboratory ID	1010-261-05	1010-261-06	1010-261-07	1010-261-08	1010-261-09	1010-261-10	1010-261-11
Sample Elevation (feet)[2]	0	0	-1	0	0	1	0
Sample Depth (feet bgs)	18	18	19	18	18	15	16
Sample Date	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010	10/28/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	240 U	33 U	35 U	360 U	31 U	120 U	760 U
Heavy Oil-Range	870	66 U	70 U	1000	61 U	270	1800
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	32 U	9.4	22	29 U	8.2 U	31 U	26 U
Chrysene	32 U	11	25	29 U	8.2 U	31 U	26 U
Benzo(b)fluoranthene	32 U	8.8 U	18	29 U	8.2 U	31 U	26 U
Benzo(k)fluoranthene	32 U	8.8 U	17	29 U	8.2 U	31 U	26 U
Benzo(a)pyrene	32 U	9.6	21	29 U	8.2 U	31 U	26 U
Indeno(1,2,3-cd)pyrene	32 U	8.8 U	13	29 U	8.2 U	31 U	26 U
Dibenzo(a,h)anthracene	32 U	8.8 U	9.3 U	29 U	8.2 U	31 U	26 U
Total cPAH TEQ[3]	24.16	12.41	28.715	21.895	6.191	23.405	19.63
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.9 U	5.5	5.8	4.4 U	5.8	4.6 U	4 U
Lead	24 U	6.6 U	7 U	22 U	39	23 U	20 U
Zinc	12 U	17	18	11 U	59	24	9.9 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1] Laboratory ID	RA5-EX-156-(-3.0) 1011-045-02	RA5-EX-157-3.0 1011-004-01	P2-DUP-38 (RA5-EX-157-3.0) 1011-004-02	RA5-EX-158-3.0 1011-004-03	P2-DUP-39 (RA5-EX-158-3.0) 1011-004-06	RA5-EX-159-(-3.0) 1011-045-04	RA5-EX-160-3.0 1011-004-05
Sample Elevation (feet)[2]	**-3**	**3**	**3**	**3**	**3**	**-3**	**3**
Sample Depth (feet bgs)	**19**	**12**	**12**	**12**	**12**	**18**	**12**
Sample Date	**11/4/2010**	**10/30/2010**	**10/30/2010**	**10/30/2010**	**10/30/2010**	**11/4/2010**	**10/30/2010**
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	30 U	120 U	100 U	96 U	95 U	31 U	110 U
Heavy Oil-Range	60 U	240	200 U	190 U	190 U	62 U	210 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Chrysene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Benzo(b)fluoranthene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Benzo(k)fluoranthene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Benzo(a)pyrene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Indeno(1,2,3-cd)pyrene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Dibenzo(a,h)anthracene	8 U	32 U	27 U	26 U	25 U	8.3 U	28 U
Total cPAH TEQ[3]	6.04	24.16	20.385	19.63	18.875	6.2665	21.14
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	32	4.8 U	4 U	4.1	3.8 U	29	4.3 U
Lead	6 U	24 U	20 U	19 U	19 U	6.2 U	21 U
Zinc	51	13	10	25	12	52	11 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1] Laboratory ID	P2-DUP-40 (RA5-EX-160-3.0) 1011-004-07	RA5-EX-161-3.0 1011-004-08	RA5-EX-162-(-1.0) 1011-045-03	RA5-EX-163-1.5 1011-004-10	RA5-EX-164-1.5 1011-004-11	RA5-EX-165-2.0 1011-004-12	RA5-EX-166-3.0 1011-004-13
Sample Elevation (feet)[2]	**3**	**3**	**-1**	**2**	**2**	**2**	**3**
Sample Depth (feet bgs) **Sample Date**	**12** **10/30/2010**	**14** **10/30/2010**	**17** **11/4/2010**	**15** **10/30/2010**	**15** **10/30/2010**	**13** **10/30/2010**	**12** **10/30/2010**
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	120 U	120 U	30 U	420 U	140 U	110 U	320 U
Heavy Oil-Range	240 U	230 U	61 U	1100	460	230 U	980
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Chrysene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Benzo(b)fluoranthene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Benzo(k)fluoranthene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Benzo(a)pyrene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Indeno(1,2,3-cd)pyrene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Dibenzo(a,h)anthracene	32 U	31 U	8.1 U	43 U	38 U	30 U	40 U
Total cPAH TEQ[3]	24.16	23.405	6.1155	32.465	28.69	22.65	30.2
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.7 U	20	5.6	7.1	5.8 U	4.5 U	5.9 U
Lead	24 U	23 U	6.1 U	32 U	29 U	23 U	34
Zinc	12 U	240	18	16 U	14 U	13	15 U
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-167-3.0	RA5-EX-168-2.0	RA5-EX-169-1.5	RA5-EX-170-1.0	RA5-EX-172-3.0	RA5-EX-173-2.0	RA5-EX-174-(-1.0)
Laboratory ID	1011-027-01	1011-027-02	1011-027-03	1011-027-04	1011-033-01	1011-033-02	1011-112-02
Sample Elevation (feet)[2]	3	2	2	1	3	2	-1
Sample Depth (feet bgs)	13	14	15	15	12	14	17
Sample Date	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/2/2010	11/10/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	120 U	110 U	93 U	380 U	130 U	170 U	31 U
Heavy Oil-Range	340	380	260	1100	480	670	62 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Chrysene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Benzo(b)fluoranthene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Benzo(k)fluoranthene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Benzo(a)pyrene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Indeno(1,2,3-cd)pyrene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Dibenzo(a,h)anthracene	31 U	25 U	25 U	30 U	31 U	37 U	8.3 U
Total cPAH TEQ[3]	23.405	18.875	18.875	22.65	23.405	27.935	6.267
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	4.7 U	3.9	3.7 U	5.8	4.7 U	5.7	47
Lead	24 U	18 U	19 U	22 U	24 U	28 U	6.2 U
Zinc	12 U	9.2 U	9.3 U	14	12 U	14 U	59
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-175-0.0	RA5-EX-176-3.0	RA5-EX-177-5.0	RA5-EX-178-3.0	RA5-EX-179-(-2.0)	RA5-EX-181-5.0	RA5-EX-182-4.0
Laboratory ID	1011-033-04	1011-033-05	1011-033-06	1011-059-01	1011-059-02	1011-112-01	1011-122-02
Sample Elevation (feet)[2]	0	3	5	3	-2	5	4
Sample Depth (feet bgs)	16	13	10	10	10	9	10
Sample Date	11/2/2010	11/2/2010	11/2/2010	11/4/2010	11/4/2010	11/10/2010	11/11/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	510 U	110 U	150 U	110 U	50 U	160 U	100 U
Heavy Oil-Range	1500	220 U	610	210 U	130	320 U	210 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	34 U	30 U	71	29 U	13 U	43 U	28 U
Chrysene	34 U	30 U	83	29 U	13 U	43 U	28 U
Benzo(b)fluoranthene	34 U	30 U	58	29 U	13 U	43 U	28 U
Benzo(k)fluoranthene	34 U	30 U	50	29 U	13 U	43 U	28 U
Benzo(a)pyrene	34 U	30 U	76	29 U	13 U	43 U	28 U
Indeno(1,2,3-cd)pyrene	34 U	30 U	42	29 U	13 U	43 U	28 U
Dibenzo(a,h)anthracene	34 U	30 U	14	29 U	13 U	43 U	28 U
Total cPAH TEQ[3]	25.67	22.65	100.33	21.895	9.815	32.465	21.14
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	5 U	6.7	41	38	21	55	22
Lead	25 U	22 U	42	27	9.9 U	32 U	21 U
Zinc	13 U	17	81	39	44	87	35
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1] Laboratory ID	RA5-EX-183-4.0 1011-122-06	RA5-EX-185-6.0 1011-122-12	RA5-EX-186-(-4.0) 1011-127-01	RA5-EX-187-(-4.0) 1011-127-03	RA5-EX-188-(-4.0) 1011-127-05	RA5-EX-189-(-4.0) 1011-127-07	RA5-EX-190-(-4.0) 1011-127-09
Sample Elevation (feet)[2]	**6**	**6**	**-4**	**-4**	**-4**	**-4**	**-4**
Sample Depth (feet bgs) **Sample Date**	**8** **11/11/2010**	**8** **11/11/2010**	**19** **11/12/2010**	**19** **11/12/2010**	**19** **11/12/2010**	**19** **11/12/2010**	**19** **11/12/2010**
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	110 U	340 U	34 U	33 U	35 U	36 U	39 U
Heavy Oil-Range	310	2,600	67 U	66 U	69 U	71 U	77 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	29 U	28 U	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Chrysene	29 U	38	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Benzo(b)fluoranthene	29 U	28 U	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Benzo(k)fluoranthene	29 U	28 U	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Benzo(a)pyrene	29 U	36	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Indeno(1,2,3-cd)pyrene	29 U	37	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Dibenzo(a,h)anthracene	29 U	28 U	8.9 U	8.9 U	9.2 U	9.5 U	10 U
Total cPAH TEQ[3]	21.895	45.68	6.719	6.719	6.946	7.173	7.55
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	38	20	9.2	7.2	11	11	16
Lead	22	26	6.7 U	6.6 U	6.9 U	7.1 U	7.7 U
Zinc	45	33	29	41	34	35	46
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-191-(-4.0)	RA5-EX-192-(-4.0)	RA5-EX-193-(-4.0)	RA5-EX-194-(-4.0)	RA5-EX-195-(-4.0)	P2-DUP-45 (RA5-EX-195-(-4.0))	RA5-EX-196-(-4.0)
Laboratory ID	1011-127-11	1011-127-13	1011-127-15	1011-127-17	1011-172-01	1011-172-02	1011-127-19
Sample Elevation (feet)[2]	-4	-4	-4	-4	-4	-4	-4
Sample Depth (feet bgs)	19	19	19	19	18	18	19
Sample Date	11/12/2010	11/12/2010	11/12/2010	11/12/2010	11/17/2010	11/17/2010	11/13/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	33 U	35 U	35 U	36 U	32 U	31 U	29 U
Heavy Oil-Range	66 U	71 U	70 U	73 U	64 U	62 U	57 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Chrysene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Benzo(b)fluoranthene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Benzo(k)fluoranthene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Benzo(a)pyrene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Indeno(1,2,3-cd)pyrene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Dibenzo(a,h)anthracene	8.7 U	9.4 U	9.3 U	9.7 U	8.5 U	8.3 U	7.6 U
Total cPAH TEQ[3]	6.569	7.097	7.021	7.323	6.417	6.267	5.738
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	8.8	12	13	15	6	7.9	5.6
Lead	6.5 U	7.1 U	7 U	7.3 U	6.4 U	6.2 U	5.7 U
Zinc	30	43	38	42	14	18	19
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-197-(-4.0)	P2-DUP-46 (RA5-EX-197-(-4.0))	RA5-EX-198-(-4.0)	P2-DUP-47 (RA5-EX-198-(-4.0))	RA5-EX-199-(-4.0)	RA5-EX-200-(-4.0)	RA5-EX-201-(-4.0)
Laboratory ID	1011-172-04	1011-172-05	1011-172-07	1011-172-08	1011-172-10	1011-172-12	1011-172-14
Sample Elevation (feet)[2]	-4	-4	-4	-4	-4	-4	-4
Sample Depth (feet bgs)	18	18	18	18	18	18	18
Sample Date	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	31 U	30 U	31 U	31 U	32 U	38 U	78 U
Heavy Oil-Range	62 U	59 U	62 U	62 U	65 U	77 U	260
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	14 U
Chrysene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	15
Benzo(b)fluoranthene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	14 U
Benzo(k)fluoranthene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	14 U
Benzo(a)pyrene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	14 U
Indeno(1,2,3-cd)pyrene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	14 U
Dibenzo(a,h)anthracene	8.2 U	7.9 U	8.2 U	8.2 U	8.6 U	10 U	14 U
Total cPAH TEQ[3]	6.191	5.965	6.191	6.191	6.493	7.55	10.65
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	9.2	5.6	5.9	7.1	7.9	8.5	35
Lead	6.2 U	5.9 U	6.2 U	6.2 U	6.5 U	7.7 U	11 U
Zinc	29 J	16 J	18	20	23	19	67
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1]	RA5-EX-202-3.0	RA5-EX-203-(-4.0)	RA5-EX-204-(-4.0)	RA5-EX-205-(-4.0)	RA5-EX-206-(-4.0)	RA5-EX-207-(-4.0)	P2-DUP-48 (RA5-EX-207-(-4.0)
Laboratory ID	1011-172-16	1011-172-17	1011-172-19	1011-172-21	1011-172-23	1011-202-01	1011-202-03
Sample Elevation (feet)[2]	3	-4	-4	-4	-4	-4	-4
Sample Depth (feet bgs)	11	18	18	19	19	19	19
Sample Date	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/19/2010	11/19/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)							
Diesel-Range	130 U	54 U	37 U	38 U	45 U	35 U	35 U
Heavy Oil-Range	350	140	73 U	76 U	89 U	71 U	70 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)							
Benzo(a)anthracene	37	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Chrysene	40	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Benzo(b)fluoranthene	35 U	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Benzo(k)fluoranthene	35 U	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Benzo(a)pyrene	40	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Indeno(1,2,3-cd)pyrene	35 U	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Dibenzo(a,h)anthracene	35 U	12 U	9.8 U	10 U	12 U	9.4 U	9.3 U
Total cPAH TEQ[3]	51.1	9.06	7.399	7.55	9.06	7.097	7.021
Total Metals by EPA 6000/7000 Series (mg/kg)							
Copper	32	20	15	15	20	12	9.9
Lead	27 U	8.7 U	7.3 U	7.6 U	8.9 U	7.1 U	6.9 U
Zinc	74	45	37	39	49	32	30
Dioxins and Furans by EPA 8290 (ng/kg)							
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--	--

Sample ID[1] Laboratory ID	RA5-EX-208-(-4.0) 1011-202-04	RA5-EX-209-(-4.0) 1011-202-06	RA5-EX-210-(-4.0) 1011-202-08	RA5-EX-211-4.0[5] 1011-206-01	RA5-EX-212-3.0[5] 1012-054-01
Sample Elevation (feet)[2]	**-4**	**-4**	**-4**	**4**	**3**
Sample Depth (feet bgs) **Sample Date**	**19** **11/19/2010**	**19** **11/19/2010**	**19** **11/19/2010**	**11** **11/19/2010**	**12** **11/30/2010**
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)					
Diesel-Range	35 U	32 U	29 U	--	--
Heavy Oil-Range	70 U	64 U	59 U	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)					
Benzo(a)anthracene	9.4 U	8.5 U	7.8 U	--	--
Chrysene	9.4 U	8.5 U	7.8 U	--	--
Benzo(b)fluoranthene	9.4 U	8.5 U	7.8 U	--	--
Benzo(k)fluoranthene	9.4 U	8.5 U	7.8 U	--	--
Benzo(a)pyrene	9.4 U	8.5 U	7.8 U	--	--
Indeno(1,2,3-cd)pyrene	9.4 U	8.5 U	7.8 U	--	--
Dibenzo(a,h)anthracene	9.4 U	8.5 U	7.8 U	--	--
Total cPAH TEQ[3]	7.097	6.417	5.889	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)					
Copper	13	7.1	26	--	--
Lead	7 U	6.4 U	5.8 U	--	--
Zinc	34	22	45	--	--
Dioxins and Furans by EPA 8290 (ng/kg)					
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	**30.221 J**	**45.555 J**
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	**23.005**	**20.95**
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	**31.403 J**	**68.295 J**

Notes:

[1]The approximate sample locations are shown in Figures 9 through 11.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

[4]Total Dioxin and Furan calculated using toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD. Individual Dioxin/Furan compounds with "U" qualifier were assigned a value of one half of the reported detection limit for these calculations.

[5]Composite sidewall sample.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

ng/kg = monograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding site-specific cleanup level (refer to Table 1).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 8

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 8

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	**RA8-EX-16-5.25**	**RA8-EX-17-5.25**	**RA8-EX-18-0.25**	**RA8-EX-19-0.25**	**RA8-EX-31-(-4.0)**	**RA8-EX-32-(-4.0)**
Laboratory ID	**1003-174-07**	**1003-174-08**	**1003-174-09**	**1003-184-01**	**1004-118-07**	**1004-118-08**
Sample Elevation (feet)[2]	**5.25**	**5.25**	**0.25**	**0.25**	**-4**	**-4**
Sample Depth (feet bgs)	**3**	**3**	**8**	**8**	**19.5**	**19.5**
Sample Date	**3/24/2010**	**3/24/2010**	**3/24/2010**	**3/24/2010**	**4/19/2010**	**4/19/2010**
Petroleum Hydrocarbons by NWTPH-Dx with acid-silica gel cleanup(mg/kg)						
Diesel-Range	34 U	140 U	25 U	170 U	30 U	35 U
Lube Oil-Range	110	1,000	61	340 U	61 U	69 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	13 U	11 U	--	--	--	--
Copper	77 J	50 J	1.3 J	32	29	11
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[3]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[3]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[3]	--	--	--	--	--	--

Sample ID[1]	RA8-EX-34-(-4.0)	P2-DUP-22 (RA8-EX-34-(-4.0))	RA8-EX-35-(-4.0)	RA8-EX-36-(-4.0)	RA8-EX-37-(-4.0)	P2-DUP-23 (RA8-EX-37-(-4.0)
Laboratory ID	1004-140-02	1004-140-07	1004-140-03	1004-140-04	1004-140-05	1004-140-08
Sample Elevation (feet)[2]	-4	-4.00	-4.00	-4.00	-4.00	-4
Sample Depth (feet bgs)	17.5	18	18	20	18	17.5
Sample Date	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010
Petroleum Hydrocarbons by NWTPH-Dx with acid-silica gel cleanup(mg/kg)						
Diesel-Range	36 U	36 U	36 U	36 U	36 U	37 U
Lube Oil-Range	72 U	72 U	72 U	72 U	72 U	73 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	--
Copper	12	13	12	14	12	13
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[3]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[3]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[3]	--	--	--	--	--	--

Sample ID[1]	RA8-EX-38-(-4.0)	RA8-EX-41-5.25	RA8-EX-43-(-4.0)	RA8-EX-44-0.25	RA8-EX-46-(-4.0)	RA8-EX-47-0.0
Laboratory ID	1004-140-06	1004-226-03	1005-023-02	1005-023-03	1005-023-05	1005-051-01
Sample Elevation (feet)[2]	-4	5	-4.00	0.25	-4.00	0.00
Sample Depth (feet bgs)	17.5	3.0	20	8	18	15
Sample Date	4/20/2010	4/28/2010	5/4/2010	5/4/2010	5/4/2010	5/5/2010
Petroleum Hydrocarbons by NWTPH-Dx with acid-silica gel cleanup(mg/kg)						
Diesel-Range	34 U	140 U	36 U	280 U	36 U	140 U
Lube Oil-Range	68 U	900	72 U	1,600 J	72 U	290 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	14 U	--	--	--	--
Copper	12	29 J	12	59	12	13
Lead	--	--	--	--	--	29 U
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[3]	--	--	--	--	0.463302 J	--
Total Dioxins - Ecological (Mammal) TEQ[3]	--	--	--	--	0.37973	--
Total Furans - Ecological (Bird) TEQ[3]	--	--	--	--	0.257474 J	--

Sample ID[1]	RA8-EX-48-0.0	RA8-EX-51-3.0	RA8-EX-52-(-1.0)	RA8-EX-53-3.0	RA8-EX-54-(-1.0)	RA8-EX-55-11.0
Laboratory ID	1005-051-02	1011-048-01	1011-048-02	1011-048-03	1011-048-04	1011-097-01
Sample Elevation (feet)[2]	0	3	-1	3.00	-1.00	11.00
Sample Depth (feet bgs)	15.5	5.0	9.0	5	9	3
Sample Date	5/5/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/9/2010
Petroleum Hydrocarbons by NWTPH-Dx with acid-silica gel cleanup(mg/kg)						
Diesel-Range	120 U	120 U	93 U	130 U	120 U	29 U
Lube Oil-Range	340	270	380	520	460	57 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	12 U	--	16	--	11 U
Copper	8.8	22	110	50	110	20
Lead	23 U	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[3]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[3]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[3]	--	--	--	--	--	--

Sample ID[1]	RA8-EX-56-8.0	P2-DUP-44 (RA8-EX-56-8.0)	RA8-EX-57-8.04	RA8-EX-58-5.0	RA8-EX-59-2.0	RA8-EX-60-(-4.0)
Laboratory ID	1011-097-02	1011-097-13	1011-097	1011-097-04	1011-097-05	1011-097-06
Sample Elevation (feet)[2]	8.00	8	8	5	2.00	-4.00
Sample Depth (feet bgs)	3	3.0	3.0	9.0	9	18
Sample Date	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010
Petroleum Hydrocarbons by NWTPH-Dx with acid-silica gel cleanup(mg/kg)						
Diesel-Range	30 U	29 U	--	170 U	160 U	37 U
Lube Oil-Range	60 U	120	--	440	320 U	74 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	12 U	11 U	--	--	--	--
Copper	39	24	--	34	45	14
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[3]	--	--	7.815 J	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[3]	--	--	**6.466**	--	--	--
Total Furans - Ecological (Bird) TEQ[3]	--	--	**5.508 J**	--	--	--

Sample ID[1]	RA8-EX-61-3.0	RA8-EX-62-(-1.0)	RA8-EX-63-(-4.0)	RA8-EX-64-(-4.0)	RA8-EX-65-(-4.0)	RA8-EX-66-(-4.0)
Laboratory ID	1011-097-07	1011-097-08	1011-097-09	1011-097-10	1011-097-11	1011-097-12
Sample Elevation (feet)[2]	3.00	-1.00	-4	-4	-4	-4.00
Sample Depth (feet bgs)	5	9	18.0	15.0	15.0	18
Sample Date	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010	11/9/2010
Petroleum Hydrocarbons by NWTPH-Dx with acid-silica gel cleanup(mg/kg)						
Diesel-Range	150 U	130 U	47 U	37 U	37 U	36 U
Lube Oil-Range	400	260 U	93 U	74 U	74 U	72 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	15	--	--	--	--	--
Copper	70	20	28	14	13	13
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[3]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[3]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[3]	--	--	--	--	--	--

Notes:

[1]The approximate sample locations are shown in Figure 12.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total Dioxin and Furan calculated using toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD. Individual Dioxin/Furan compounds with "U" qualifier were assigned a value of one half of the reported detection limit for these calculations.

[4]Composite sidewall sample.

mg/kg = milligrams per kilogram

ng/kg = monograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding site-specific cleanup level (refer to Table 1).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 9

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 9

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA9-EX-1-3.5	RA9-EX-2-2.5	RA9-EX-3-3.5	RA9-EX-4-5.25	RA9-EX-5-0.25	RA9-EX-6-0.25
Laboratory ID	1004-072-03	1004-072-04	1004-072-05	1005-069-03	1005-069-04	1005-099-01
Sample Elevation (feet)[2]	3.5	2.5	3.5	5.25	0.25	0.25
Sample Depth (feet bgs)	10	10	10	3	8	8
Sample Date	4/12/2010	4/12/2010	4/12/2010	5/10/2010	5/10/2010	5/12/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	93 U	150 U	120 U	32 U	140 U	120 U
Lube Oil-Range	810	300 U	480	130	480	450
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	39 J	--	--
Chrysene	--	--	--	57 J	--	--
Benzo(b)fluoranthene	--	--	--	52 J	--	--
Benzo(k)fluoranthene	--	--	--	45 J	--	--
Benzo(a)pyrene	--	--	--	51 J	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	38 J	--	--
Dibenzo(a,h)anthracene	--	--	--	13 J	--	--
Total cPAH[3]	--	--	--	70.27 J	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	13 U	--	--
Copper	330	32	75	50	32	19
Lead	280	30 U	65	35 J	27 U	24 U
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--

Sample ID[1]	RA9-EX-7-3.5	RA9-EX-8-3.5	RA9-EX-9-3.0	RA9-EX-10-3.5	RA9-EX-11-10.0	RA9-EX-12-5.0
Laboratory ID	1005-099-02	1005-146-01	1005-146-02	1005-146-03	1005-146-04	1005-146-05
Sample Elevation (feet)[2]	3.5	3.5	3.0	3.50	10.00	5.00
Sample Depth (feet bgs)	10	10	10	10	3	8
Sample Date	5/12/2010	5/19/2010	5/19/2010	5/19/2010	5/19/2010	5/19/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	140 U	140 U	170 U	120 U	28 U	28 U
Lube Oil-Range	390	270 U	340 U	240 U	55 U	60
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	7.4 U	--
Chrysene	--	--	--	--	7.4 U	--
Benzo(b)fluoranthene	--	--	--	--	7.4 U	--
Benzo(k)fluoranthene	--	--	--	--	7.4 U	--
Benzo(a)pyrene	--	--	--	--	7.4 U	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	7.4 U	--
Dibenzo(a,h)anthracene	--	--	--	--	7.4 U	--
Total cPAH[3]	--	--	--	--	5.587	--
Total Metals by EPA 6000/7000 Series (mg/kg)					--	
Arsenic	--	--	--	--	11 U	--
Copper	30	45	22	45	12	23
Lead	27 U	27 U	34 U	24 U	5.9	7.4
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[4]	--	1.834	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	0.941	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	4.234	--	--	--	--

Sample ID[1]	RA9-EX-15-4.0	RA9-EX-16-11.0	RA9-EX-17-6.0	RA9-EX-21-6.0	RA9-EX-23-5.0	RA9-EX-27-4.0
Laboratory ID	1005-156-01	1005-156-02	1005-156-03	1005-156-07	1005-156-09	1005-156-13
Sample Elevation (feet)[2]	4.0	11.0	6.0	6.00	5.00	4.00
Sample Depth (feet bgs)	10	3	8	8	8	10
Sample Date	5/20/2010	5/20/2010	5/20/2010	5/20/2010	5/20/2010	5/20/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	150 U	27 U	43 U	97 U	150 U	170 U
Lube Oil-Range	300 U	53 U	140	780 J	430	340 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	7.1 U	--	--	--	--
Chrysene	--	7.1 U	--	--	--	--
Benzo(b)fluoranthene	--	7.1 U	--	--	--	--
Benzo(k)fluoranthene	--	7.1 U	--	--	--	--
Benzo(a)pyrene	--	7.1 U	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	7.1 U	--	--	--	--
Dibenzo(a,h)anthracene	--	7.1 U	--	--	--	--
Total cPAH[3]	--	5.3605	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	11 U	--	--	--	--
Copper	100	7.3	80	240	84	26
Lead	30 U	5.3 U	23	76	51	34 U
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[4]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	--	--	--	--

Sample ID[1]	RA9-EX-29-10.0	RA9-EX-28-11.0	RA9-EX-30-11.0[5]	RA9-EX-31-0.25	P2-DUP-24 (RA9-EX-31-0.25)	RA9-EX-32-0.25
Laboratory ID	1005-199-02	1005-199-01	1006-028	1006-055-01	1006-055-05	1006-055-02
Sample Elevation (feet)[2]	10	11.0	11.0	0.25	0.25	0.25
Sample Depth (feet bgs)	3	3	3	8	8	8
Sample Date	5/25/2010	5/25/2010	6/2/2010	6/7/2010	6/7/2010	6/7/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	36 U	32 U	--	58 U	59 U	42 U
Lube Oil-Range	71 U	63 U	--	280	220	160
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	9.5 U	19	--	--	--	--
Chrysene	9.5 U	26	--	--	--	--
Benzo(b)fluoranthene	9.5 U	23	--	--	--	--
Benzo(k)fluoranthene	9.5 U	17	--	--	--	--
Benzo(a)pyrene	9.5 U	16	--	--	--	--
Indeno(1,2,3-cd)pyrene	9.5 U	12	--	--	--	--
Dibenzo(a,h)anthracene	9.5 U	8.4 U	--	--	--	--
Total cPAH[3]	7.1725	23.78	--	--	--	--
Total Metals by EPA 6000/7000 Se	--					
Arsenic	14 U	13 U	--	--	--	--
Copper	8.9	5.4	--	88	110	74
Lead	7.1 U	6.3 U	--	51 J	67 J	53 J
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[4]	--	--	**49.44601 J**	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--	**39.488**	--	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--	**37.24667 J**	--	--	--

Sample ID[1]	P2-DUP-25 (RA9-EX-32-0.25)	RA9-EX-33-0.25
Laboratory ID	1006-055-04	1006-055-03
Sample Elevation (feet)[2]	0	0.25
Sample Depth (feet bgs)	8	8
Sample Date	6/7/2010	6/7/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)		
Diesel-Range	43 U	290 U
Lube Oil-Range	190	920
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)		
Benzo(a)anthracene	--	--
Chrysene	--	--
Benzo(b)fluoranthene	--	--
Benzo(k)fluoranthene	--	--
Benzo(a)pyrene	--	--
Indeno(1,2,3-cd)pyrene	--	--
Dibenzo(a,h)anthracene	--	--
Total cPAH[3]	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)		
Arsenic	--	--
Copper	57	54
Lead	35 J	23 J
Dioxins and Furans by EPA 8290 (ng/kg)		
Total Dioxins/Furans - Human Health TEQ[4]	--	--
Total Dioxins - Ecological (Mammal) TEQ[4]	--	--
Total Furans - Ecological (Bird) TEQ[4]	--	--

Notes:

[1]The approximate sample locations are shown in Figure 13.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

[4]Total Dioxin and Furan calculated using toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD. Individual Dioxin/Furan compounds with "U" qualifier were assigned a value of one half of the reported detection limit for these calculations.

[5]Composite sidewall sample.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

ng/kg = monograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding site-specific cleanup level (refer to Table 1).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 10

Summary of Soil Chemical Analytical Results
Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 10

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA10-EX-3-13.0	RA10-EX-4-8.0	RA10-EX-10-13.0	P2-DUP-43 (RA10-EX-10-13.0)	RA10-EX-11-9.0	RA10-EX-12-13.0
Laboratory ID	1011-034-03	1011-034-04	1011-046-01	1011-046-13	1011-046-02	1011-046-03
Sample Elevation (feet)[2]	13	8	13	13	9	13
Sample Depth (feet bgs)	3	8	3	3	8	3
Sample Date	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010	11/3/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	39 U	180	59 U	52 U	150 U	29 U
Lube Oil-Range	110	960	360	380	800	120
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	26	--	46	56	--	23
Chrysene	21	--	37	41	--	19
Benzo(b)fluoranthene	18	--	32	32	--	18
Benzo(k)fluoranthene	17	--	32	33	--	19
Benzo(a)pyrene	10	--	23	23	--	13
Indeno(1,2,3-cd)pyrene	10 U	--	9.2 U	9 U	--	7.8 U
Dibenzo(a,h)anthracene	12	--	29	33	--	18
Total cPAH[3]	23.9	--	44.8	46.7	--	26.2
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.1	0.089 U	0.32	0.33	0.09 U	0.3
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	7.7 U	--	6.9 U	6.7 U	--	5.9 U
Chromium	30	--	28	30	--	22
Copper	39	110	86	86	31	42
Lead	18 J	43 J	43	33	13	16
Mercury	0.39 U	0.45 U	0.52	0.54	0.45 U	0.29 U
Nickel	29	--	38	41	--	24
Zinc	69	--	110	110	--	61

Sample ID[1]	RA10-EX-13-9.0	RA10-EX-16-13.0	RA10-EX-17-9.0	RA10-EX-24-13.0	RA10-EX-25-8.0	RA10-EX-28-13.0
Laboratory ID	1011-046-04	1011-046-07	1011-046-08	1011-205-01	1011-205-02	1011-205-03
Sample Elevation (feet)[2]	9	13	9	13	8	13
Sample Depth (feet bgs)	8	3	8	3	8	3
Sample Date	11/3/2010	11/3/2010	11/3/2010	11/22/2010	11/22/2010	11/22/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	47 U	29 U	120 U	30 U	44	27 U
Lube Oil-Range	180	120	850	61 U	310	55 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	32	--	8.1 U	--	7.8
Chrysene	--	24	--	8.1 U	--	8.3
Benzo(b)fluoranthene	--	25	--	8.1 U	--	7.3 U
Benzo(k)fluoranthene	--	23	--	8.1 U	--	7.3 U
Benzo(a)pyrene	--	17	--	8.1 U	--	7.3 U
Indeno(1,2,3-cd)pyrene	--	7.8 U	--	8.1 U	--	7.3 U
Dibenzo(a,h)anthracene	--	19	--	8.1 U	--	7.3 U
Total cPAH[3]	--	31.5	--	6.115	--	6.018
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.094 U	0.51	0.067 U	0.061 U	0.22	0.055 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	7	--	6.1 U	--	5.5 U
Chromium	--	23	--	19	--	18
Copper	34	60	46	8	83	7.7
Lead	31	62	19	6.1 U	130	5.5 U
Mercury	0.47 U	0.29 U	0.33 U	0.3 U	0.41 U	0.27 U
Nickel	--	26	--	18	--	18
Zinc	--	86	--	28	--	28

Sample ID[1]	RA10-EX-29-8.0	RA10-EX-30-13.0	RA10-EX-31-8.0	RA10-EX-32-(-7.0)	RA10-EX-33-(-7.0)	RA10-EX-35-13.0
Laboratory ID	1011-205-04	1011-205-05	1011-205-06	1011-205-07	1011-203-05	1011-235-01
Sample Elevation (feet)[2]	8	13	8	-7	-7	13
Sample Depth (feet bgs)	8	3	8	23	23	3
Sample Date	11/22/2010	11/22/2010	11/22/2010	11/22/2010	11/20/2010	11/30/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	33 U	200	240	32 U	34 U	28 U
Lube Oil-Range	200	1500	430	65 U	69 U	56 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	–	11 U	–	–	–	7.5 U
Chrysene	–	11 U	–	–	–	7.5 U
Benzo(b)fluoranthene	–	11 U	–	–	–	7.5 U
Benzo(k)fluoranthene	–	11 U	–	–	–	7.5 U
Benzo(a)pyrene	–	11 U	–	–	–	7.5 U
Indeno(1,2,3-cd)pyrene	–	11 U	–	–	–	7.5 U
Dibenzo(a,h)anthracene	–	11 U	–	–	–	7.5 U
Total cPAH[3]	–	8.305	–	–	–	5.663
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.065 U	0.15	0.12 U	0.065 U	0.069 U	0.056 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	–	8.3 U	–	–	–	5.6 U
Chromium	–	50	–	–	–	22
Copper	44	30	44	38	35	6.9
Lead	35	21	23	6.5	6.9 U	5.6 U
Mercury	0.33 U	0.42 U	0.49 U	0.32 U	0.34 U	0.28 U
Nickel	–	13	–	–	–	19
Zinc	–	34	–	–	–	31

Sample ID[1]	RA10-EX-36-8.0	RA10-EX-37-10.0	RA10-EX-38-5.0	RA10-EX-39-10.0	RA10-EX-40-5.0
Laboratory ID	1011-235-02	1012-017-01	1012-017-02	1012-017-03	1012-017-04
Sample Elevation (feet)[2]	8	10	5	10	5
Sample Depth (feet bgs)	8	3	8	3	8
Sample Date	11/30/2010	12/1/2010	12/1/2010	12/1/2010	12/1/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)					
Diesel-Range	88 U	48 U	36 U	35 U	36 U
Lube Oil-Range	200	130	73 U	69 U	71 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)					
Benzo(a)anthracene	--	9.6 U	--	9.2 U	--
Chrysene	--	9.6 U	--	9.2 U	--
Benzo(b)fluoranthene	--	9.6 U	--	9.2 U	--
Benzo(k)fluoranthene	--	9.6 U	--	9.2 U	--
Benzo(a)pyrene	--	9.6 U	--	9.2 U	--
Indeno(1,2,3-cd)pyrene	--	9.6 U	--	9.2 U	--
Dibenzo(a,h)anthracene	--	9.6 U	--	9.2 U	--
Total cPAH[3]	--	7.248	--	6.946	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)					
Total PCBs	0.18 U	0.072 U	0.072 U	0.069 U	0.071 U
Total Metals by EPA 6000/7000 Series (mg/kg)					
Antimony	--	7.2 U	--	6.9 U	--
Chromium	--	27	--	28	--
Copper	28	15	13	14	13
Lead	18 U	7.2 U	7.2 U	6.9 U	7.1 U
Mercury	0.44 U	0.36 U	0.36 U	0.35 U	0.36 U
Nickel	--	21	--	22	--
Zinc	--	42	--	43	--

Notes:

[1]The approximate sample locations are shown in Figure 14.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 11

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 11

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA11-EX-7-A-1.5	RA11-EX-16-A-1.5	RA11-EX-17-A-10.5	RA11-EX-18-A-5.5	RA11-EX-19-A-5.5	RA11-EX-20-A-1.0
Laboratory ID	**1002-088-03**	**1002-088-02**	**0911-086-01**	**0911-086-02**	**0911-096-01**	**1002-088-07**
Sample Elevation (feet)[2]	**1.5**	**1.5**	**10.5**	**5.5**	**5.5**	**1**
Sample Depth (feet bgs)	**12**	**12**	**3**	**8**	**8**	**12.5**
Sample Date	**2/10/2010**	**2/10/2010**	**11/10/2009**	**11/10/2009**	**11/11/2009**	**2/11/2010**
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	32 U	30 U	32 U	50 U	100 U	34 U
Lube Oil-Range	63 U	60 U		220	530	68 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	38 J	--	--	--
Chrysene	--	--	59 J	--	--	--
Benzo(b)fluoranthene	--	--	57	--	--	--
Benzo(k)fluoranthene	--	--	41	--	--	--
Benzo(a)pyrene	--	--	47	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	37	--	--	--
Dibenzo(a,h)anthracene	--	--	12	--	--	--
Total cPAH[3]	--	--	66.09 J	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	6.5 U	--	--	--
Arsenic	--	--	13 U	--	--	--
Chromium	--	--	46	--	--	--
Copper	39	37	81	180	250	45
Lead	6.3 U	6 U	88	100	240	6.8 U
Thallium	--	--	3.2 U	--	--	--
Zinc	--	--	110	--	--	--

Sample ID[1]	RA11-EX-28-A-11.0	RA11-EX-28-A-6.0	RA11-EX-36-A-10.5	P2-DUP-10 (RA11-EX-36-A-10.5)	RA11-EX-36-A-5.5	P2-DUP-11 (RA11-EX-36-A-5.5)
Laboratory ID	0912-027-03	0912-027-04	0912-179-03	0912-179-17	0912-179-04	0912-179-18
Sample Elevation (feet)[2]	11.0	6.0	10.5	10.5	5.5	5.5
Sample Depth (feet bgs)	3	8	3	3	8	8
Sample Date	12/2/2009	12/2/2009	12/28/2009	12/28/2009	12/28/2009	12/28/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	160 J	150 J	27 U	27 U	32 U	36 U
Lube Oil-Range	1200 J	1,400 J	55 U	55 U	200	200 J
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	69	--	68 J	7.3 UJ	--	--
Chrysene	89	--	76 J	7.3 UJ	--	--
Benzo(b)fluoranthene	57	--	42 J	7.3 UJ	--	--
Benzo(k)fluoranthene	42	--	27 J	7.3 U	--	--
Benzo(a)pyrene	46	--	19 J	7.3 U	--	--
Indeno(1,2,3-cd)pyrene	26	--	7.3 U	7.3 U	--	--
Dibenzo(a,h)anthracene	14	--	7.3 U	7.3 U	--	--
Total cPAH[3]	67.69	--	34.19 J	5.5115 J	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6.9 U	--	5.5 U	5.5 U	--	--
Arsenic	14 U	--	11 U	11 U	--	--
Chromium	39	--	24	23	--	--
Copper	70	55	16	17	120 J	41 J
Lead	57	56	5.5 U	5.5 U	92	92
Thallium	3.5 U	--	2.7 U	2.7 U	--	--
Zinc	98	--	23	28	--	--

Sample ID[1]	RA11-EX-37-A-10.5	RA11-EX-37-A-5.5	RA11-EX-40-A-10.0	RA11-EX-40-A-5.5	RA11-EX-42-A-9.5	RA11-EX-42-A-4.5
Laboratory ID	0912-179-05	0912-179-06	0912-179-11	0912-179-12	1001-044-06	1001-044-07
Sample Elevation (feet)[2]	10.5	5.5	10.0	5.5	9.5	4.5
Sample Depth (feet bgs)	3	8	3	8	3	8
Sample Date	12/28/2009	12/28/2009	12/28/2009	12/28/2009	1/8/2010	1/8/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	34 U	52 U	28 U	83 U	27 U	29 U
Lube Oil-Range	360 J	480 J	56 U	450	54 U	440
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	89	--	7.4 U	--	7.2 U	--
Chrysene	85	--	7.4 U	--	7.2 U	--
Benzo(b)fluoranthene	37	--	7.4 U	--	7.2 U	--
Benzo(k)fluoranthene	25	--	7.4 U	--	7.2 U	--
Benzo(a)pyrene	33	--	7.4 U	--	7.2 U	--
Indeno(1,2,3-cd)pyrene	9.1	--	7.4 U	--	7.2 U	--
Dibenzo(a,h)anthracene	7.7 U	--	7.4 U	--	7.2 U	--
Total cPAH[3]	50.245	--	5.587	--	5.436 U	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.7 U	--	5.6 U	--	5.4 U	--
Arsenic	11 U	--	11 U	--	11 U	--
Chromium	27	--	34	--	14	--
Copper	24	31	17	140	17	42
Lead	25	35	5.6 U	310	5.4 U	160
Thallium	2.9 U	--	5.6 U	--	2.7 U	--
Zinc	51	--	29	--	22	--

Sample ID[1]	RA11-EX-43-A-1.0	RA11-EX-44-A-5.0	RA11-EX-44-A-0.0	RA11-EX-45-A-5.5	P2-DUP-16 (RA11-EX-45-A-5.5)	RA11-EX-45-A-0.5
Laboratory ID	1002-088-04	1001-107-01	1001-107-02	1001-143-02	1001-143-03	1001-143-04
Sample Elevation (feet)[2]	1.0	5.0	0.0	5.5	5.5	0.5
Sample Depth (feet bgs)	13	3	8	3	3	8
Sample Date	2/10/2010	1/19/2010	1/19/2010	1/20/2010	1/20/2010	1/20/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	31 U	310	31 U	98	74	32 U
Lube Oil-Range	63 U	720	61 U	470	470	97
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	83	--	120 J	220 J	--
Chrysene	--	96	--	160 J	290 J	--
Benzo(b)fluoranthene	--	47	--	100 J	210 J	--
Benzo(k)fluoranthene	--	51	--	99 J	210 J	--
Benzo(a)pyrene	--	76	--	120 J	270 J	--
Indeno(1,2,3-cd)pyrene	--	31	--	60 J	130 J	--
Dibenzo(a,h)anthracene	--	22 U	--	17	40	--
Total cPAH[3]	--	99.26	--	**161.2 J**	**353.9 J**	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	16 U	--	11 U	10 U	--
Arsenic	--	32 U	--	22 U	21 U	--
Chromium	--	23	--	34 J	21 J	--
Copper	36	110	35	100	110	56
Lead	6.3 U	110	6.4	170	160	31
Thallium	--	8 U	--	5.6 U	5.2 U	--
Zinc	--	300	--	220	190	--

Sample ID[1]	RA11-EX-46-A-5.0	RA11-EX-46-A-1.0	RA11-EX-47-A-5.0	RA11-EX-47-A-1.0	RA11-EX-48-A-1.5	RA11-EX-49-A-1.5
Laboratory ID	1002-056-01	1002-056-02	1002-056-03	1002-056-04	1002-056-05	1002-056-06
Sample Elevation (feet)[2]	5.0	1.0	5.0	1.0	1.5	1.5
Sample Depth (feet bgs)	3	8	3	8	12	12
Sample Date	2/4/2010	2/4/2010	2/4/2010	2/4/2010	2/4/2010	2/4/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	39 U	32 U	44 U	32 U	32 U	32 U
Lube Oil-Range	380 J	250	290	64 U	64 U	64 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	71	--	30	--	--	--
Chrysene	67	--	36	--	--	--
Benzo(b)fluoranthene	47	--	22	--	--	--
Benzo(k)fluoranthene	46	--	18	--	--	--
Benzo(a)pyrene	42	--	21	--	--	--
Indeno(1,2,3-cd)pyrene	20	--	12 U	--	--	--
Dibenzo(a,h)anthracene	9 U	--	12 U	--	--	--
Total cPAH[3]	61.52	--	29.56	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	13	--	8.7 U	--	--	--
Arsenic	14 U	--	17 U	--	--	--
Chromium	34	--	35	--	--	--
Copper	61	59	110	27	35	33
Lead	63	120	**230**	6.6	6.4 U	6.4 U
Thallium	3.4 U	--	4.4 U	--	--	--
Zinc	75	--	110	--	--	--

Sample ID[1]	RA11-EX-50-A-0.0	RA11-EX-51-A-1.5	RA11-EX-52-A-1.0	PH2-DUP-17 (RA11-EX-52-A-1.0)	RA11-EX-53-A-10.5	RA11-EX-54-A-5.5
Laboratory ID	1001-143-05	1002-056-07	1002-056-08	1002-056-09	1001-043-06	1001-143-07
Sample Elevation (feet)[2]	0.0	1.5	1.0	1.0	10.5	5.5
Sample Depth (feet bgs)	10	13	12	12	3	8
Sample Date	1/21/2010	2/4/2010	2/4/2010	2/4/2010	1/22/2010	1/22/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	33 U	29 U	31 U	32 U	28 U	440
Lube Oil-Range	66 U	57 U	61 U	63 U	55 U	1700
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	7.4 U	--
Chrysene	--	--	--	--	7.4 U	--
Benzo(b)fluoranthene	--	--	--	--	7.4 U	--
Benzo(k)fluoranthene	--	--	--	--	7.4 U	--
Benzo(a)pyrene	--	--	--	--	7.4 U	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	7.4 U	--
Dibenzo(a,h)anthracene	--	--	--	--	7.4 U	--
Total cPAH[3]	--	--	--	--	5.587 U	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	5.5 U	--
Arsenic	--	--	--	--	11 U	--
Chromium	--	--	--	--	16 J	--
Copper	42	34	62 J	26 J	15	**1,700**
Lead	6.6 U	5.7 U	6.1 U	6.3 U	5.5 U	**1,100**
Thallium	--	--	--	--	2.8 U	--
Zinc	--	--	--	--	25	--

Sample ID[1]	RA11-EX-55-A-1.0	RA11-EX-56-A-5.5	RA11-EX-57-A-5.5	RA11-EX-58-A-4.5	RA11-EX-5-B-10.5	RA11-EX-6-B-5.5
Laboratory ID	1002-088-08	1002-088-01	1002-088-05	1002-088-06	0910-252-05	0910-252-06
Sample Elevation (feet)[2]	1.0	5.5	5.5	4.5	10.5	5.5
Sample Depth (feet bgs)	13	8	8	9	3	8
Sample Date	2/11/2010	2/10/2010	2/11/2010	2/11/2010	10/29/2009	10/29/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	30 U	370 U	**2,400**	250	35 U	230 J
Lube Oil-Range	60 U	1,300 J	**2,500**	1,200	560 J	1,700 J
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	50	--
Chrysene	--	--	--	--	69	--
Benzo(b)fluoranthene	--	--	--	--	64	--
Benzo(k)fluoranthene	--	--	--	--	21	--
Benzo(a)pyrene	--	--	--	--	52	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	25	--
Dibenzo(a,h)anthracene	--	--	--	--	9.3 U	--
Total cPAH[3]	--	--	--	--	69.155	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	7 U	--
Arsenic	--	--	--	--	14 U	--
Chromium	--	--	--	--	40	--
Copper	37	93	**630**	**630**	54	**1,400**
Lead	6 U	63	**540**	**610**	69	**660**
Thallium	--	--	--	--	1.4 U	--
Zinc	--	--	--	--	100	--

Sample ID[1]	P2-DUP-1 (RA11-EX-6-B-5.5)	RA11-EX-8-B-5.5	RA11-EX-9-B-10.5	P2-DUP-3 (RA11-EX-9-B-10.5)	RA11-EX-1-10.0	RA11-EX-2-C-13.5
Laboratory ID	0910-252-07	0910-252-10	0910-252-11	0910-252-12	0910-222-11	0910-222-12
Sample Elevation (feet)[2]	5.5	5.5	10.5	10.5	10.0	13.5
Sample Depth (feet bgs)	8	8	3	3	0.5	0.5
Sample Date	10/29/2009	10/29/2009	10/29/2009	10/29/2009	10/27/2009	10/27/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	140 J	340	310	290	27 U	27 U
Lube Oil-Range	760 J	1,600	1,800	1,700	54 U	71
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	100	72	7.2 U	9.6
Chrysene	--	--	130	97	7.2 U	11
Benzo(b)fluoranthene	--	--	130	100	7.2 U	11
Benzo(k)fluoranthene	--	--	49	37	7.2 U	7.1 U
Benzo(a)pyrene	--	--	99	68	7.2 U	7.4
Indeno(1,2,3-cd)pyrene	--	--	47	38	7.2 U	7.1 U
Dibenzo(a,h)anthracene	--	--	18	12	7.2 U	7.1 U
Total cPAH[3]	--	--	134.7	94.87	5.436	10.635
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	6.9 U	6.9 U	5.4 U	9.6
Arsenic	--	--	14 U	14 U	14	14
Chromium	--	--	50	49	35	44
Copper	**1,600**	66	66	61	88	100
Lead	**400**	20	31	29	15	16
Thallium	--	--	1.4 U	1.4 U	1.1 U	1.1 U
Zinc	--	--	200	200	630	560

Sample ID[1]	RA11-EX-3-C-13.5	RA11-EX-4-C-13.0	RA11-EX-5-C-13.5	RA11-EX-2-D-13.0	RA11-EX-2-DR-13.0
Laboratory ID	0910-222-13	0910-222-14	0910-222-15	0910-222-08	0912-027-23
Sample Elevation (feet)[2]	13.5	13.0	13.5	13.0	13.0
Sample Depth (feet bgs)	0.5	1	0.5	0.5	0.5
Sample Date	10/27/2009	10/27/2009	10/27/2009	10/27/2009	12/2/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)					
Diesel-Range	28 U	27 U	27 U	--	28 U
Lube Oil-Range	56 U	130	53 U	--	56 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)					
Benzo(a)anthracene	7.4 U	7.1 U	7.1 U	7.2	--
Chrysene	7.4 U	7.1 U	7.1 U	9.2	--
Benzo(b)fluoranthene	7.8	7.1 U	7.9	9.1	--
Benzo(k)fluoranthene	7.4 U	7.1 U	7.1 U	7.1 U	--
Benzo(a)pyrene	7.4 U	7.1 U	7.1 U	7.1 U	--
Indeno(1,2,3-cd)pyrene	7.4 U	7.1 U	7.1 U	7.1 U	--
Dibenzo(a,h)anthracene	7.4 U	7.1 U	7.1 U	7.1 U	--
Total cPAH[3]	5.997	5.3605	5.7955	6.337	--
Total Metals by EPA 6000/7000 Series (mg/kg)					
Antimony	9.4	12	21	5.3 U	--
Arsenic	12	16	11	11 U	--
Chromium	33	39	33	33	--
Copper	100	140	130	96	--
Lead	15	19	20	12	--
Thallium	1.1 U	1.1 U	1.1 U	1.1 U	--
Zinc	420	380	470	180	--

Notes:

[1]The approximate sample locations are shown in Figure 15.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

[3]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding site-specific cleanup level (refer to Table 1).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 12

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 12

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA12-EX-1-9.0	RA12-EX-1-4.0	RA12-EX-2-9.0	RA12-EX-2-4.0	RA12-EX-3-(-1.0)	RA12-EX-5-5.0
Laboratory ID	0909-207-01	0909-207-02	0909-207-03	0909-207-04	0911-033-01	0911-033-03
Sample Elevation (feet)[2]	9	4	9	4	-1	5
Sample Depth (feet bgs)	3	8	3	8	10	8
Sample Date	9/22/2009	9/22/2009	9/22/2009	9/22/2009	11/3/2009	11/3/2009
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.4 U	--	5.3 U	--	--	--
Arsenic	11 U	--	11 U	--	--	--
Copper	21	54	21	94	31	58
Lead	5.4 U	57	5.3 U	340	6.9	140
Thallium	5.4 U	--	5.3 U	--	--	--
Zinc	26	--	28	--	--	--

Sample ID[1]	RA12-EX-6-10.0	P2-DUP-4 (RA12-EX-6-10.0)	RA12-EX-7-10.0	RA12-EX-8-10.0	P2-DUP-5 (RA12-EX-8-10.0)	RA12-EX-10-5.0
Laboratory ID	0911-033-04	0911-033-05	0911-033-06	0911-033-07	0911-033-08	0911-151-01
Sample Elevation (feet)[2]	10	10	10	10	10	5
Sample Depth (feet bgs)	3	3	3	3	3	8
Sample Date	11/3/2009	11/3/2009	11/3/2009	11/3/2009	11/3/2009	11/18/2009
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	--
Arsenic	11 U	11 U	11 U	11 U	11 U	--
Copper	16	11	33	20	21	110
Lead	15	6.5	15	11	10	110
Thallium	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	--
Zinc	22	25	31	32	30	--

Sample ID[1]	RA12-EX-11-5.0	RA12-EX-12-5.0	RA12-EX-13-10.0	RA12-EX-14-3.0	RA12-EX-15-3.0	RA12-EX-16-6.0
Laboratory ID	0911-151-02	0911-151-03	0911-151-04	0911-151-05	0911-151-06	1003-100-01
Sample Elevation (feet)[2]	5	5	10	3	3	6
Sample Depth (feet bgs)	8	8	3	10	10	3
Sample Date	11/18/2009	11/18/2009	11/18/2009	11/18/2009	11/18/2009	3/12/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	5.9 U	--	--	6.7 U
Arsenic	--	--	12 U	--	--	13 U
Copper	89	220	80	20	240	34
Lead	94	76	7.3	6.5 U	**800**	23
Thallium	--	--	2.9 U	--	--	3.4 U
Zinc	--	--	40	--	--	47

Notes:

[1]The approximate sample locations are shown in Figure 16.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

mg/kg = milligrams per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding site-specific cleanup level (refer to Table 1).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 13

Summary of Soil Chemical Analytical Results

Final Excavation Limit Verification Soil Samples - Remedial Excavation Area 13

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	RA13-EX-1-12.25	RA13-EX-2-12.25	RA13-EX-3-12.25	RA13-EX-4-11.5	RA13-EX-5-12.25
Laboratory ID	0910-252-13	0910-252-14	0910-252-15	0910-252-16	0910-252-17
Sample Elevation (feet)[2]	12	12	12	12	12
Sample Depth (feet bgs)	1	1	1	2	1
Sample Date	10/30/2009	10/30/2009	10/30/2009	10/30/2009	10/30/2009
Total Metals by EPA 6000/7000 Series (mg/kg)					
Arsenic	11 U	11 U	11 U	11 U	11 U
Copper	46	25	20	21	26

Notes:

[1]The approximate sample locations are shown in Figure 17.

[2]Sample Elevation referenced to 1988 North American Vertical Datum (NAVD88).

mg/kg = milligrams per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL).

J = estimated result.

-- = not analyzed

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 14

Summary of Shallow Overburden Soil Chemical Analytical Results

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID Laboratory ID Sample Date	RA1-SP0-1 0907-040-39 7/7/2009	DRIVEWAY-SP0-1 0907-040-38 7/7/2009	RA3-SP0-1 0907-040-37 7/7/2009	RA3-SP0-2 0907-136-01 7/14/2009	RA3-SP0-3 0907-136-02 7/14/2009	RA4-SP0-1 0907-040-35 7/7/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	26 U	26 U	29 U	--	--	26 U
Lube Oil-Range	52 U	53 U	95	--	--	52 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	6.9 U	7 U	14	--	--	6.9 U
Chrysene	6.9 U	7 U	17	--	--	7.4
Benzo(b)fluoranthene	6.9 U	7 U	20	--	--	9
Benzo(k)fluoranthene	6.9 U	7 U	7.7 U	--	--	6.9 U
Benzo(a)pyrene	6.9 U	7 U	16	--	--	6.9 U
Indeno(1,2,3-cd)pyrene	6.9 U	7 U	11	--	--	6.9 U
Dibenzo(a,h)anthracene	6.9 U	7 U	7.7 U	--	--	6.9 U
Total cPAH[1]	5.2095	5.285	21.44	--	--	5.804
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.052 U	0.053 U	0.057 U	--	--	0.052 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.2 U	5.3 U	5.7 U	--	--	5.2 U
Arsenic	10 U	11 U	11 U	--	--	10 U
Chromium	40	41	24	--	--	12
Copper	30	32	30	--	--	7.8
Lead	5.2 U	5.3 U	12	--	--	5.2 U
Mercury	0.26 U	0.26 U	0.29 U	--	--	0.26 U
Nickel	56	67	25	--	--	13
Thallium	2.6 U	2.6 U	2.9 U	--	--	2.6 U
Zinc	48	56	170	--	--	22
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.159	0.224	**14.568**	3.654	3.356	1.104
Total Dioxins - Ecological (Mammal) TEQ[2]	0.093	0.137	**11.32**	2.777	3.281	0.784
Total Furans - Ecological (Bird) TEQ[2]	0.3	0.316	**7.604**	2.837	0.258	1.33

Sample ID Laboratory ID Sample Date	RA4-SP0-2 0907-040-36 7/7/2009	SP0-3 0909-100-01 9/10/2009	SP0-4 0909-100-02 9/10/2009	SP0-5 0909-100-03 9/10/2009	SP0-6 0909-100-04 9/10/2009	SP0-7 0909-100-05 9/10/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	26 U	27 U	27 U	26 U	26 U	27 U
Lube Oil-Range	52 U	71	58	81	53 U	53 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	9.8	7.6	7.2 U	7 U	7 U	7.1 U
Chrysene	11	12	7.2 U	8.1	8.4	7.1 U
Benzo(b)fluoranthene	14	10	7.2 U	9.6	7.6	7.1 U
Benzo(k)fluoranthene	6.9 U	7.1 U	7.2 U	7 U	7 U	7.1 U
Benzo(a)pyrene	11	8	7.2 U	7 U	7 U	7.1 U
Indeno(1,2,3-cd)pyrene	7.5	7.1 U	7.2 U	7 U	7 U	7.1 U
Dibenzo(a,h)anthracene	6.9 U	7.1 U	7.2 U	7 U	7 U	7.1 U
Total cPAH[1]	14.93	10.945	5.436	5.941	5.744	5.3605
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.052 U	0.053 U	0.054 U	0.053 U	0.053 U	0.053 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.2 U	5.3 U	5.4 U	5.3 U	5.3 U	5.3 U
Arsenic	10 U	11 U	11 U	11 U	11 U	11 U
Chromium	17	26	24	38	23	21
Copper	12	13	14	23	11	13
Lead	5.2 U	5.3 U	5.4 U	5.3 U	5.3 U	5.3 U
Mercury	0.26 U	0.27 U	0.27 U	0.26 U	0.26 U	0.27 U
Nickel	20	30	25	29	22	35
Thallium	2.6 U	5.3 U	5.4 U	5.3 U	5.3 U	5.3 U
Zinc	31	32	28	40	26	26
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	2.316	0.711893	0.29944 J	0.59005	0.26474	0.19893
Total Dioxins - Ecological (Mammal) TEQ[2]	1.678	0.5572	0.2249 J	0.4205	0.2087	0.1557
Total Furans - Ecological (Bird) TEQ[2]	1.781	0.440581	0.22798 J	0.34215	0.16708	0.13711

Sample ID Laboratory ID Sample Date	SP0-8 0911-032-01 11/4/2009	SP0-9 0911-032-02 11/4/2009	SP0-10 0911-032-03 11/4/2009	SP0-11 0911-032-04 11/4/2009	SP0-12 0911-032-05 11/4/2009	SP0-13 0911-032-06 11/4/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	28 U	26 U	29 U	29 U	28 U
Lube Oil-Range	54 U	56 U	52 U	170	440	270
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.2 U	7.4 U	6.9 U	59	26	33
Chrysene	7.2 U	7.4 U	6.9 U	87	43	56
Benzo(b)fluoranthene	7.2 U	7.4 U	6.9 U	85	53	62
Benzo(k)fluoranthene	7.2 U	7.4 U	6.9 U	25	15	21
Benzo(a)pyrene	7.2 U	7.4 U	6.9 U	65	29	37
Indeno(1,2,3-cd)pyrene	7.2 U	7.4 U	6.9 U	33	20	26
Dibenzo(a,h)anthracene	7.2 U	7.4 U	6.9 U	14	9.4	9.1
Total cPAH[1]	5.436	5.587	5.2095	87.47	41.77	52.67
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.054 U	0.056 U	0.052 U	0.13	0.16	0.66
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.4 U	5.6 U	5.2 U	5.2 U	**36**	5.8 U
Arsenic	11 U	11 U	10 U	11	12 U	12 U
Chromium	27	30	48	35	28	42
Copper	15	10	39	**230**	**140**	**150**
Lead	5.4 U	5.6 U	5.2 U	66	130	200
Mercury	0.27 U	0.28 U	0.26 U	**2.1**	**7.2**	**3.4**
Nickel	34	23	58	38	33	33
Thallium	1.1 U	1.1 U	1 U	1 U	1.2 U	1.2 U
Zinc	36	27	37	230	120	110
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-14 0911-032-07 11/4/2009	SP0-15 0911-032-08 11/4/2009	SP0-16 0911-032-09 11/4/2009	SP0-17 0911-032-10 11/4/2009	SP0-18 0911-032-30 11/4/2009	SP0-19 1001-006-11 1/4/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	30 U	28 U	27 U	27 U	27 U	28 U
Lube Oil-Range	200	240	58	54 U	53 U	56 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	57	37	7.2 U	7.2 U	34	7.5 U
Chrysene	85	100	7.2 U	7.2 U	46	7.5 U
Benzo(b)fluoranthene	77	95	7.6	7.2 U	46	7.5
Benzo(k)fluoranthene	19	17	7.2 U	7.2 U	11	7.5 U
Benzo(a)pyrene	49	39	7.2 U	7.2 U	21	7.5 U
Indeno(1,2,3-cd)pyrene	30	23	7.2 U	7.2 U	11	7.5 U
Dibenzo(a,h)anthracene	13	16	7.2 U	7.2 U	7.1 U	7.5 U
Total cPAH[1]	69.45	58.8	5.836	5.436	32.015	6.0375
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.17	0.23	0.054 U	0.054 U	0.053 U	0.056 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6	5.6 U	5.4 U	5.4 U	5.3 U	5.6 U
Arsenic	12 U	11 U	11 U	11 U	11 U	11 U
Chromium	42	41	33	29	41	19
Copper	**120**	**110**	38	27	30	15
Lead	90	35	18	6.6	7.4	9.5
Mercury	**1.6**	0.65	0.27 U	0.27 U	0.27 U	0.28 U
Nickel	43	32	33	39	39	22
Thallium	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	2.8 U
Zinc	140	130	85	48	95	36
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	0.96735	0.40828	0.70512	2.489
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	0.6704	0.3361	0.6065	1.126
Total Furans - Ecological (Bird) TEQ[2]	--	--	0.7202	0.16751	0.25039	2.7451

Sample ID Laboratory ID Sample Date	SP0-20 1001-006-12 1/4/2010	SP0-21 1001-006-13 1/4/2010	SP0-22 1003-099-01 3/12/2010	SP0-23 1003-079-02 3/10/2010	SP0-24 1003-079-03 3/10/2010	SP0-25 1003-148-01 3/19/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	31 U	28 U	--	--	--	--
Lube Oil-Range	63 U	55 U	--	--	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	8.3 U	7.4 U	--	--	--	--
Chrysene	8.3 U	7.4 U	--	--	--	--
Benzo(b)fluoranthene	8.3 U	7.4 U	--	--	--	--
Benzo(k)fluoranthene	8.3 U	7.4 U	--	--	--	--
Benzo(a)pyrene	8.3 U	7.4 U	--	--	--	--
Indeno(1,2,3-cd)pyrene	8.3 U	7.4 U	--	--	--	--
Dibenzo(a,h)anthracene	8.3 U	7.4 U	--	--	--	--
Total cPAH[1]	6.2665	5.587	--	--	--	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.063 U	0.056 U	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6.3 U	5.5 U	--	--	--	--
Arsenic	13 U	11 U	**24**	17	14	**24**
Chromium	22	17	--	--	--	--
Copper	11	9.4	65	53	52	57
Lead	6.3 U	5.5 U	--	--	--	--
Mercury	0.31 U	0.28 U	--	--	--	--
Nickel	20	18	--	--	--	--
Thallium	3.1 U	2.8 U	--	--	--	--
Zinc	26	25	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.31731	0.4516	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	0.2584	0.3542	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	0.18857	0.3266	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-26 1003-148-02 3/19/2010	SP0-27 1003-148-03 3/19/2010	SP0-28 1003-148-04 3/19/2010	SP0-29 1003-148-05 3/19/2010	SP0-30 1003-148-06 3/19/2010	SP0-31 1003-148-07 3/19/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	30 U	30 U	31 U	--	30 U	30 U
Lube Oil-Range	84	130	88	--	60 U	61 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	23	43	22	--	7.9 U	20
Chrysene	40	54	32	--	9	27
Benzo(b)fluoranthene	29	41	21	--	7.9 U	18
Benzo(k)fluoranthene	18	34	17	--	7.9 U	16
Benzo(a)pyrene	28	58	25	--	7.9 U	23
Indeno(1,2,3-cd)pyrene	21	36	16	--	7.9 U	15
Dibenzo(a,h)anthracene	8.1	13	8.2 U	--	7.9 U	8 U
Total cPAH[1]	38.31	75.24	33.33	--	6.015	30.57
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.088	0.06 U	0.062 U	--	0.06 U	0.061 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6 U	6.1 U	7.3	--	31	22
Arsenic	16	12 U	12 U	**29**	17	17
Chromium	26	28	23	--	30	23
Copper	52	43	74	100	49	56
Lead	37	29	32	--	34	33
Mercury	0.3 U	0.3 U	0.31 U	--	0.3 U	0.3 U
Nickel	36	38	34	--	34	31
Thallium	3 U	3 U	3.1 U	--	3 U	3 U
Zinc	120	99	100	--	130	120
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-32 1004-001-01 3/31/2010	SP0-33 1004-001-02 3/31/2010	SP0-34 1004-001-03 3/31/2010	SP0-35 1004-001-04 3/31/2010	SP0-36 1004-016-01 4/5/2010	SP0-37 1004-016-02 4/5/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	--	--	--	--
Lube Oil-Range	--	--	--	--	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--
Dibenzo(a,h)anthracene	--	--	--	--	--	--
Total cPAH[1]	--	--	--	--	--	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	--	--
Arsenic	**110**	**55**	**83**	11 U	**74**	11 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Thallium	--	--	--	--	--	--
Zinc	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-38 1004-016-03 4/5/2010	SP0-39 1004-016-04 4/5/2010	SP0-40 1004-074-01 4/12/2010	SP0-41 1004-074-02 4/12/2010	SP0-42 1004-074-03 4/12/2010	SP0-43 1004-074-04 4/12/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	27 U	28 U	28 U	28 U
Lube Oil-Range	--	--	54 U	55 U	56 U	140
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	7.2 U	9	9	8.8
Chrysene	--	--	8.3	13	14	13
Benzo(b)fluoranthene	--	--	7.2 U	8.9	9.9	10
Benzo(k)fluoranthene	--	--	7.2 U	7.7	7.4 U	7.9
Benzo(a)pyrene	--	--	7.2 U	8.8	9.3	10
Indeno(1,2,3-cd)pyrene	--	--	7.2 U	7.3 U	7.4 U	7.6 U
Dibenzo(a,h)anthracene	--	--	7.2 U	7.3 U	7.4 U	7.6 U
Total cPAH[1]	--	--	5.483	12.22	12.44	13.56
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	0.054 U	0.055 U	0.056 U	0.057 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	5.4 U	5.5 U	5.6 U	5.7 U
Arsenic	**39**	**27**	11 U	11 U	11 U	11 U
Chromium	--	--	18	17	20	21
Copper	--	--	16	20	23	27
Lead	--	--	6.1	6.9	11	9.9
Mercury	--	--	0.27 U	0.27 U	0.28 U	0.28 U
Nickel	--	--	23	22	25	27
Thallium	--	--	2.7 U	2.7 U	2.8 U	2.8 U
Zinc	--	--	36	36	50	43
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	0.31411	1.1107	2.26664	2.254075
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	0.2105	0.793	1.354	1.358
Total Furans - Ecological (Bird) TEQ[2]	--	--	0.25761	0.9808	2.74358	**3.8752**

Sample ID Laboratory ID Sample Date	SP0-44 1004-074-05 4/12/2010	SP0-45 1004-099-01 4/15/2010	SP0-46 1004-099-02 4/15/2010	SP0-47 1004-099-03 4/15/2010	SP0-48 1004-099-04 4/15/2010	SP0-49 1004-099-05 4/15/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	30 U	--	--	--	--	--
Lube Oil-Range	87	--	--	--	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	29	--	--	--	--	--
Chrysene	46	--	--	--	--	--
Benzo(b)fluoranthene	32	--	--	--	--	--
Benzo(k)fluoranthene	30	--	--	--	--	--
Benzo(a)pyrene	40	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	24	--	--	--	--	--
Dibenzo(a,h)anthracene	8.1 U	--	--	--	--	--
Total cPAH[1]	52.365	--	--	--	--	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.15	--	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6.1 U	--	--	--	--	--
Arsenic	12 U	13 U	32	14	17	19
Chromium	26	--	--	--	--	--
Copper	55	**62**	**83**	36	51	55
Lead	30	--	--	--	--	--
Mercury	0.3 U	--	--	--	--	--
Nickel	35	--	--	--	--	--
Thallium	3 U	--	--	--	--	--
Zinc	140	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	7.7972	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	4.72	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	**8.4309**	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-50 1005-052-01 5/6/2010	SP0-51 1005-052-02 5/6/2010	SP0-52 1005-129-01 5/17/2010	SP0-53 1005-129-02 5/17/2010	SP0-54 1005-129-03 5/17/2010	SP0-55 1005-129-04 5/17/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	--	--	--	--
Lube Oil-Range	--	--	--	--	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--
Dibenzo(a,h)anthracene	--	--	--	--	--	--
Total cPAH[1]	--	--	--	--	--	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	--	--
Arsenic	--	--	12 U	11 U	11 U	12 U
Chromium	--	--	--	--	--	--
Copper	--	--	28	22	24	24
Lead	--	--	8.5	5.6 U	5.7 U	7.2
Mercury	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Thallium	--	--	--	--	--	--
Zinc	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.170758	3.35129	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	0.08146	2.611	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	0.495116	2.57098	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-56 1005-129-05 5/17/2010	SP0-52R 1006-088-01 6/10/2010	SP0-53R 1006-088-02 6/10/2010	SP0-54R 1006-088-03 6/10/2010	SP0-55R 1006-088-04 6/10/2010	SP0-56R 1006-088-05 6/10/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	27 U	27 U	27 U	26 U	27 U
Lube Oil-Range	--	54 U	54 U	53 U	72	54 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Chrysene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Benzo(b)fluoranthene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Benzo(k)fluoranthene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Benzo(a)pyrene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Indeno(1,2,3-cd)pyrene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Dibenzo(a,h)anthracene	--	7.2 U	7.2 U	7.1 U	7 U	7.2 U
Total cPAH[1]	--	5.436	5.436	5.3605	5.285	5.436
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	0.054 U	0.054 U	0.053 U	0.053 U	0.054 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	5.4 U	5.4 U	5.3 U	5.2 U	5.4 U
Arsenic	11 U	--	--	--	--	--
Chromium	--	17	18	15	16	16
Copper	19	--	--	--	--	--
Lead	5.6 U	--	--	--	--	--
Mercury	--	0.27 U	0.27 U	0.27 U	0.26 U	0.27 U
Nickel	--	19	25	17	22	20
Thallium	--	2.7 U	2.7 U	2.7 U	2.6 U	2.7 U
Zinc	--	33	31	26	28	31
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	0.339845	0.32707	0.3451875	0.36428	1.5261
Total Dioxins - Ecological (Mammal) TEQ[2]	--	0.2652	0.2652	0.27697	0.2771	1.028
Total Furans - Ecological (Bird) TEQ[2]	--	0.260415	0.20584	0.2259225	0.23586	1.1135

Sample ID Laboratory ID Sample Date	SP0-57 1005-165-01 5/24/2010	SP0-58 1005-165-02 5/24/2010	SP0-59 1005-165-03 5/24/2010	SP0-60 1005-165-04 5/24/2010	SP0-61 1005-165-05 5/24/2010	SP0-62 1006-161-01 6/17/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	27 U	29 U	28 U	28 U	28 U
Lube Oil-Range	54 U	62	58 U	57 U	57 U	55 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.2 U	7.3 U	7.7 U	7.6 U	7.6 U	7.4 U
Chrysene	7.2 U	8.4	7.7 U	7.6 U	7.6 U	7.4 U
Benzo(b)fluoranthene	7.2 U	7.5	7.7 U	7.6 U	7.6 U	7.4 U
Benzo(k)fluoranthene	7.2 U	7.3 U	7.7 U	7.6 U	7.6 U	7.4 U
Benzo(a)pyrene	7.2 U	7.3 U	7.7 U	7.6 U	7.6 U	7.4 U
Indeno(1,2,3-cd)pyrene	7.2 U	7.3 U	7.7 U	7.6 U	7.6 U	7.4 U
Dibenzo(a,h)anthracene	7.2 U	7.3 U	7.7 U	7.6 U	7.6 U	7.4 U
Total cPAH[1]	5.436	5.944	5.8135	5.738	5.738	5.587
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.054 U	0.054 U	0.057 U	0.057 U	0.057 U	0.055 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.4 U	5.5 U	5.8 U	5.7 U	5.7 U	5.5 U
Arsenic	11 U	11 U	12 U	11 U	11 U	11 U
Chromium	23	16	24	21	24	16
Copper	9.4	11	7.3	7.7	8.1	7.4
Lead	5.4 U	5.5 U	5.8 U	5.7 U	5.7 U	5.5 U
Mercury	0.27 U	0.27 U	0.29 U	0.28 U	0.28 U	0.28 U
Nickel	21	19	20	19	20	17
Thallium	2.7 U	2.7 U	2.9 U	2.8 U	2.8 U	2.8 U
Zinc	35	31	34	30	31	28
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.27368	0.38697	0.159146	0.2112615	0.196089	0.3212
Total Dioxins - Ecological (Mammal) TEQ[2]	0.2183	0.3275	0.1217	0.168	0.1606	0.2126
Total Furans - Ecological (Bird) TEQ[2]	0.23706	0.19879	0.175227	0.1623205	0.137123	0.38125

Sample ID Laboratory ID Sample Date	SP0-63 1006-161-02 6/17/2010	SP0-64 1006-161-03 6/17/2010	SP0-65 1006-161-04 6/17/2010	SP0-66 1006-161-05 6/17/2010	SP0-67 1006-161-06 6/17/2010	SP0-68 1006-161-07 6/17/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	28 U	28 U	29 U	30 U	26 U	28 U
Lube Oil-Range	57 U	55 U	58 U	60 U	53 U	55 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Chrysene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Benzo(b)fluoranthene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Benzo(k)fluoranthene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Benzo(a)pyrene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Indeno(1,2,3-cd)pyrene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Dibenzo(a,h)anthracene	7.6 U	7.4 U	7.7 U	8 U	7 U	7.4 U
Total cPAH[1]	5.738	5.587	5.8135	6.04	5.285	5.587
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.057 U	0.055 U	0.057 U	0.06 U	0.053 U	0.055 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.7 U	5.5 U	5.7 U	6 U	5.3 U	5.5 U
Arsenic	11 U	11 U	11 U	12 U	11 U	11 U
Chromium	18	25	17	20	16	20
Copper	6.2	8.7	8.4	8.1	7.6	8.1
Lead	5.7 U	5.5 U	5.7 U	6 U	5.3 U	5.5 U
Mercury	0.28 U	0.28 U	0.29 U	0.3 U	0.26 U	0.28 U
Nickel	16	23	17	19	17	20
Thallium	2.8 U	2.8 U	2.9 U	3 U	2.6 U	2.8 U
Zinc	29	29	28	29	27	30
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.207743	0.283646	0.35723	0.248202	0.25868	0.28814
Total Dioxins - Ecological (Mammal) TEQ[2]	0.15725	0.2196	0.2836	0.1862	0.1985	0.2292
Total Furans - Ecological (Bird) TEQ[2]	0.139531	0.172232	0.21141	0.185794	0.15091	0.16313

Sample ID Laboratory ID Sample Date	SP0-69 1006-271-01 6/29/2010	SP0-70 1006-271-02 6/29/2010	SP0-71 1006-271-03 6/29/2010	SP0-72 1006-271-04 6/29/2010	SP0-73 1006-271-05 6/29/2010	SP0-74 1006-271-06 6/29/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	27 U	28 U	27 U	27 U	27 U
Lube Oil-Range	54 U	54 U	56 U	54 U	55 U	54 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.2 U	9.4	7.4 U	7.7	7.3 U	7.3 U
Chrysene	7.2 U	20	9.9	19	7.4	13
Benzo(b)fluoranthene	7.2 U	7.9	9.8	20	7.3 U	8.9
Benzo(k)fluoranthene	7.2 U	7.4	8.1	7.4	7.3 U	7.7
Benzo(a)pyrene	7.2 U	8.2	9.2	8.4	7.3 U	8.3
Indeno(1,2,3-cd)pyrene	7.2 U	7.2 U	7.8	7.2 U	7.3 U	7.3 U
Dibenzo(a,h)anthracene	7.2 U	7.2 U	7.4 U	7.2 U	7.3 U	7.3 U
Total cPAH[1]	5.436	11.59	12.609	12.82	5.549	11.185
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.054 U	0.054 U	0.056 U	0.054 U	0.054 U	0.054 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.4 U	5.4 U	5.6 U	5.4 U	5.5 U	5.4 U
Arsenic	11 U	11 U	11 U	11 U	11 U	11 U
Chromium	18	18	17	16	24	17
Copper	9.5	11	9.3	9.7	12	7.6
Lead	5.4 U	5.4 U	5.6 U	5.4 U	5.5 U	5.4 U
Mercury	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U
Nickel	21	25	21	20	34	21
Thallium	2.7 U	2.7 U	2.8 U	2.7 U	2.7 U	2.7 U
Zinc	25	26	24	23	25	24
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.312758	0.39006	0.324073	0.221901	0.35909	0.25177
Total Dioxins - Ecological (Mammal) TEQ[2]	0.2647	0.3061	0.2578	0.176	0.2785	0.1913
Total Furans - Ecological (Bird) TEQ[2]	0.159436	0.25517	0.188596	0.152767	0.35358	0.1623

Sample ID Laboratory ID Sample Date	SP0-75 1006-271-07 6/29/2010	SP0-76 1007-108-01 7/15/2010	SP0-77 1007-108-02 7/15/2010	SP0-78 1007-108-03 7/15/2010	SP0-79 1007-108-04 7/15/2010	SP0-80 1007-108-05 7/15/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	26 U	26 U	100	26 U	30 U
Lube Oil-Range	55 U	53 U	52 U	54 U	53 U	59 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.3 U	4.2 U	4	4.4	4.2 U	4.7 U
Chrysene	7.3 U	4.2 U	8.9	8.1	4.2 U	8
Benzo(b)fluoranthene	7.3 U	4.2 U	6.8	6.9	4.2 U	4.7 U
Benzo(k)fluoranthene	7.3 U	4.2 U	6.3	6.6	4.2 U	4.7 U
Benzo(a)pyrene	7.3 U	4.2 U	6.4	6.6	4.2 U	4.7 U
Indeno(1,2,3-cd)pyrene	7.3 U	4.2 U	4.5	5	4.2 U	4.7 U
Dibenzo(a,h)anthracene	7.3 U	4.2 U	4 U	4.3 U	4.2 U	4.7 U
Total cPAH[1]	5.5115	3.171	8.849	9.186	3.171	3.605
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.055 U	0.053 U	0.052 U	0.054 U	0.053 U	0.059 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	5.3 U	5.2 U	5.4 U	5.3 U	5.9 U
Arsenic	11 U	11 U	10 U	11 U	11 U	12 U
Chromium	17	25	24	24	20	27
Copper	10	6.8	13	10	7.6	7.3
Lead	5.5 U	5.3 U	5.2 U	5.4 U	5.3 U	5.9 U
Mercury	0.27 U	0.26 U	0.26 U	0.27 U	0.26 U	0.3 U
Nickel	23	22	30	21	20	23
Thallium	2.7 U	2.6 U	2.6 U	2.7 U	2.6 U	3 U
Zinc	24	31	38	34	30	37
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.396055	0.143996	1.18338	0.54389	0.149371	0.144848
Total Dioxins - Ecological (Mammal) TEQ[2]	0.3234	0.1019	0.9905	0.447	0.1124	0.1036
Total Furans - Ecological (Bird) TEQ[2]	0.228135	0.104127	0.36616	0.19928	0.093127	0.118716

Sample ID Laboratory ID Sample Date	SP0-81 1007-108-06 7/15/2010	SP0-82 1007-108-07 7/15/2010	SP0-83 1007-108-08 7/15/2010	SP0-84 1007-108-09 7/15/2010	SP0-85 1007-108-10 7/15/2010	SP0-86 1008-161-01 8/23/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	29 U	29 U	29 U	29 U	27 U
Lube Oil-Range	53 U	58 U	58 U	58 U	57 U	54 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	4.2 U	4.6 U	9.9	4.6 U	4.6 U	7.1 U
Chrysene	4.2 U	4.6 U	13	6.1	4.6 U	7.1 U
Benzo(b)fluoranthene	4.2 U	4.6 U	9.9	5	4.6 U	7.1 U
Benzo(k)fluoranthene	4.2 U	4.6 U	10	4.6 U	4.6 U	7.1 U
Benzo(a)pyrene	4.2 U	4.6 U	9.9	4.6 U	4.6 U	7.1 U
Indeno(1,2,3-cd)pyrene	4.2 U	4.6 U	6.3	4.6 U	4.6 U	7.1 U
Dibenzo(a,h)anthracene	4.2 U	4.6 U	4.6 U	4.6 U	4.6 U	7.1 U
Total cPAH[1]	3.171	3.473	13.87	3.781	3.473	5.3605
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.053 U	0.057 U	0.058 U	0.058 U	0.057 U	0.054 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.3 U	5.8 U	5.8 U	5.8 U	5.7 U	5.4 U
Arsenic	11 U	12 U	12 U	12 U	11 U	11 U
Chromium	19	26	23	25	20	14
Copper	8.4	7.7	11	10	8.5	12
Lead	5.3 U	5.8 U	5.8 U	5.8 U	5.7 U	5.4 U
Mercury	0.26 U	0.29 U	0.29 U	0.29 U	0.29 U	0.27 U
Nickel	20	23	19	23	21	19
Thallium	2.6 U	2.9 U	2.9 U	2.9 U	2.9 U	2.7 U
Zinc	31	35	29	38	33	28
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.21205	0.16475	0.140915	0.228728	0.171925	0.44882
Total Dioxins - Ecological (Mammal) TEQ[2]	0.1486	0.109	0.1055	0.1732	0.1318	0.37
Total Furans - Ecological (Bird) TEQ[2]	0.15615	0.12985	0.126715	0.150276	0.10103	0.24249

Sample ID Laboratory ID Sample Date	SP0-87 1008-161-02 8/23/2010	SP0-88 1008-161-03 8/23/2010	SP0-89 1008-161-04 8/23/2010	SP0-90 1008-161-05 8/23/2010	SP0-91 1008-161-06 8/23/2010	SP0-92 1008-161-07 8/23/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	27 U	27 U	27 U	27 U	28 U
Lube Oil-Range	54 U	54 U	55 U	54 U	54 U	80
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.2 U	7.2 U	7.3 U	7.2 U	7.2 U	7.4 U
Chrysene	7.2 U	7.2 U	7.3 U	7.7	8.5	7.4 U
Benzo(b)fluoranthene	7.2 U	7.2 U	7.3 U	7.2 U	7.2 U	7.4 U
Benzo(k)fluoranthene	7.2 U	7.2 U	7.3 U	7.2 U	7.2 U	7.4 U
Benzo(a)pyrene	7.2 U	7.2 U	7.3 U	7.2 U	7.2 U	7.4 U
Indeno(1,2,3-cd)pyrene	7.2 U	7.2 U	7.3 U	7.2 U	7.2 U	7.4 U
Dibenzo(a,h)anthracene	7.2 U	7.2 U	7.3 U	7.2 U	7.2 U	7.4 U
Total cPAH[1]	5.436	5.436	5.5115	5.477	5.485	5.587
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.054 U	0.054 U	0.054 U	0.054 U	0.054 U	0.055 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.5 U
Arsenic	11 U	11 U	11 U	11 U	11 U	11 U
Chromium	13	17	17	17	16	18
Copper	6.9	8.3	10	10	9.7	10
Lead	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.5 U
Mercury	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U
Nickel	15	18	21	21	18	21
Thallium	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.8 U
Zinc	22	26	26	26	28	29
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.50207	0.347904	0.332691	0.2246535	0.35721	0.2773795
Total Dioxins - Ecological (Mammal) TEQ[2]	0.3866	0.2675	0.2734	0.1848	0.2691	0.2167
Total Furans - Ecological (Bird) TEQ[2]	0.38549	0.216518	0.199147	0.1304845	0.29772	0.2336265

Sample ID Laboratory ID Sample Date	SP0-93 1008-161-08 8/23/2010	SP0-94 1008-161-09 8/23/2010	SP0-95 1008-161-10 8/23/2010	SP0-96 1009-014-01 9/1/2010	SP0-97 1009-014-02 9/1/2010	SP0-98 1009-014-03 9/1/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	27 U	26 U	30 U	28 U	28 U
Lube Oil-Range	53 U	54 U	69	59 U	78	57 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.1 U	7.3 U	7 U	12	7.4 U	12
Chrysene	7.1 U	7.3 U	7 U	14	7.8	13
Benzo(b)fluoranthene	7.1 U	7.3 U	7 U	8.9	7.4 U	8.5
Benzo(k)fluoranthene	7.1 U	7.3 U	7 U	9.4	7.4 U	7.6
Benzo(a)pyrene	7.1 U	7.3 U	7 U	11	7.4 U	12
Indeno(1,2,3-cd)pyrene	7.1 U	7.3 U	7 U	7.9 U	7.4 U	7.6 U
Dibenzo(a,h)anthracene	7.1 U	7.3 U	7 U	7.9 U	7.4 U	7.6 U
Total cPAH[1]	5.3605	5.5115	5.285	14.96	5.628	15.7
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.053 U	0.054 U	0.052 U	0.059 U	0.056 U	0.057 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.3 U	5.4 U	5.2 U	5.9 U	5.6 U	5.7 U
Arsenic	11 U	11 U	10 U	--	--	--
Chromium	17	15	18	12 U	11 U	11 U
Copper	10	9.2	13	30	32	28
Lead	5.3 U	5.4 U	5.2 U	18	14	17
Mercury	0.27 U	0.27 U	0.26 U	5.9 U	6.6	5.7 U
Nickel	21	19	23	0.29 U	0.28 U	0.28 U
Thallium	2.7 U	2.7 U	2.6 U	--	--	--
Zinc	27	26	30	35	30	31
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.30677	0.210788	0.46463	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	0.2411	0.16355	0.3715	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	0.21994	0.155746	0.27941	--	--	--

Sample ID Laboratory ID Sample Date	SP0-99 1009-014-04 9/1/2010	SP0-100 1009-014-05 9/1/2010	SP0-101 1009-014-06 9/1/2010	SP0-102 1009-014-07 9/1/2010	SP0-103 1009-014-08 9/1/2010	SP0-104 1009-014-09 9/1/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	30 U	28 U	28 U	29 U	29 U
Lube Oil-Range	55 U	61 U	57 U	70	71	57 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.3 U	21	7.5 U	7.3 U	8.1	7.6 U
Chrysene	7.3 U	23	7.5 U	7.3 U	9.6	7.6 U
Benzo(b)fluoranthene	7.3 U	15	7.5 U	7.3 U	7.6 U	7.6 U
Benzo(k)fluoranthene	7.3 U	17	7.5 U	7.3 U	7.6 U	7.6 U
Benzo(a)pyrene	7.3 U	25	7.5 U	7.3 U	8.8	7.6 U
Indeno(1,2,3-cd)pyrene	7.3 U	15	7.5 U	7.3 U	7.6 U	7.6 U
Dibenzo(a,h)anthracene	7.3 U	8.1 U	7.5 U	7.3 U	7.6 U	7.6 U
Total cPAH[1]	5.5115	32.435	5.6625	5.5115	11.226	5.738
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.055 U	0.061 U	0.056 U	0.055 U	0.057 U	0.057 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	6.1 U	5.6 U	5.5 U	5.7 U	5.7 U
Arsenic	--	--	--	--	--	--
Chromium	11 U	12 U	11 U	11 U	11 U	11 U
Copper	23	25	24	27	23	25
Lead	16	14	15	17	17	14
Mercury	5.5 U	6.1 U	5.6 U	5.5 U	5.7 U	5.7 U
Nickel	0.27 U	0.3 U	0.28 U	0.27 U	0.29 U	0.29 U
Thallium	--	--	--	--	--	--
Zinc	36	34	27	36	27	30
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SP0-105 1009-014-10 9/1/2010	SP0-106 1011-028-11 11/2/2010	SP0-107 1011-028-12 11/2/2010	SP0-108 1011-028-13 11/2/2010	SP0-109 1011-028-14 11/2/2010	SP0-110 1011-028-15 11/2/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	56 U	29 U	29 U	30 U	27 U	28 U
Lube Oil-Range	370	66	58 U	88	54 U	56 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	18	31	53	21	7.2 U	7.4 U
Chrysene	21	49	87	33	7.2 U	7.4 U
Benzo(b)fluoranthene	14	51	110	23	7.2 U	7.4 U
Benzo(k)fluoranthene	15	41	85	21	7.2 U	7.4 U
Benzo(a)pyrene	20	39	57	24	7.2 U	7.4 U
Indeno(1,2,3-cd)pyrene	15	45	49	15	7.2 U	7.4 U
Dibenzo(a,h)anthracene	8 U	9.7	14	8.1 U	7.2 U	7.4 U
Total cPAH[1]	26.81	57.26	88.97	32.735	5.436	5.587
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.06 U	0.058 U	0.058 U	0.06 U	0.054 U	0.056 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6 U	5.8 U	5.8 U	6 U	5.4 U	5.6 U
Arsenic	--	12 U	12 U	12 U	11 U	11 U
Chromium	12 U	25	20	22	16	16
Copper	29	25	17	26	13	8.8
Lead	16	16	9.5	18	5.4 U	5.6 U
Mercury	9.6	0.29 U	0.29 U	0.3 U	0.27 U	0.28 U
Nickel	0.3 U	30	24	28	23	19
Thallium	--	2.9 U	2.9 U	3 U	2.7 U	2.8 U
Zinc	33	48	44	64	27	29
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	3.565	0.68	1.617	0.415	0.42
Total Dioxins - Ecological (Mammal) TEQ[2]	--	2.797	0.43	1.127	0.25	0.271
Total Furans - Ecological (Bird) TEQ[2]	--	1.762	0.824	1.555	0.463	0.582

Sample ID Laboratory ID Sample Date	SP0-111 1011-028-16 11/2/2010	SP0-112 1011-028-17 11/2/2010	SP0-113 1011-028-18 11/2/2010	SP0-114 1011-028-19 11/2/2010	SP0-115 1011-028-20 11/2/2010	SP0-116 1011-209-01 11/23/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	28 U	27 U	28 U	29 U	28 U
Lube Oil-Range	55 U	56 U	55 U	55 U	94	56 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.3 U	7.5 U	7.3 U	7.3 U	28	7.5 U
Chrysene	7.3 U	7.5 U	12	7.3 U	37	7.5 U
Benzo(b)fluoranthene	7.3 U	7.5 U	7.3 U	7.3 U	25	7.5 U
Benzo(k)fluoranthene	7.3 U	7.5 U	7.3 U	7.3 U	25	7.5 U
Benzo(a)pyrene	7.3 U	7.5 U	7.3 U	7.3 U	34	7.5 U
Indeno(1,2,3-cd)pyrene	7.3 U	7.5 U	7.3 U	7.3 U	17	7.5 U
Dibenzo(a,h)anthracene	7.3 U	7.5 U	7.3 U	7.3 U	7.7 U	7.5 U
Total cPAH[1]	5.511	5.663	5.595	5.511	44.255	5.663
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.055 U	0.056 U	0.055 U	0.055 U	0.057 U	0.056 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	5.6 U	5.5 U	5.5 U	5.7 U	5.6 U
Arsenic	11 U	11 U	11 U	11 U	11 U	11 U
Chromium	22	18	22	22	23	17
Copper	13	9.7	14	8.6	15	7.8
Lead	5.5 U	5.6 U	5.5 U	5.5 U	8.3	7.9
Mercury	0.27 U	0.28 U	0.27 U	0.27 U	0.29 U	0.28 U
Nickel	30	20	33	21	25	20
Thallium	2.7 U	2.8 U	2.7 U	2.7 U	2.9 U	2.8 U
Zinc	31	31	33	31	43	29
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.285	0.294	0.428	0.368	0.989	0.916
Total Dioxins - Ecological (Mammal) TEQ[2]	0.205	0.195	0.253	0.22	0.612	0.649
Total Furans - Ecological (Bird) TEQ[2]	0.238	0.359	0.635	0.564	1.166	1.295

Sample ID Laboratory ID Sample Date	SP0-117 1011-209-02 11/23/2010	SP0-118 1011-209-03 11/23/2010	SP0-119 1011-209-04 11/23/2010	SP0-120 1011-209-05 11/23/2010	SP0-121 1011-209-06 11/23/2010	SP0-122 1011-209-07 11/23/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	27 U	27 U	26 U	27 U	28 U
Lube Oil-Range	65	54 U	54 U	53 U	54 U	56 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.2 U	7.3 U	7.2 U	7 U	7.6	7.5 U
Chrysene	7.2 U	7.3 U	7.2 U	7 U	16	7.5 U
Benzo(b)fluoranthene	7.2 U	7.3 U	7.2 U	7 U	11	7.5 U
Benzo(k)fluoranthene	7.2 U	7.3 U	7.2 U	7 U	7.2	7.5 U
Benzo(a)pyrene	7.2 U	7.3 U	7.2 U	7 U	10	7.5 U
Indeno(1,2,3-cd)pyrene	7.2 U	7.3 U	7.2 U	7 U	7.2 U	7.5 U
Dibenzo(a,h)anthracene	7.2 U	7.3 U	7.2 U	7 U	7.2 U	7.5 U
Total cPAH[1]	5.436	5.511	5.436	5.285	13.46	5.663
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.054 U	0.054 U	0.054 U	0.053 U	0.054 U	0.056 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.4 U	5.4 U	5.4 U	5.3 U	5.4 U	5.6 U
Arsenic	11 U	11 U	11 U	11 U	11 U	11 U
Chromium	20	18	17	18	18	20
Copper	10	9.7	9.6	16	9.2	10
Lead	5.4 U	5.4 U	5.4 U	5.3 U	7.1	5.6 U
Mercury	0.27 U	0.27 U	0.27 U	0.26 U	0.27 U	0.28 U
Nickel	22	20	19	38	20	25
Thallium	2.7 U	2.7 U	2.7 U	2.6 U	2.7 U	2.8 U
Zinc	32	28	29	28	30	32
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	1.243	1.114	0.995	1.171	0.499	0.464
Total Dioxins - Ecological (Mammal) TEQ[2]	0.868	0.737	0.646	0.873	0.32	0.307
Total Furans - Ecological (Bird) TEQ[2]	1.546	1.528	1.384	1.278	0.92	0.801

Notes:

[1]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations.

[2]Total Dioxin and Furan calculated using toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD. Individual Dioxin/Furan compounds with "U" qualifier were assigned a value of one half of the reported detection limit for these calculations.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

ng/kg = monograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL)

J = estimated result

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding the Site backfill reuse criteria (refer to Table 1). Soil represented by this sample was subsequently transported from the Site for permitted landfill disposal.

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 15

Summary of Deep Overburden Soil Chemical Analytical Results

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID Laboratory ID Sample Date	SPU-1 0907-176-04 7/23/2009	SPU-2 0907-176-05 7/23/2009	SPU-3 0907-176-06 7/23/2009	SPU-4 0911-032-11 11/4/2009	SPU-5 0911-032-12 11/4/2009	SPU-6 0911-032-13 11/4/2009
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	28 U	28 U	26 U	82 U	36 U	36 U
Lube Oil-Range	93	89	61	900 U	360 U	220
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	12	12	7.4	100	30	71
Chrysene	16	16	10	130	46	87
Benzo(b)fluoranthene	21	24	19	130	55	84
Benzo(k)fluoranthene	7.3 U	7.3 U	7 U	31	14	27
Benzo(a)pyrene	17	18	14	68	29	48
Indeno(1,2,3-cd)pyrene	11	12	9.1	44	24	32
Dibenzo(a,h)anthracene	7.3 U	7.3 U	7 U	18	8.8 U	12
Total cPAH[1]	22.29	23.69	18.35	101.6	42.2	71.47
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.055 U	0.055 U	0.053 U	0.21	0.35	0.2
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	5.5 U	5.3 U	7.1 U	6.5 U	7.1 U
Arsenic	11 U	11 U	11 U	14 U	13 U	14 U
Chromium	28 J	33 J	21 J	36	27	32
Copper	21	28	17	78	73	76
Lead	28	7.4	6.5	65	120	75
Mercury	0.27 U	0.27 U	0.26 U	0.66	**8.8**	**5.2**
Nickel	32	66	28	38	33	36
Thallium	5.5 U	5.5 U	5.3 U	1.4 U	1.3 U	1.4 U
Zinc	62	53	43	87	76	84
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	2.33876	0.70827	1.67705	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	0.65	0.4215	1.248	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	**6.12715**	0.79099	1.25695	--	--	--

Sample ID Laboratory ID Sample Date	SPU-7 0911-032-14 11/4/2009	SPU-8 0911-032-15 11/4/2009	SPU-9 0911-032-16 11/4/2009	SPU-10 0911-032-17 11/4/2009	SPU-11 0911-032-18 11/4/2009	SPU-12 1001-006-06 1/4/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	59 U	150 U	28 U	27 U	27 U	29 U
Lube Oil-Range	410 U	1600 U	73	55 U	89	58 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	68	78	7.3 U	15	25	12
Chrysene	86	110	8.1	17	33	16
Benzo(b)fluoranthene	82	130	11	26	48	17
Benzo(k)fluoranthene	23	35	7.3 U	8.1	13	7.7 U
Benzo(a)pyrene	57	64	7.5	19	37	10
Indeno(1,2,3-cd)pyrene	36	62	7.3 U	14	24	7.7 U
Dibenzo(a,h)anthracene	14	22	7.3 U	7.2 U	7.4	7.7 U
Total cPAH[1]	80.16	97.8	10.141	25.84	49.07	14.215
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.44	0.5	0.078	0.054 U	0.054 U	0.057 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6.4 U	6.4 U	5.5 U	5.5 U	5.4 U	5.8 U
Arsenic	13 U	13 U	11 U	11 U	11 U	12 U
Chromium	27	29	31	25	22	25
Copper	95	68	38	23	26	42
Lead	88	96	190	75	50	12
Mercury	2.5	0.86	0.27 U	0.27 U	0.27 U	0.35
Nickel	34	34	34	33	34	33
Thallium	1.3 U	1.3 U	1.1 U	1.1 U	1.1 U	2.9 U
Zinc	91	140	37	31	39	94
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	3.61335	0.98105	1.00045	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	2.594	0.6785	0.691	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	1.6866	0.5097	0.70795	--

Sample ID Laboratory ID Sample Date	SPU-13 1001-006-07 1/4/2010	SPU-14 1001-006-08 1/4/2010	SPU-15 1001-006-09 1/4/2010	SPU-16 1001-006-10 1/4/2010	SPU-17 1001-149-01 1/25/2010	SPU-18 1001-149-02 1/25/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	30 U	29 U	29 U	28 U	27 U	26 U
Lube Oil-Range	60 U	59 U	270	56 U	53 U	53 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	38	12	31	7.5 U	7.1 U	7 U
Chrysene	48	37	54	11	7.1 U	7 U
Benzo(b)fluoranthene	49	29	58	14	7.1 U	7 U
Benzo(k)fluoranthene	16	9.6	18	7.5 U	7.1 U	7 U
Benzo(a)pyrene	36	12	30	7.5 U	7.1 U	7 U
Indeno(1,2,3-cd)pyrene	19	8.9	21	7.5 U	7.1 U	7 U
Dibenzo(a,h)anthracene	8 U	7.8 U	7.7 U	7.5 U	7.1 U	7 U
Total cPAH[1]	49.08	18.71	43.725	6.76	5.3605	5.285 U
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.06 U	0.059 U	0.13	0.056 U	0.053 U	0.053 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6 U	5.9 U	5.7 U	5.6 U	5.3 U	5.3 U
Arsenic	12 U	12 U	11 U	11 U	11 U	11 U
Chromium	27	20	26	31	17 J	17 J
Copper	66	26	45	45	26	21
Lead	45	12	85	11	8.5 J	5.3 U
Mercury	**1.1**	0.29 U	**6**	0.28 U	0.27 U	0.26 U
Nickel	33	38	40	40	41	35
Thallium	3 U	2.9 U	2.9 U	2.8 U	2.7 U	2.6 U
Zinc	140	73	83	94	150	29
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	0.70511	0.360899
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	0.5	0.2988
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	0.52957	0.166183

Sample ID Laboratory ID Sample Date	SPU-19 1001-149-03 1/25/2010	SPU-20 1001-149-04 1/25/2010	SPU-21 1001-149-05 1/25/2010	SPU-22 1001-149-06 1/25/2010	SPU-23 1001-149-07 1/25/2010	SPU-24 1002-015-01 2/1/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	28 U	27 U	27 U	27 U	27 U	27 U
Lube Oil-Range	55 U	54 U	89	54 U	54 U	67
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.5	7.2 U	7.2	21	7.2 U	7.2 U
Chrysene	9	12	9.4	23	7.2 U	7.2
Benzo(b)fluoranthene	7.4 U	8.5	7.5	19	7.2 U	7.2 U
Benzo(k)fluoranthene	7.4 U	7.2 U	7.2 U	16	7.2 U	7.2 U
Benzo(a)pyrene	7.4 U	7.2 U	7.2 U	17	7.2 U	7.2 U
Indeno(1,2,3-cd)pyrene	7.4 U	7.2 U	7.2 U	8.6	7.2 U	7.2 U
Dibenzo(a,h)anthracene	7.4 U	7.2 U	7.2 U	7.1 U	7.2 U	7.2 U
Total cPAH[1]	6.02	6.01	6.244	24.045	5.436	5.472
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.056 U	0.054 U	0.054 U	0.087	0.054 U	0.054 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
Arsenic	11 U	11 U	11 U	11 U	11 U	11 U
Chromium	22 J	30 J	39 J	17 J	18 J	33
Copper	30	30	33	25	16	33
Lead	21 J	22 J	15 J	22 J	12 J	16
Mercury	0.28 U	0.27 U	0.78	0.27 U	0.27 U	**1.6 J**
Nickel	57	55	59	34	73	61
Thallium	2.8 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Zinc	55	48	53	34	22	50
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.5791	1.03385	--	0.66307	0.38609	--
Total Dioxins - Ecological (Mammal) TEQ[2]	0.4355	0.6725	--	0.531	0.282	--
Total Furans - Ecological (Bird) TEQ[2]	0.3122	0.805	--	0.28599	0.34638	--

Sample ID Laboratory ID Sample Date	SPU-25 1002-015-02 2/1/2010	SPU-26 1002-062-01 2/9/2010	SPU-27 1006-087-01 6/10/2010	SPU-28 1006-087-02 6/10/2010	SPU-29 1006-087-03 6/10/2010	SPU-30 1006-087-04 6/10/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	27 U	28 U	37 U	34 U	67	69
Lube Oil-Range	54 U	56 U	200	190	310	340
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	7.2 U	8.4	18	23	76	22
Chrysene	7.2 U	9.9	30	39	140	80
Benzo(b)fluoranthene	7.2 U	7.4 U	24	27	72	51
Benzo(k)fluoranthene	7.2 U	7.4 U	22	26	72	50
Benzo(a)pyrene	7.2 U	7.4 U	28	34	90	55
Indeno(1,2,3-cd)pyrene	7.2 U	7.4 U	18	21	53	38
Dibenzo(a,h)anthracene	7.2 U	7.4 U	9.8 U	9.1 U	11	14 U
Total cPAH[1]	5.436	6.119	36.99	44.545	119.8	72.6
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.054 U	0.056 U	0.074 U	0.068 U	0.081 U	0.1 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.5 U	5.6 U	7.3 U	7.2	8 U	10 U
Arsenic	11 U	11 U	15 U	14 U	16 U	10 U
Chromium	24	25 J	32	26	17	23
Copper	18	19 J	50	53	31	69
Lead	5.5 U	14 J	19 J	17 J	12 J	31 J
Mercury	0.27 U	0.28 U	0.37 U	0.34 U	0.4 U	0.52 U
Nickel	71	67	38	28	20	32
Thallium	2.7 U	2.8 U	3.7 U	3.4 U	4 U	5.2 U
Zinc	28	31	53	89	57	170
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.56425	0.28767	1.068955	1.83579	2.6571	2.2586
Total Dioxins - Ecological (Mammal) TEQ[2]	0.4405	0.2259	0.764	1.4795	1.2365	1.419
Total Furans - Ecological (Bird) TEQ[2]	0.36235	0.15429	1.132885	1.21803	**4.1939**	2.9459

Sample ID Laboratory ID Sample Date	SPU-31 1006-087-05 6/10/2010	SPU-32 1006-162-01 6/17/2010	SPU-33 1006-162-02 6/17/2010	SPU-34 1006-162-03 6/17/2010	SPU-35 1006-162-04 6/17/2010	SPU-36 1006-162-05 6/17/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	38 U	35 U	42 U	140 U	74 U	97 U
Lube Oil-Range	120	69 U	240	1200	520	810
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	13	12	11	73	420	130
Chrysene	35	22	19	100	480	230
Benzo(b)fluoranthene	30	20	13	83	290	150
Benzo(k)fluoranthene	23	17	11	76	340	130
Benzo(a)pyrene	27	19	12	96	400	180
Indeno(1,2,3-cd)pyrene	10 U	17	11	94	170	100
Dibenzo(a,h)anthracene	10 U	9.2 U	11 U	23	59	31
Total cPAH[1]	34.95	26.28	17.34	131.9	**532.7**	**236.4**
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.076 U	0.069 U	0.085 U	0.086 U	0.07 U	0.069 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	7.6 U	6.9 U	8.4 U	8.7 U	7 U	6.9 U
Arsenic	15 U	14 U	17 U	17 U	14 U	14 U
Chromium	28	23	28	19	24	26
Copper	64	38	60	71	38	39
Lead	24 J	23	19	37	19	24
Mercury	0.38 U	0.35 U	0.42 U	0.43 U	0.35 U	0.35 U
Nickel	30	24	33	26	30	30
Thallium	3.8 U	3.5 U	4.2 U	4.3 U	3.5 U	3.5 U
Zinc	130	54	89	62	71	77
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	0.87339	5.70532	**31.2348**	5.347	8.1627	4.500975
Total Dioxins - Ecological (Mammal) TEQ[2]	0.707	3.664	**23.45**	3.415	5.98	3.042
Total Furans - Ecological (Bird) TEQ[2]	0.39698	**8.22944**	**30.8721**	**6.096**	**5.8949**	**5.715325**

Sample ID Laboratory ID Sample Date	SPU-38 1006-272-01 6/29/2010	SPU-39 1006-272-02 6/29/2010	SPU-40 1006-272-03 6/29/2010	SPU-41 1006-272-04 6/29/2010	SPU-42 1006-272-05 6/29/2010	SPU-43 1006-272-06 6/29/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	--	--	--	--
Lube Oil-Range	--	--	--	--	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	--	--
Chrysene	--	--	--	--	--	--
Benzo(b)fluoranthene	--	--	--	--	--	--
Benzo(k)fluoranthene	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	--
Dibenzo(a,h)anthracene	--	--	--	--	--	--
Total cPAH[1]	--	--	--	--	--	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	--	--
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	27 J	29 J	40 J	180 J	35 J	35 J
Lead	9.2	16	22	22	22	27
Mercury	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Thallium	--	--	--	--	--	--
Zinc	40	57	72	71	70	69
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	0.2 U	--	0.2 U	0.2 U
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-44 1006-272-07 6/29/2010	SPU-45 1006-295-01 6/29/2010	SPU-46 1006-295-02 6/29/2010	SPU-47 1006-295-03 6/29/2010	SPU-48 1006-295-04 6/29/2010	SPU-49 1006-295-05 6/29/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	65 U	220 U	50 U	110 U	180 U
Lube Oil-Range	--	500	2000	390	910	1300
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	33	8.4 U	28	15	20
Chrysene	--	51	17	45	31	31
Benzo(b)fluoranthene	--	53	10	33	21	25
Benzo(k)fluoranthene	--	42	8.4	35	15	18
Benzo(a)pyrene	--	61	8.4 U	41	20	30
Indeno(1,2,3-cd)pyrene	--	51	11	29	16	23
Dibenzo(a,h)anthracene	--	13	8.4 U	8.4 U	8.9 U	9.3 U
Total cPAH[1]	--	80.71	8.15	54.37	27.455	39.375
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	0.069 U	0.063 U	0.063 U	0.067 U	0.07 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	6.9 U	6.3 U	6.3 U	6.7 U	7 U
Arsenic	--	14 U	13 U	13 U	13 U	14 U
Chromium	--	28	23	22	21	25
Copper	39 J	31	19	29	32	43
Lead	18	15	9.4	11	15	32
Mercury	--	0.34 U	0.31 U	0.31 U	0.33 U	0.35 U
Nickel	--	33	24	26	22	26
Thallium	--	3.4 U	3.1 U	3.1 U	3.3 U	3.5 U
Zinc	63	58	41	50	50	72
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	0.2 U	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	1.53175	1.03109	0.98395	0.85981	2.61625
Total Dioxins - Ecological (Mammal) TEQ[2]	--	1.1968	0.6676	0.8047	0.7021	2.05
Total Furans - Ecological (Bird) TEQ[2]	--	1.1534	1.09633	0.608	0.48777	2.4281

Sample ID Laboratory ID Sample Date	SPU-50 1007-031-01 7/6/2010	SPU-51 1007-031-02 7/6/2010	SPU-52 1007-031-03 7/6/2010	SPU-53 1007-031-04 7/6/2010	SPU-54 1007-031-05 7/6/2010	SPU-55 1007-031-06 7/6/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	--	--	--	--
Lube Oil-Range	--	--	--	--	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	--	11 U	32
Chrysene	--	--	--	--	11 U	56
Benzo(b)fluoranthene	--	--	--	--	11 U	46
Benzo(k)fluoranthene	--	--	--	--	11 U	44
Benzo(a)pyrene	--	--	--	--	11 U	51
Indeno(1,2,3-cd)pyrene	--	--	--	--	11 U	39
Dibenzo(a,h)anthracene	--	--	--	--	11 U	9.9 U
Total cPAH[1]	--	--	--	--	8.305	68.155
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	--	--	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	--	--
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	38	42	--	--	--	--
Lead	22 J	21 J	--	--	--	--
Mercury	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Thallium	--	--	--	--	--	--
Zinc	69	63	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	0.2 U	0.2 U	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	5.3978	3.2833	**24.015**	2.944035
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	3.99	2.4485	**21.785**	2.036
Total Furans - Ecological (Bird) TEQ[2]	--	--	**5.5216**	2.9291	**6.415**	**3.738345**

Sample ID Laboratory ID Sample Date	SPU-55X 1007-107-01 7/15/2010	SPU-56 1007-107-02 7/15/2010	SPU-57 1007-107-03 7/15/2010	SPU-58 1007-107-04 7/15/2010	SPU-59 1007-107-05 7/15/2010	SPU-60 1007-107-06 7/15/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	50	56	140	68	67	39
Lube Oil-Range	240	270	490	420	450	250
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	130	58	86	460	380	2600
Chrysene	180	92	120	480	410	4200
Benzo(b)fluoranthene	110	63	67	360	270	2700
Benzo(k)fluoranthene	98	52	58	300	260	3000
Benzo(a)pyrene	130	62	89	410	340	3400
Indeno(1,2,3-cd)pyrene	80	44	48	220	130	1900
Dibenzo(a,h)anthracene	27	14	19	70	46	640
Total cPAH[1]	**176.3**	86.02	**118**	**555.8**	**452.7**	**4526**
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.075 U	0.088 U	0.064 U	0.058 U	0.23	0.087
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	7.4 U	8.7 U	6.4 U	5.8 U	6.2 U	8.5
Arsenic	15 U	17 U	13 U	12 U	12 U	15 U
Chromium	25	32	34	30	35	27
Copper	51	28	51	55	47	74
Lead	32	26	19	34	30	98
Mercury	0.37 U	0.44 U	0.32 U	0.29 U	0.31 U	0.37 U
Nickel	25	25	34	29	30	27
Thallium	3.7 U	4.4 U	3.2 U	2.9 U	3.1 U	3.7 U
Zinc	130	63	77	88	94	230
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-61 1007-107-07 7/15/2010	SPU-62 1007-107-08 7/15/2010	SPU-63 1007-107-09 7/15/2010	SPU-64 1007-107-10 7/15/2010	SPU-65 1007-115-01 7/15/2010	SPU-66 1007-115-02 7/15/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	81	61	66	65	--	--
Lube Oil-Range	300	330	280	360	--	--
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	270	170	320	170	--	--
Chrysene	320	250	440	210	--	--
Benzo(b)fluoranthene	210	160	250	130	--	--
Benzo(k)fluoranthene	170	150	220	120	--	--
Benzo(a)pyrene	250	150	280	140	--	--
Indeno(1,2,3-cd)pyrene	130	73	140	71	--	--
Dibenzo(a,h)anthracene	41	26	43	19	--	--
Total cPAH[1]	**335.3**	**210.4**	**381.7**	**193.1**	--	--
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.052 U	0.3	0.079 U	0.082 U	--	--
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.2 U	7.6 U	7.9 U	8.2 U	7.5 U	7.4 U
Arsenic	10 U	15 U	16 U	16 U	--	--
Chromium	33	26	33	28	67	44
Copper	61	32	37	38	**190**	**310**
Lead	92	18	18	25	71	**290**
Mercury	0.33	0.38 U	0.4 U	0.41 U	0.38 U	0.55
Nickel	35	24	33	28	52	38
Thallium	2.6 U	3.8 U	4 U	4.1 U	--	--
Zinc	140	78	65	74	160	**400**
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	0.2 U	0.2 U
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-67 1007-115-03 7/15/2010	SPU-69 1008-011-01 7/29/2010	SPU-70 1008-011-02 7/29/2010	SPU-71 1008-161-11 8/23/2010	SPU-72 1008-161-12 8/23/2010	SPU-73 1008-161-13 8/23/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	--	270 U	110 U	62 U
Lube Oil-Range	--	--	--	2000	690	460
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	--	--	--	29	150	8.5
Chrysene	--	--	--	41	170	13
Benzo(b)fluoranthene	--	--	--	27	130	8.2
Benzo(k)fluoranthene	--	--	--	28	130	8.1 U
Benzo(a)pyrene	--	--	--	41	170	11
Indeno(1,2,3-cd)pyrene	--	--	--	21	93	8.1 U
Dibenzo(a,h)anthracene	--	--	--	8.6 U	32	8.1 U
Total cPAH[1]	--	--	--	52.34	**225.2**	14.015
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	--	0.065 U	0.06 U	0.061 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	8.8 U	--	--	6.5 U	6 U	6.1 U
Arsenic	--	--	--	13 U	12 U	12 U
Chromium	17	--	--	19	19	20
Copper	23	--	--	27	30	16
Lead	20	--	--	14	23	15
Mercury	0.44 U	--	--	0.32 U	0.3 U	0.3 U
Nickel	18	--	--	22	26	25
Thallium	--	--	--	3.2 U	3 U	3 U
Zinc	37	--	--	49	51	34
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	0.2 U	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	2.7156	3.2012	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	1.665	2.267	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	**4.1302**	2.8883	--	--	--

Sample ID Laboratory ID Sample Date	SPU-74 1008-161-14 8/23/2010	SPU-75 1008-161-15 8/23/2010	SPU-76 1008-161-16 8/23/2010	SPU-77 1008-161-17 8/23/2010	SPU-78 1008-161-18 8/23/2010	SPU-79 1008-161-19 8/23/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	95 U	100 U	30 U	87 U	210 U	110 U
Lube Oil-Range	790	460	140	370	1500	490
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	26	190	230	260	110	310
Chrysene	41	230	250	290	130	370
Benzo(b)fluoranthene	24	180	150	200	87	230
Benzo(k)fluoranthene	23	170	180	190	96	250
Benzo(a)pyrene	30	210	230	260	130	330
Indeno(1,2,3-cd)pyrene	18	120	110	130	71	170
Dibenzo(a,h)anthracene	8 U	40	41	53	21	55
Total cPAH[1]	39.91	**282.3**	**303.6**	**346.2**	**169.8**	**435.2**
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.06 U	0.065 U	0.06 U	0.059 U	0.064 U	0.063 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6 U	6.5 U	6 U	5.9 U	6.4 U	6.3 U
Arsenic	12 U	13 U	12 U	12 U	13 U	13 U
Chromium	21	20	20	24	20	23
Copper	30	91	25	34	37	**220**
Lead	89	54	7.5	18	24	48
Mercury	0.3 U	0.33 U	0.3 U	0.29 U	0.32 U	0.31 U
Nickel	29	22	31	35	26	25
Thallium	3 U	3.3 U	3 U	2.9 U	3.2 U	3.1 U
Zinc	53	120	40	57	57	100
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-80 1008-161-20 8/23/2010	SPU-81 1010-248-01 10/27/2010	SPU-82 1010-248-02 10/27/2010	SPU-83 1010-248-03 10/27/2010	SPU-84 1010-248-04 10/27/2010	SPU-85 1010-248-05 10/27/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	45 U	69 U	55 U	75 U	33 U	44 U
Lube Oil-Range	190	500	340	770	200	340
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	250	100	120	100	100	98
Chrysene	290	180	180	150	110	130
Benzo(b)fluoranthene	140	88	120	92	65	100
Benzo(k)fluoranthene	160	64	96	60	52	80
Benzo(a)pyrene	210	76	95	74	67	98
Indeno(1,2,3-cd)pyrene	96	45	59	49	37	59
Dibenzo(a,h)anthracene	34	21	22	18	14	23
Total cPAH[1]	280.9	109.6	138.5	107.4	94.9	135.3
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.058 U	0.061 U	0.066 U	0.067 U	0.056 U	0.06 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	5.8 U	6.1 U	6.6 U	6.7 U	5.6 U	6 U
Arsenic	12 U	12 U	13 U	13 U	11 U	12 U
Chromium	21	26	30	28	22	29
Copper	42	38	43	66	57	44
Lead	24	25	53	37	10	32
Mercury	0.29 U	0.3 U	0.33 U	0.33 U	0.28 U	0.3 U
Nickel	29	35	37	39	32	32
Thallium	2.9 U	3 U	3.3 U	3.3 U	2.8 U	3 U
Zinc	110	75	100	110	120	76
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-86 1010-248-06 10/27/2010	SPU-87 1010-248-07 10/27/2010	SPU-88 1011-028-01 11/2/2010	SPU-89 1011-028-02 11/2/2010	SPU-90 1011-028-03 11/2/2010	SPU-91 1011-028-04 11/2/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	290 U	39 U	45 U	38 U	35 U	38 U
Lube Oil-Range	1800	190	200	83	71 U	76 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	120	74	150	32	9.4 U	15
Chrysene	170	170	180	46	9.4 U	27
Benzo(b)fluoranthene	110	100	120	34	9.4 U	20
Benzo(k)fluoranthene	110	93	120	33	9.4 U	22
Benzo(a)pyrene	130	94	160	36	9.4 U	24
Indeno(1,2,3-cd)pyrene	99	66	82	24	9.4 U	17
Dibenzo(a,h)anthracene	31	19	24	10 U	9.4 U	10 U
Total cPAH[1]	**178.7**	130.9	**211.4**	49.26	7.097	32.17
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.064 U	0.39	0.066 U	0.076 U	0.071 U	0.33
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6.4 U	7.7 U	6.6 U	15	7.1 U	7.6 U
Arsenic	13 U	15 U	13 U	**34**	14 U	15 U
Chromium	15	28	21	62	28	70
Copper	35	61	42	65	44	66
Lead	28	53	36 J	40 J	11 J	60 J
Mercury	0.32 U	0.39 U	0.33 U	0.38 U	0.35 U	0.38 U
Nickel	23	36	19	32	28	61
Thallium	3.2 U	3.9 U	3.3 U	3.8 U	3.5 U	3.8 U
Zinc	75	110	77	140	57	90
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-92 1011-028-05 11/2/2010	SPU-93 1011-028-06 11/2/2010	SPU-94 1011-028-07 11/2/2010	SPU-95 1011-028-08 11/2/2010	SPU-96 1011-028-09 11/2/2010	SPU-97 1011-028-10 11/2/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	140 U	41 U	47 U	28 U	30 U	42 U
Lube Oil-Range	730	180	150	120	140	84 U
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	41	23	32	27	29	11
Chrysene	68	39	55	38	41	14
Benzo(b)fluoranthene	39	15	26	26	32	11 U
Benzo(k)fluoranthene	37	17	20	26	20	11 U
Benzo(a)pyrene	51	22	29	32	27	11
Indeno(1,2,3-cd)pyrene	40	13	21	21	17	11 U
Dibenzo(a,h)anthracene	12	8.1 U	9.6 U	7.3 U	7.9 U	11 U
Total cPAH[1]	68.58	29.595	39.93	42.745	37.605	14.44
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	0.12	0.061 U	0.072 U	0.055 U	0.059 U	0.084 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	6.2 U	6.1 U	7.2 U	5.5 U	5.9 U	8.4 U
Arsenic	12 U	12 U	14 U	11 U	12 U	17 U
Chromium	25	27	29	15	27	27
Copper	41	22	41	17	24	71
Lead	24 J	21 J	35 J	10 J	21 J	21 J
Mercury	0.31 U	0.3 U	0.36 U	0.27 U	0.3 U	0.42 U
Nickel	32	31	37	18	35	30
Thallium	3.1 U	3 U	3.6 U	2.7 U	3 U	4.2 U
Zinc	100	57	92	38	61	75
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPU-98 1011-083-01 11/8/2010	SPU-99 1011-083-02 11/8/2010	SPU-100 1011-083-03 11/8/2010	SPU-101 1011-083-04 11/8/2010	SPU-102 1011-083-05 11/9/2010	SPU-103 1011-083-06 11/9/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)						
Diesel-Range	--	--	--	--	38	33 U
Lube Oil-Range	--	--	--	--	300	160
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)						
Benzo(a)anthracene	100	80	34	22	36	80
Chrysene	150	120	61	33	69	98
Benzo(b)fluoranthene	88	98	37	27	42	63
Benzo(k)fluoranthene	120	74	33	23	34	65
Benzo(a)pyrene	150	140	44	28	57	92
Indeno(1,2,3-cd)pyrene	100	100	27	21	46	55
Dibenzo(a,h)anthracene	19	24	8.8 U	9.3 U	36	14
Total cPAH[1]	**194.2**	**178.8**	58.1	38.1	77.1	120.7
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)						
Total PCBs	--	--	--	--	0.075 U	0.065 U
Total Metals by EPA 6000/7000 Series (mg/kg)						
Antimony	--	--	--	--	19	6.5 U
Arsenic	14 U	14 U	13 U	14 U	15 U	13 U
Chromium	--	--	--	--	25	25
Copper	--	--	--	--	82	51
Lead	--	--	--	--	31	17
Mercury	--	--	--	--	0.37 U	0.33 U
Nickel	--	--	--	--	31	31
Thallium	--	--	--	--	3.7 U	3.3 U
Zinc	--	--	--	--	90	62
TCLP Metals by EPA 1311/6010B (mg/L)						
Lead	--	--	--	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)						
Total Dioxins/Furans - Human Health TEQ[2]	--	--	1.380795	2.08413	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	0.935	1.5725	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	1.291165	1.89271	--	--

Sample ID Laboratory ID Sample Date	SPU-104 1011-083-07 11/9/2010	SPU-105 1011-083-08 11/9/2010	SPU-106 1011-083-09 11/9/2010
Petroleum Hydrocarbons by NWTPH-Dx with Acid-Silica Gel Cleanup (mg/kg)			
Diesel-Range	40	81	73
Lube Oil-Range	390	660	600
Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA 8270D/SIM (µg/kg)			
Benzo(a)anthracene	28	58	24
Chrysene	47	100	44
Benzo(b)fluoranthene	44	57	58
Benzo(k)fluoranthene	29	57	34
Benzo(a)pyrene	34	57	38
Indeno(1,2,3-cd)pyrene	23	33	23
Dibenzo(a,h)anthracene	9.1 U	11	8.9 U
Total cPAH[1]	47.4	79.6	52.7
Polychlorinated Biphenyl's (PCBs) by SW8082 (mg/kg)			
Total PCBs	0.18	0.073 U	0.39
Total Metals by EPA 6000/7000 Series (mg/kg)			
Antimony	6.9 U	7.3 U	6.7 U
Arsenic	14 U	15 U	13 U
Chromium	**200**	30	27
Copper	**410**	50	53
Lead	51	37	40
Mercury	0.47	0.37 U	0.33 U
Nickel	33	27	37
Thallium	3.4 U	3.7 U	3.3 U
Zinc	98	89	72
TCLP Metals by EPA 1311/6010B (mg/L)			
Lead	--	--	--
Dioxins and Furans by EPA 8290 (ng/kg)			
Total Dioxins/Furans - Human Health TEQ[2]	--	--	--
Total Dioxins - Ecological (Mammal) TEQ[2]	--	--	--
Total Furans - Ecological (Bird) TEQ[2]	--	--	--

Notes:

[1]Total carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated using toxic equivalent (TEQ) methodology relative to benzo(a)pyrene. Individual cPAH compounds with "U" qualifier were assigned a value of one half of the reported practical quantitation limit for these calculations

[2]Total Dioxin and Furan calculated using toxic equivalent (TEQ) methodology relative to 2,3,7,8-TCDD. Individual Dioxin/Furan compounds with "U" qualifier were assigned a value of one half of the reported detection limit for these calculations.

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

ng/kg = monograms per kilogram

U = analyte not detected above laboratory practical quantitation limit (PQL)

J = estimated result

-- = not analyzed

Shading indicates that the analyte was detected at a concentration exceeding the Site backfill reuse criteria (refer to Table 1). Soil represented by this sample was subsequently transported from the Site for permitted landfill disposal.

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 16

Summary of Contaminated Soil Chemical Analytical Results

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID Laboratory ID Sample Date	SPC-1 0911-032-19 11/4/2009	SPC-2 0911-032-20 11/4/2009	SPC-3 0911-032-21 11/4/2009	SPC-4 0911-032-22 11/4/2009	SPC-5 0911-032-23 11/4/2009	SPC-6 0911-032-24 11/4/2009
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	11 U	14 U	14 U	10 U	11 U	11 U
Chromium	--	--	--	--	--	--
Copper	150 J	99 J	60 J	180 J	150 J	240 J
Lead	--	51 J	47 J	280 J	140 J	260 J
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.12	0.02 U	0.023	0.02 U	0.037	0.02 U
Lead	0.2 U	0.2 U	0.2 U	0.23	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-7 0911-032-25 11/4/2009	SPC-8 0911-032-26 11/4/2009	SPC-9 0911-032-27 11/4/2009	SPC-10 0911-032-28 11/4/2009	SPC-11 0911-032-29 11/4/2009	SPC-12 0911-194-01 11/24/2009
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	12
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	4600
Lead	6900 J	940 J	710 J	530 J	420 J	1100
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	4.1
Lead	0.55	2.1	0.45	3.6	0.49	2.5
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-13 0911-194-02 11/24/2009	SPC-14 0911-194-03 11/24/2009	SPC-15 0911-194-04 11/24/2009	SPC-16 0911-194-05 11/24/2009	SPC-17 0911-194-06 11/24/2009	SPC-18 0911-194-07 11/24/2009
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	**26**	24	26	16 U	12 U	11 U
Chromium	--	--	--	--	--	--
Copper	**460**	**580**	**820**	**310**	**930**	**300**
Lead	**510**	**470**	**640**	**680**	**1600**	**640**
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.14	0.34	0.032
Lead	0.22	0.2 U	0.2 U	**6**	**8.8**	0.73
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-19 0911-194-08 11/24/2009	SPC-20 0911-194-09 11/24/2009	SPC-21 0911-194-10 11/24/2009	SPC-22 1001-006-01 1/4/2010	SPC-23 1001-006-02 1/4/2010	SPC-24 1001-006-03 1/4/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	11 U	17 U	11 U	17 U	15 U	32
Chromium	--	--	--	--	--	--
Copper	480	650	750	150	130	43000
Lead	430	830	1800	250	100	99000
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.054	0.14	0.26	0.02 U	0.037	0.6
Lead	1.4	0.87	16	0.68	0.2 U	1.1
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-25 1001-006-04 1/4/2010	SPC-26 1001-006-05 1/4/2010	SPC-27 1001-188-01 1/28/2010	SPC-28 1002-051-01 2/5/2010	SPC-29 1002-051-02 2/5/2010	SPC-30 1002-051-03 2/5/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	13 U	17 U	18	17 U	13 U	12 U
Chromium	--	--	--	--	--	--
Copper	43	**270**	84	**280**	**120**	**130**
Lead	29	**460**	91	**520**	150	**250**
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	.4	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.24	.097	0.03	0.046	0.02 U
Lead	0.2 U	2.1	.21	0.6	1.6	1.3
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-31 1002-051-04 2/5/2010	SPC-32 1002-051-05 2/5/2010	SPC-33 1002-051-06 2/5/2010	SPC-34 1002-051-07 2/5/2010	SPC-35 1002-051-08 2/5/2010	SPC-36 1002-051-09 2/5/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	17 U	19 U	16 U	20 U	20 U	11 U
Chromium	--	--	--	--	--	--
Copper	250	130	130	420	980	140
Lead	120	160	100	960	1900	320
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.053	0.092	0.028	0.52	0.087	0.02 U
Lead	0.2 U	0.2 U	0.2 U	4.2	7	0.74
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-37 1002-051-10 2/5/2010	SPC-38 1002-051-11 2/5/2010	SPC-39 1002-051-12 2/5/2010	SPC-40 1002-051-13 2/5/2010	SPC-41 1002-089-01 2/11/2010	SPC-42 1002-089-02 2/11/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	11 U	13 U	15 U	16 U	15 U	20 U
Chromium	--	--	--	--	--	--
Copper	34	100	**150**	**180**	57	100
Lead	45	110	**520**	**540**	17	**230**
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.086	0.022	0.02 U	0.032	0.024	0.026
Lead	0.2 U	0.2 U	1.6	4.4	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-43 1002-089-03 2/11/2010	SPC-44 1002-089-04 2/11/2010	SPC-45 1002-089-05 2/11/2010	SPC-46 1002-089-06 2/11/2010	SPC-47 1002-089-07 2/11/2010	SPC-48 1002-089-08 2/11/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	18	18 U	13 U	15 U	15 U	12 U
Chromium	--	--	--	--	--	--
Copper	170	340	71	180	150	1000
Lead	160	210	80	160	98	6 U
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.037	0.02 U	0.02 U	0.53
Lead	0.2 U	0.2 U	0.28	1.5	1.1	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-49 1002-089-09 2/11/2010	SPC-50 1002-089-10 2/11/2010	SPC-51 1002-109-01 2/16/2010	SPC-52 1002-109-02 2/16/2010	SPC-53 1002-109-03 2/16/2010	SPC-54 1002-109-04 2/16/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	17 U	16 U	18	23	26	16 U
Chromium	--	--	--	--	--	--
Copper	320	160	1600	490	360	1400
Lead	180	130	1400	1300	3600	2500
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Lead	0.2 U	0.56	1.5	0.38	30	0.32
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-55 1002-109-05 2/16/2010	SPC-56 1002-109-06 2/16/2010	SPC-57 1002-109-07 2/16/2010	SPC-58 1002-173-01 2/24/2010	SPC-59 1002-173-02 2/24/2010	SPC-60 1002-173-03 2/24/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	20 U	12 U	12 U	15 U	15 U	20 U
Chromium	--	--	--	--	--	--
Copper	**560**	**110**	44	**170 J**	**130 J**	**480 J**
Lead	**610**	**370**	27	210 J	120 J	160 J
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	1.1	0.18	0.035	0.02 U	0.02 U	0.02 U
Lead	1.6	0.55	0.2 U	0.2 U	0.2 U	0.2
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-61 1002-173-04 2/24/2010	SPC-62 1003-032-01 3/3/2010	SPC-63 1003-079-01 3/10/2010	SPC-64 1003-099-02 3/12/2010	SPC-65 1003-099-03 3/12/2010	SPC-66 1003-185-10 3/25/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	16 U	16 U	81	80	78	16 U
Chromium	--	--	--	--	--	--
Copper	1300 J	3100 J	140	--	--	--
Lead	820 J	220 J	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.064	--	--	--	--
Lead	2.2	0.78	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-67 1003-185-01 3/25/2010	SPC-68 1003-185-02 3/25/2010	SPC-69 1003-185-03 3/25/2010	SPC-70 1003-185-04 3/25/2010	SPC-71 1003-185-05 3/25/2010	SPC-72 1003-185-06 3/25/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	13 U	13	16	20 U	16 U	17 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-73 1003-185-07 3/25/2010	SPC-74 1003-185-08 3/25/2010	SPC-75 1003-185-09 3/25/2010	SPC-76 1004-073-01 4/13/2010	SPC-77 1004-073-02 4/13/2010	SPC-78 1004-073-03 4/13/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	17 U	15 U	20 U	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	270	160	170
Lead	--	--	--	1000	230	260
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	0.02 U	0.02 U	0.02 U
Lead	--	--	--	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-79 1004-073-04 4/13/2010	SPC-80 1004-073-05 4/13/2010	SPC-81 1004-073-06 4/13/2010	SPC-82 1004-073-07 4/13/2010	SPC-83 1004-119-01 4/20/2010	SPC-84 1004-119-02 4/20/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	**44**	19 U
Chromium	--	--	--	--	--	--
Copper	**140**	**210**	**220**	100	--	--
Lead	140	120	**1400**	62	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.13	--	--
Lead	0.2 U	0.2 U	0.2 U	0.2 U	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-85 1004-119-03 4/20/2010	SPC-86 1004-119-04 4/20/2010	SPC-87 1004-119-05 4/20/2010	SPC-88 1004-119-06 4/20/2010	SPC-89 1004-119-07 4/20/2010	SPC-90 1004-142-01 4/21/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	17	17 U	13 U	20 U	22	13
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-91 1004-142-02 4/21/2010	SPC-92 1004-142-03 4/21/2010	SPC-93 1004-142-04 4/21/2010	SPC-94 1004-142-05 4/21/2010	SPC-95 1004-142-06 4/21/2010	SPC-96 1004-142-07 4/21/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	18 U	18 U	15 U	11 U	17 U	17 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-97 1004-142-08 4/21/2010	SPC-98 1004-142-09 4/21/2010	SPC-99 1004-142-10 4/21/2010	SPC-100 1004-205-01 4/28/2010	SPC-101 1004-205-02 4/28/2010	SPC-102 1004-205-03 4/28/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	15 U	15 U	14 U	14 U	11 U	12 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-103 1004-205-04 4/28/2010	SPC-104 1004-205-05 4/28/2010	SPC-105 1005-024-01 5/4/2010	SPC-106 1005-024-02 5/4/2010	SPC-107 1005-024-03 5/4/2010	SPC-108 1005-024-04 5/4/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	17 U	15 U	18 U	11 U	12 U	12 U
Chromium	--	--	--	--	--	--
Copper	--	--	190	99	74	62
Lead	--	--	150	67	98	40
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Lead	--	--	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-109 1005-024-05 5/4/2010	SPC-112 1005-025-01 5/4/2010	SPC-113 1005-025-02 5/4/2010	SPC-114 1005-025-03 5/4/2010	SPC-115 1005-025-04 5/4/2010	SPC-116 1005-025-05 5/4/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	11 U	15 U	12 U	14 U	17 U	15
Chromium	--	--	--	--	--	--
Copper	52	--	--	--	--	--
Lead	49	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	--	--	--	--	--
Lead	0.2 U	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-117 1005-025-06 5/4/2010	SPC-118 1005-025-07 5/4/2010	SPC-119 1005-070-01 5/10/2010	SPC-120 1005-070-02 5/10/2010	SPC-121 1005-070-03 5/10/2010	SPC-122 1005-070-04 5/10/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	12 U	14 U	16 U	14	12 U	13 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-123 1005-070-05 5/10/2010	SPC-124 1005-070-06 5/10/2010	SPC-125 1005-070-07 5/10/2010	SPC-126 1005-071-01 5/10/2010	SPC-127 1005-071-02 5/10/2010	SPC-128 1005-071-03 5/10/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	19 U	17 U	10 U	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	83	83	**430**
Lead	--	--	--	17	**740**	**370**
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	.02 U	.02 U	.02 U
Lead	--	--	--	.2 U	.2 U	.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-129 1005-071-04 5/10/2010	SPC-130 1005-071-05 5/10/2010	SPC-131 1005-098-01 5/12/2010	SPC-132 1005-098-02 5/12/2010	SPC-133 1005-098-03 5/12/2010	SPC-134 1005-098-04 5/12/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	**140**	79	**130**	**170**	**140**	**210**
Lead	**390**	210	200	170	210	210
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	.02 U	.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Lead	.2 U	.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-135 1005-098-05 5/12/2010	SPC-136 1005-157-01 5/20/2010	SPC-137 1005-157-02 5/20/2010	SPC-138 1005-157-03 5/20/2010	SPC-139 1005-157-04 5/20/2010	SPC-140 1005-157-05 5/20/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	**190**	**180**	**100**	**100**	**99**	**85**
Lead	**330**	100	150	93	94	61
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Lead	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-141 1005-157-06 5/20/2010	SPC-142 1005-157-07 5/20/2010	SPC-143 1005-157-08 5/20/2010	SPC-144 1005-157-09 5/20/2010	SPC-145 1005-157-10 5/20/2010	SPC-146 1006-056-01 6/8/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	80	60	50	150	71	150
Lead	43	65	32	54	23	120 J
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Lead	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-147 1006-056-02 6/8/2010	SPC-148 1006-056-03 6/8/2010	SPC-149 1006-056-04 6/8/2010	SPC-150 1006-056-05 6/8/2010	SPC-151 1006-056-06 6/8/2010	SPC-152 1006-056-07 6/8/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	140	110	78	80	93	140
Lead	1300 J	84 J	41 J	49 J	61 J	65 J
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Lead	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-153 1006-163-01 6/17/2010	SPC-154 1006-163-02 6/17/2010	SPC-155 1006-163-03 6/17/2010	SPC-156 1006-163-04 6/17/2010	SPC-157 1006-163-05 6/17/2010	SPC-158 1006-250-01 6/23/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	14 U
Chromium	--	--	--	--	--	--
Copper	47	100	61	52	42	--
Lead	64	88	59	18	18	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	0.4 U
Chromium	--	--	--	--	--	--
Copper	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	--
Lead	0.2 U	0.2 U	0.2 U	0.2 U	1.1	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-159 1006-250-02 6/23/2010	SPC-160 1006-250-03 6/23/2010	SPC-161 1006-297-01 6/29/2010	SPC-162 1006-297-02 6/29/2010	SPC-163 1006-297-03 6/29/2010	SPC-164 1006-297-04 6/29/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	13 U	12 U	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	59	29	36	**130**
Lead	--	--	52	16	30	92
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	0.02 U	0.02 U	0.02 U	0.02 U
Lead	--	--	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-165 1006-297-05 6/29/2010	SPC-173 1011-047-01 11/3/2010	SPC-174 1011-047-02 11/3/2010	SPC-175 1011-047-03 11/3/2010	SPC-176 1011-096-01 11/10/2010	SPC-177 1011-096-02 11/10/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	16 U	13 U
Chromium	--	41	23	58	--	--
Copper	53	**110**	63	**190**	--	--
Lead	62	87	39	69	--	--
Mercury	--	**1.7**	0.41	**1.4**	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	0.4 U	0.4 U
Chromium	--	0.02 U	0.02 U	0.02 U	--	--
Copper	0.02 U	0.02 U	0.02 U	0.02 U	--	--
Lead	0.2 U	0.2 U	0.2 U	0.2 U	--	--
Mercury	--	0.005 U	0.005 U	0.005 U	--	--

Sample ID Laboratory ID Sample Date	SPC-178 1011-096-03 11/10/2010	SPC-179 1011-096-04 11/10/2010	SPC-180 1011-096-05 11/10/2010	SPC-181 1011-096-06 11/10/2010	SPC-182 1011-096-07 11/10/2010	SPC-183 1011-096-08 11/10/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	16 U	11 U	12 U	15 U	16 U	17 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-184 1011-096-09 11/10/2010	SPC-185 1011-096-10 11/10/2010	SPC-186 1011-096-11 11/10/2010	SPC-187 1011-096-12 11/10/2010	SPC-188 1011-096-13 11/10/2010	SPC-189 1011-096-14 11/10/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	13 U	14 U	11 U	18 U	18 U	11 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-190 1011-096-15 11/10/2010	SPC-191 1011-096-16 11/10/2010	SPC-192 1011-096-17 11/10/2010	SPC-193 1011-113-01 11/10/2010	SPC-194 1011-113-02 11/10/2010	SPC-195 1011-113-03 11/10/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	11 U	11 U	12 U	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	34	58	22
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	0.2 U	0.2 U	0.2 U
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-196 1011-207-01 11/23/2010	SPC-197 1011-207-02 11/23/2010	SPC-198 1011-207-03 11/23/2010	SPC-199 1011-207-04 11/23/2010	SPC-200 1011-207-05 11/23/2010	SPC-201 1011-207-06 11/23/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	--	--
Chromium	28 J	28 J	29 J	30 J	32 J	22 J
Copper	51	59	99	64	65	44
Lead	67	21	63	15	53	18
Mercury	0.37 U	0.41 U	**3.5**	0.3 U	0.45 U	0.35 U
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	--	--
Chromium	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Copper	0.02 U	0.02 U	0.027	0.022	0.02 U	0.02 U
Lead	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Mercury	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U

Sample ID Laboratory ID Sample Date	SPC-202 1011-207-07 11/23/2010	SPC-203 1011-207-08 11/23/2010	SPC-204 1011-207-09 11/23/2010	SPC-205 1011-207-10 11/23/2010	SPC-206 1011-208-01 11/23/2010	SPC-207 1011-208-02 11/23/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	--	--	--	--	18 U	11 U
Chromium	35 J	25 J	24 J	34 J	--	--
Copper	57	150	86	110	--	--
Lead	12	180	31	75	--	--
Mercury	0.43 U	0.47	0.29 U	0.51	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	--	--	--	--	0.4 U	0.4 U
Chromium	0.02 U	0.02 U	0.02 U	0.02 U	--	--
Copper	0.02 U	0.041	0.042	0.039	--	--
Lead	0.2 U	0.22	0.2 U	0.2 U	--	--
Mercury	0.005 U	0.005 U	0.005 U	0.005 U	--	--

Sample ID Laboratory ID Sample Date	SPC-208 1011-208-03 11/23/2010	SPC-209 1011-208-04 11/23/2010	SPC-210 1011-208-05 11/23/2010	SPC-211 1011-208-06 11/23/2010	SPC-212 1011-208-07 11/23/2010	SPC-213 1011-208-08 11/23/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	16 U	17 U	10 U	15 U	13 U	18 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	--	--	--	--
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPC-214 1011-208-09 11/23/2010	SPC-215 1011-208-10 11/23/2010	SPD-1 1003-217-01 3/30/2010	SPD-2 1003-217-02 3/30/2010	SPD-3 1003-217-03 3/30/2010	SPD-4 1003-217-04 3/30/2010
Total Metals by EPA 6000/7000 Series (mg/kg)						
Arsenic	14 U	15 U	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	790	780	740	590
Mercury	--	--		--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)						
Arsenic	0.4 U	0.4 U	--	--	--	--
Chromium	--	--	--	--	--	--
Copper	--	--	--	--	--	--
Lead	--	--	3.2	2.6	1.8	11
Mercury	--	--	--	--	--	--

Sample ID Laboratory ID Sample Date	SPD-5 1003-217-05 3/30/2010	SPD-6 1003-217-06 3/30/2010	SPD-7 1003-217-07 3/30/2010	SPD-8 1004-021-01 4/6/2010	SPD-9 1004-021-02 4/6/2010
Total Metals by EPA 6000/7000 Series (mg/kg)					
Arsenic	--	--	--	--	--
Chromium	--	--	--	--	--
Copper	--	--	--	--	--
Lead	730	640	350	1100	930
Mercury	--	--	--	--	--
TCLP Metals by EPA 1311/6010B (mg/L)					
Arsenic	--	--	--	--	--
Chromium	--	--	--	--	--
Copper	--	--	--	--	--
Lead	0.45	0.21	0.79	2	1.1
Mercury	--	--	--	--	--

Notes:

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
ng/kg = monograms per kilogram
U = analyte not detected above laboratory practical quantitation limit (PQL)
J = estimated result
– = not analyzed
Green shading indicates that the analyte was detected at a concentration exceeding the Site backfill reuse criteria (refer to Table 1).
Orange shading indicates that the analyte designated as a Dangerous Waste by WAC 173-303.
Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 17

City of Anacortes Wastewater Discharge Criteria

Former Scott Paper Mill Site
Anacortes, Washington

Constituents of Concern	Discharge Criteria
Total Petroleum Hydrocarbons (mg/L)	
Gasoline-range hydrocarbons	1
Diesel-range hydrocarbons	1
Lube Oil-range Hydrocarbons	NE
BTEX (µg/L)	
Benzene	5
Toluene	100
Ethylbenzene	
Xylene, m-, p-	
Xylene, o-	
Fats, Oils, and Grease (FOG) (mg/L)	
FOG	5
Total Metals (mg/L)	
Copper	NE
Lead	5
Sodium	NE
Zinc	NE
Conventionals	
pH	5.0 - 10.0
Total Settleable Solids (mg/L)	0
Total Suspended Solids (NTU)	50
Salinity (ppt)	NE[1]

Notes:

[1]Daily discharge rate determined by the City of Anacortes based on field measurements of salinity.

mg/L = milligrams per Liter

µg/L = milligrams per Liter

NTU = nephelometric turbidity units

ppt = parts per thousand

Table 18

Summary of Construction Wastewater Chemical Analytical Results

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID Laboratory ID Sample Date Sample Type	DW-081409 0908-114-01 8/14/2009 Baseline	DW-PH1-100109 0910-021-01 10/1/2009 Compliance	DW-PH2-RA-111009 0911-085-01 11/10/2009 Baseline	DW-PH2-RA-120309 0912-031-01 12/3/2009 Compliance	DW-PH2-RA-121809 0912-136-01 12/18/2009 Compliance	DW-PH2-RA-010710 1001-042-01 1/7/2010 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.4 U	0.41 U	0.39 U	0.4 U	0.4 U	0.4 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	--	--	--	--	--	--
Total Metals by EPA 6010B/200.8 (mg/L)						
Lead	2.9	2	**58**	1.4	1.1 U	**30**
Sodium	470,000	270,000	5,300,000	3,500,000	5,400,000	5,500,000
pH						
Laboratory - by EPA Method 150.1	7.15	8.3	6.59	7.68	7.37	7.49
Field - by Horiba U52 Water Quality Meter	6	8.05	6.8	7.5	7.19	7.17
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	**54 J**	7	30	4 U	14	4 U
Field - by Horiba U52 Water	37.3	45.3	45	2.1	2.1	4.1
Salinity (ppt)						
Laboratory - by EPA Method	1.54	0.88	17.36	11.46	17.69	18.01
Field - by Horiba U52 Water	1.3	0.201	1.6	6.1	13.6	14.1

Sample ID Laboratory ID Sample Date Sample Type	DW-PH2-RA-010810 1001-054-01 1/8/2010 Compliance	DW-PH2-RA-011110 1001-063-01 1/11/2010 Compliance	DW-PH2-RA-011510 1001-092-01 1/15/2010 Compliance	DW-PH2-RA-011910 1001-108-01 1/19/2010 Compliance	DW-PH2-RA-012610 1001-150-01 1/26/2010 Compliance	DW-PH2-RA-020210 1002-017-01 2/2/2010 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.4 U	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	--	--	--	--	--	--
Total Metals by EPA 6010B/200.8 (mg/L)						
Lead	1.1 U	3.1	**6.2**	1.1 U	1.1 U	1.1 U
Sodium	5,700,000	2,700,000	5,000,000	6,900,000	5,600,000	7,100,000
pH						
Laboratory - by EPA Method 150.1	7.12	7.36	7.4	7.59	7.37	7.31
Field - by Horiba U52 Water Quality Meter	7.14	7.14	7.17	6.98	7.18	7.58
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	4 U	4 U	4 U	4 U	4 U	15
Field - by Horiba U52 Water	6	6.2	3.5	0	0	3.5
Salinity (ppt)						
Laboratory - by EPA Method	18.67	8.84	16.38	22.60	18.34	23.26
Field - by Horiba U52 Water	6.2	6	13.4	19	14.3	21.2

Sample ID	DW-PH2-RA-020810	DW-PH2-RA-021610	DW-PH2-RA-022310	DW-PH2-RA-030210	DW-PH2-RA-032410	DW-PH2-RA-033010
Laboratory ID	1002-059-01	1002-108-01	1002-170-01	1003-031-01	1003-183-01	1003-218-01
Sample Date	2/8/2010	2/16/2010	2/23/2010	3/2/2010	3/24/2010	3/30/2010
Sample Type	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.39 U	0.4 U	0.4 U	0.4 U	1.4	0.39 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1.3	1 U	2.1	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	--	--	--	--	--	--
Total Metals by EPA 6010B/200.8 (mg/L)						
Lead	1.1 U	4.9	3.4	**5.7**	**48**	1.4
Sodium	7,300,000	6,100,000	4,100,000	4,200,000	5,500,000	5,600,000
pH						
Laboratory - by EPA Method 150.1	7.62	7.39	7.28	7.68	7.3	7.6
Field - by Horiba U52 Water Quality Meter	7.76	7.62	7.68	7.55	7.22	7.53
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.2 U	0.2 U	0.2 U	0.2 U	0.29	0.2 U
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	4 U	12	4 U	4 U	**170**	14
Field - by Horiba U52 Water	0	1.3	14.3	2.8	**548**	8.4
Salinity (ppt)						
Laboratory - by EPA Method	23.91	19.98	13.43	13.76	18.01	18.34
Field - by Horiba U52 Water	20.8	18.1	11.2	12.6	18.3	17.4

Sample ID	DW-PH2-RA-051910	DW-PH2-RA-052410	DW-PH2-RA-060310	DW-PH2-RA-060810
Laboratory ID	1005-147-01	1005-164-01	1006-044-01	1006-054-01
Sample Date	5/19/2010	5/24/2010	6/3/2010	6/8/2010
Sample Type	Compliance	Compliance	Compliance	Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)				
Diesel-range hydrocarbons	0.25 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.39 U	0.4 U	0.39 U	0.4 U
NWTPH-G (µg/L)				
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)				
Benzene	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)				
FOG	--	--	--	--
Total Metals by EPA 6010B/200.8 (mg/L)				
Lead	3.9	2.9	**5.4 J**	2.1 J
Sodium	7,300,000	7,600,000	7,000,000	6,800,000
pH				
Laboratory - by EPA Method 150.1	7.7	7.6	7.3	7.3
Field - by Horiba U52 Water Quality Meter	7.34	7.38	7.08	7.2
Total Settleable Solids (mg/L/hr)				
Laboratory - EPA Method 160.5	0.2 U	0.2 U	--	--
Field - Imhoff Cone	0	0	0	0
Total Suspended Solids (NTU)				
Laboratory - by EPA Method SM	4 U	4 U	4	10
Field - by Horiba U52 Water	0	0	5.8	0
Salinity (ppt)				
Laboratory - by EPA Method	23.91	24.89	22.93	22.27
Field - by Horiba U52 Water	22.6	24.3	22.7	23

Notes:

[1]Total Sodium concentration used to calculate salinity [S(g/L) = 3.2754 x Na(g/L)].

mg/L = milligrams per Liter

µg/L = milligrams per Liter

U = analyte not detected above laboratory practical quantitation limit (PQL)

J = estimated result

-- = not analyzed

ppt = parts per thousand

Shading indicates that the analyte was detected at a concentration exceeding the Site backfill reuse criteria (refer to Table 17).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 19

Summary of Pier 2 Wastewater Chemical Analytical Results

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID Laboratory ID Sample Date Sample Type	DW-PH2-P2-101609 0910-139-01 10/16/2009 Baseline	DW-PH2-P2-103009 0911-002-01 10/30/2009 Compliance	DW-PH2-P2-110509 0911-054-01 11/5/2009 Compliance	DW-PH2-P2-111209 0911-096-08 11/12/2009 Compliance	DW-PH2-P2-111809 0911-150-01 11/18/2009 Compliance	DW-PH2-P2-112409 0911-196-01 11/24/2009 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.29 U	0.26 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	1.7	0.47 U	0.41 U	0.4 U	0.41 U	0.41 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	--	--	5.1 U	10 U	5.4 U	5.7 U
Total Metals by EPA 6010B/200.8 (mg/L)						
Copper	--	--	11 U	11 U	11 U	11 U
Lead	**6.1**	1.2	1.2	2.4	1.1 U	1.1 U
Sodium	1,100,000	860,000	460,000	520,000	410,000	540,000
Zinc	--	--	210	56 U	160	170
pH						
Laboratory - by EPA Method 150.1	7.5	7.88	7.41	8.18	7.55	7.65
Field - by Horiba U52 Water Quality Meter	--	--	7.57	8.47	8.04	7.58
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.099	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	**100**	4 U	4 U	4 U	6	6
Field - by Horiba U52 Water Quality	--	--	10.5	2.66	9.8	50.6
Salinity (ppt)						
Laboratory - by EPA Method	3.60	2.82	1.51	1.70	1.34	1.77
Field - by Horiba U52 Water Quality	--	--	1	1	0.9	1.1

Sample ID Laboratory ID Sample Date Sample Type	DW-PH2-P2-120109 0912-025-01 12/1/2009 Compliance	DW-PH2-P2-121509 0912-115-01 12/15/2009 Compliance	DW-PH2-P2-122109 0912-168-01 12/21/2009 Compliance	DW-PH2-P2-123009 0912-193-01 12/30/2009 Compliance	DW-PH2-P2-010710 1001-040-01 1/7/2010 Compliance	DW-PH2-P2-011410 1001-093-01 1/14/2010 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.26 U	0.26 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.4 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	5.3 U	5.3 U	5.5 U	5.5 U	5.3 U	5.4 U
Total Metals by EPA 6010B/200.8 (mg/L)						
Copper	11 U	11 U	12	11 U	11 U	11 U
Lead	1.1 U	1.1 U	1.9	1.1 U	1.1 U	1.3
Sodium	410,000	790,000	710,000	1,200,000	920,000	650,000
Zinc	130	56 U	44	56 U	56 U	56 U
pH						
Laboratory - by EPA Method 150.1	7.49	7.89	7.65	7.5	7.82	7.71
Field - by Horiba U52 Water Quality Meter	7.62	7.69	7.94	7.51	7.57	7.43
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	5	4 U	4 U	4 U	4 U	4 U
Field - by Horiba U52 Water Quality	26.1	1.1	1.6	4.5	5	3.6
Salinity (ppt)						
Laboratory - by EPA Method	1.34	2.59	2.33	3.93	3.01	2.13
Field - by Horiba U52 Water Quality	0.7	1.4	1.4	2.6	1.9	1.2

Sample ID Laboratory ID Sample Date Sample Type	DW-PH2-P2-012010 1001-141-01 1/20/2010 Compliance	DW-PH2-P2-012710 1001-190-01 1/27/2010 Compliance	DW-PH2-P2-020210 1002-016-01 2/2/2010 Compliance	DW-PH2-P2-020910 1002-060-01 2/9/2010 Compliance	DW-PH2-P2-021910 1002-146-01 2/19/2010 Compliance	DW-PH2-P2-022510 1002-190-01 2/25/2010 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	5.4 U	5.2 U	5.3 U	5.4 U	5.5 U	5.4 U
Total Metals by EPA 6010B/200.8 (mg/L)						
Copper	11 U	11 U	36	11 U	11 U	11 U
Lead	1.1 U	1.1 U	**12**	1.1 U	1.5	1.1 U
Sodium	690,000	190,000	230,000	200,000	800,000	1,600,000
Zinc	56 U	52	60	80	56 U	56 U
pH						
Laboratory - by EPA Method 150.1	7.69 J	7.44	7.63	7.47	7.69	7.98
Field - by Horiba U52 Water Quality Meter	7.96	8.4	8.26	8.57	8.02	7.95
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	4 U	4 U	4 U	4	4 U	4 U
Field - by Horiba U52 Water Quality	1.3	4.1	0.4	31.9	7.06	4.3
Salinity (ppt)						
Laboratory - by EPA Method	2.26	0.62	0.75	0.66	2.62	5.24
Field - by Horiba U52 Water Quality	1.3	0.3	0.6	0.5	1.8	4.1

Sample ID Laboratory ID Sample Date Sample Type	DW-PH2-P2-030810 1003-065-01 3/8/2010 Compliance	DW-PH2-P2-032310 1003-164-01 3/23/2010 Compliance	DW-PH2-P2-032910 1003-209-01 3/29/2010 Compliance	DW-PH2-P2-040910 1004-060-01 4/9/2010 Compliance	DW-PH2-P2-052710 1005-231-01 5/27/2010 Compliance	DW-PH2-P2-060110 1006-009-01 6/1/2010 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)						
Diesel-range hydrocarbons	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Lube Oil-range Hydrocarbons	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U
NWTPH-G (µg/L)						
Gasoline-range hydrocarbons	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)						
Benzene	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, m-, p-	1 U	1 U	1 U	1 U	1 U	1 U
Xylene, o-	1 U	1 U	1 U	1 U	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)						
FOG	5.4 U	5.6 U	5.7 U	5.6 U	5.3 U	5.4 U
Total Metals by EPA 6010B/200.8 (mg/L)						
Copper	11	11 U	11 U	11 U	37	11 U
Lead	1.3	1.2	**1.1 U**	1.1 U	13	1.4
Sodium	3,500,000	1,100,000	390,000	750,000	350,000	180,000
Zinc	57	40	56 U	56 U	110	96
pH						
Laboratory - by EPA Method 150.1	7.73	7.71	7.6	7.8	8.2	7.1
Field - by Horiba U52 Water Quality Meter	7.72	7.84	7.72	--	7.97	--
Total Settleable Solids (mg/L/hr)						
Laboratory - EPA Method 160.5	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Field - Imhoff Cone	0	0	0	0	0	0
Total Suspended Solids (NTU)						
Laboratory - by EPA Method SM	4 U	4 U	4 U	4 U	4 U	4 U
Field - by Horiba U52 Water Quality	2.6	1.11	2.6	--	2.5	--
Salinity (ppt)						
Laboratory - by EPA Method	11.46	3.60	1.28	2.46	1.15	0.59
Field - by Horiba U52 Water Quality	9.9	2.7	9.9	--	1	--

Sample ID Laboratory ID Sample Date Sample Type	DW-PH2-P2-072210 1007-158-01 7/22/2010 Compliance	DW-PH2-P2-090710 1009-055-01 9/7/2010 Compliance
NWTPH-Dx with acid-silica gel cleanup (mg/L)		
Diesel-range hydrocarbons	0.27 U	0.25 U
Lube Oil-range Hydrocarbons	0.43 U	0.4 U
NWTPH-G (µg/L)		
Gasoline-range hydrocarbons	0.1 U	0.1 U
BTEX by EPA Method 8021B (µg/L)		
Benzene	1 U	1 U
Toluene	1 U	1 U
Ethylbenzene	1.2	1 U
Xylene, m-, p-	3.2	1 U
Xylene, o-	1 U	1 U
Fats, Oils, and Grease (FOG) by EPA Method 1622 (mg/L)		
FOG	5.8 U	5.5 U
Total Metals by EPA 6010B/200.8 (mg/L)		
Copper	13	11 U
Lead	3.1	1.4
Sodium	3,000,000	240,000
Zinc	56 U	53
pH		
Laboratory - by EPA Method 150.1	7.3	7.5
Field - by Horiba U52 Water Quality Meter	7.52	8.83
Total Settleable Solids (mg/L/hr)		
Laboratory - EPA Method 160.5	0.2 U	0.2 U
Field - Imhoff Cone	0	0
Total Suspended Solids (NTU)		
Laboratory - by EPA Method SM	4	4 U
Field - by Horiba U52 Water Quality	1.6	9.8
Salinity (ppt)		
Laboratory - by EPA Method	9.83	0.79
Field - by Horiba U52 Water Quality	8.8	0.7

Notes:

[1]Total Sodium concentration used to calculate salinity [S(g/L) = 3.2754 x Na(g/L)].

mg/L = milligrams per Liter

µg/L = milligrams per Liter

U = analyte not detected above laboratory practical quantitation limit (PQL)

J = estimated result

-- = not analyzed

ppt = parts per thousand

Shading indicates that the analyte was detected at a concentration exceeding the Site backfill reuse criteria (refer to Table 17).

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

Table 20

Summary of Sediment Chemical Analytical Results

Former Scott Paper Mill Site
Anacortes, Washington

Sample ID[1]	GEI-SED-1	GEI-SED-2	GEI-SED-3	GEI-SED-4	GEI-SED-5	GEI-SED-6
Laboratory ID	0911-102-01	0911-102-02	0911-102-03	1001-041-01	1001-064-01	1001-064-02
Sample Elevation (feet)[2]	-9	-9	-8	-1	-2	-3
Sample Depth (feet)	4	3	4	5	3	2
Sample Date	11/12/2009	11/12/2009	11/12/2009	1/6/2010	1/12/2010	1/12/2010
NWTPH-Dx With Acid-Silica Gel Cleanup (mg/kg)						
Diesel Range	89	50 U	51 U	36 U	31 U	140
Lube Oil	390	100 U	100 U	71 U	61 U	500
PCBs by EPA 8082						
Total PCBs (mg/kg)[3]	0.059 U	NA	NA	NA	0.061 U	0.12 U
Total PCBs (mg/kg OC)	NA	3.57 U	5.88 U	3.09 U	NA	NA
Total Metals by EPA 6000/7000 Series (mg/kg)						
Copper	68	26	19	12	38	95
Lead	51	10 U	10 U	7.1 U	6.1 U	69
Mercury	0.37 U	0.25 U	0.25 U	0.36 U	0.31 U	**0.49**
Conventionals						
Wood Debris (% by volume) Using	<5	<5	<5	<5	<5	**30**
Total Organic Carbon Using EPA 9060 (% weight)	7.3	2.8	1.7	2.3	0.3	8.5
Total Volatile Solids Using EPA SM 245-G (% weight)	**14.2**	7.3	6.1	2.83	1.96	**17.7**

Sample ID[1]	GEI-SED-7	GEI-SED-8	GEI-SED-9	P2-DUP-50 (GEI-SED-9)	GEI-SED-10	GEI-SED-11
Laboratory ID	1002-157-01	1003-070-01	1101-149-01	1101-149-02	1006-251-01	1007-030-01
Sample Elevation (feet)[2]	-5	-7.5	-7.5	-7.5	-5.5	-5
Sample Depth (feet)	6	6	2	2	3	3
Sample Date	2/19/2010	3/5/2010	1/19/2011	1/19/2011	6/23/2010	7/6/2010
NWTPH-Dx With Acid-Silica Gel Cleanup (mg/kg)						
Diesel Range	39 U	150 U	38 U	37 U	700 U	51 U
Lube Oil	410	690	76 U	74 U	1700	220
Polychlorinated Biphenyl's (PCBs) by EPA 8082						
Total PCBs (mg/kg)[3]	**0.21**	**0.48**	NA	NA	0.12 U	0.1 U
Total PCBs (mg/kg OC)	NA	NA	5.067 U	4.933 U	NA	NA
Total Metals by EPA 6000/7000 Series (mg/kg)						
Copper	180	78	14	13	25	32
Lead	200	54	7.6 U	7.4 U	14	12
Mercury	0.39 U	0.3 U	0.38 U	0.37 U	0.3 U	0.25 U
Conventionals						
Wood Debris (% by volume) by Visual Observation	<5	**100**	<5	<5	25	15
Total Organic Carbon (TOC) by EPA Method 9060 (% weight)	4.4	25	1.5	1.5	5.4	4.6
Total Volatile Solids by EPA Method SM 245-G (% weight)	**15.7**	**51.1**	3.22	4.02	**18.5**	**16.1**

Notes:

[1]The approximate sample locations are shown in Figure 18.

[2]Sample Elevation referenced to Mean Lower Low Water (MLLW).

[3]Total PCB conentration is reported in mg/kg and is screened against the Puget Sound dry weight Lowest Apparent Effects Threshold (LAET) value of 0.13 mg/kg for total PCBs because the TOC percentage is outside the range of typical Puget Sound marine sediment (0.5 to 3%).

mg/kg = milligrams per kilogram

mg/kg OC = milligrams per kilogram normalized to organic carbon (OC).

NE = not established

NA = not applicable

U = Laboratory qualifier indicating that the analyte was not detected at the reported practical quantitation limit.

Green shading indicates that the analyte was detected at a concentration exceeding site specific sediment cleanup level (refer to Table 2).

Blue shading indicates that the analyte was detected at a concentration exceeding the LAET value.

Chemical analyses performed by OnSite Environmental, Inc of Redmond, Washington.

FIGURES

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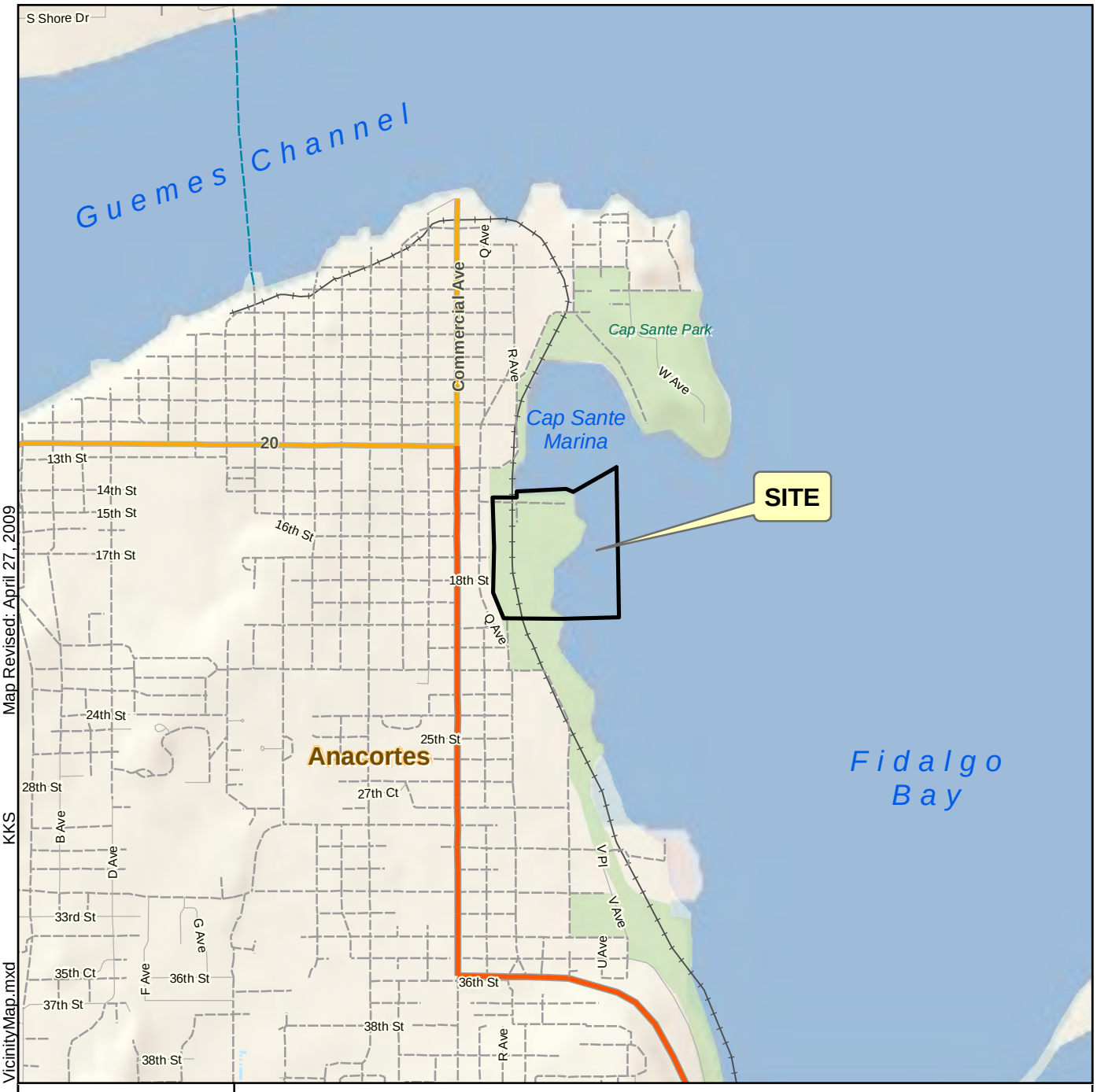

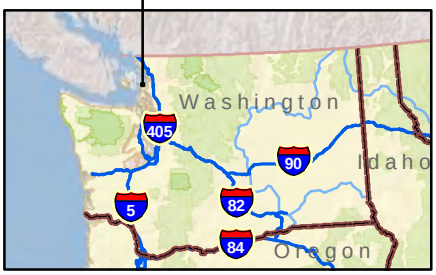

N
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2,000 0 2,000
Feet

Notes:
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Data Sources: ESRI Data & Maps, Street Maps 2005

Transverse Mercator, Zone 10 N North, North American Datum 1983
North arrow oriented to grid north

Vicinity Map

Scott Paper Mill
Anacortes, Washington

GeoEngineers

Figure 1

Office: SEA Path: P:\5\5147007\GIS\5147007l1 Fig1 VicinityMap.mxd KKS Map Revised: April 27, 2009

Source: AutoCAD figure provided by Landau Associates, dated September 2006. Base map source: David C. Smith and Associates, July 2004.

Legend

- Building
- 75-Foot Shoreline Buffer
- MW-111 — Monitoring Well with Designation
- MHHW — Mean High Higher Water

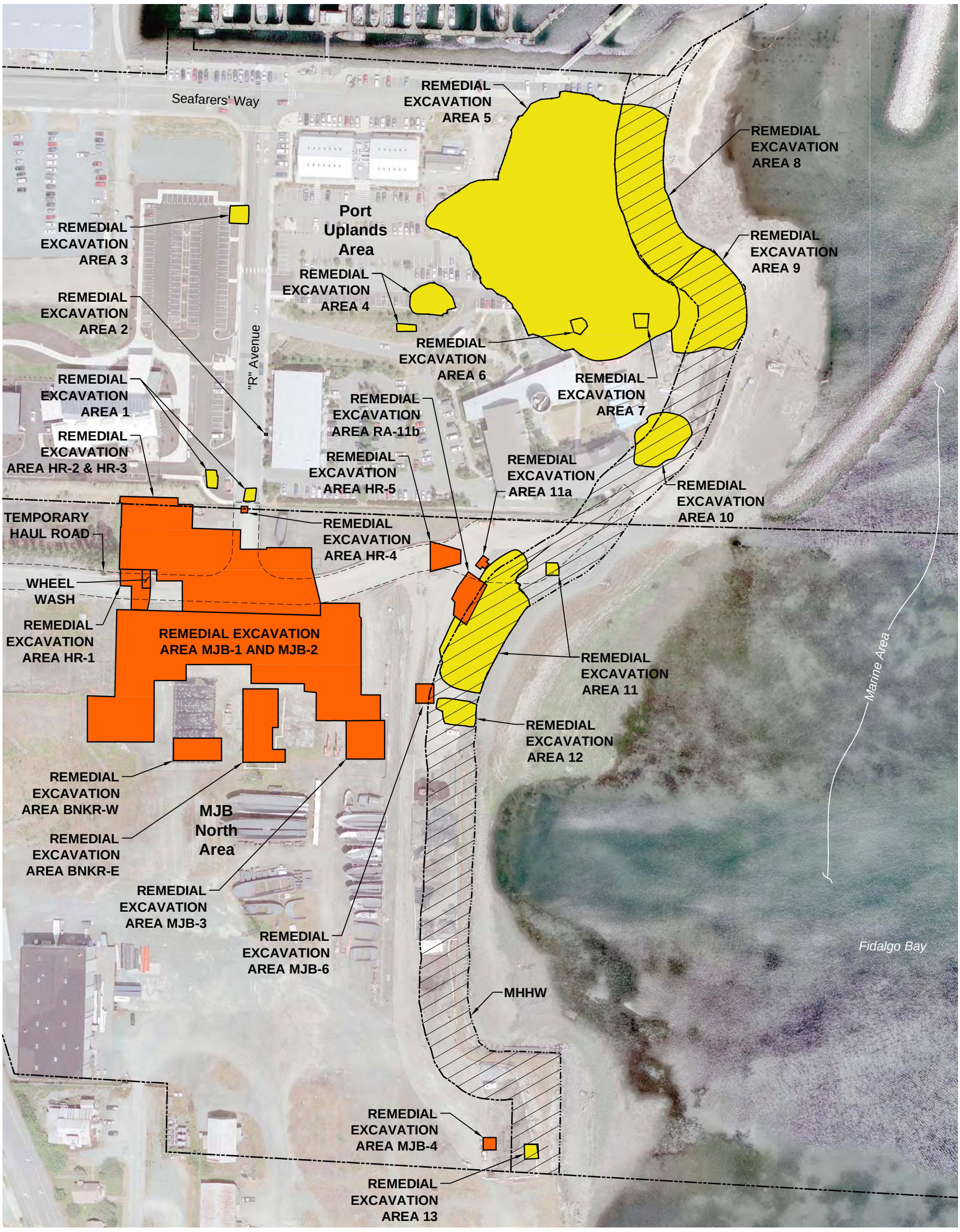
Site Plan
Pre-Construction Site Conditions

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 2

P:\5\5147007\19\CAD\Completion Report Figures\5147007I9 Pre-Con Conditions Fig 2.dwg\TAB:F2 modified by tmichaud on Dec 22, 2011 - 15:12



Legend

- Site Boundary
- Port Uplands and 75-Foot Shoreline Buffer Zone Area Remedial Excavation
- MJB North Area Remedial Excavation
- 75-Foot Shoreline Buffer Zone
- MHHW Mean High Higher Water

N W E S

150 0 150

FEET

Uplands Area and Shoreline Buffer Zone Remedial Excavation Overview

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers | **Figure 3**

Source: AutoCAD figure provided by Landau Associates, dated September 2006. Base map source: David C. Smith and Associates, September 2010.

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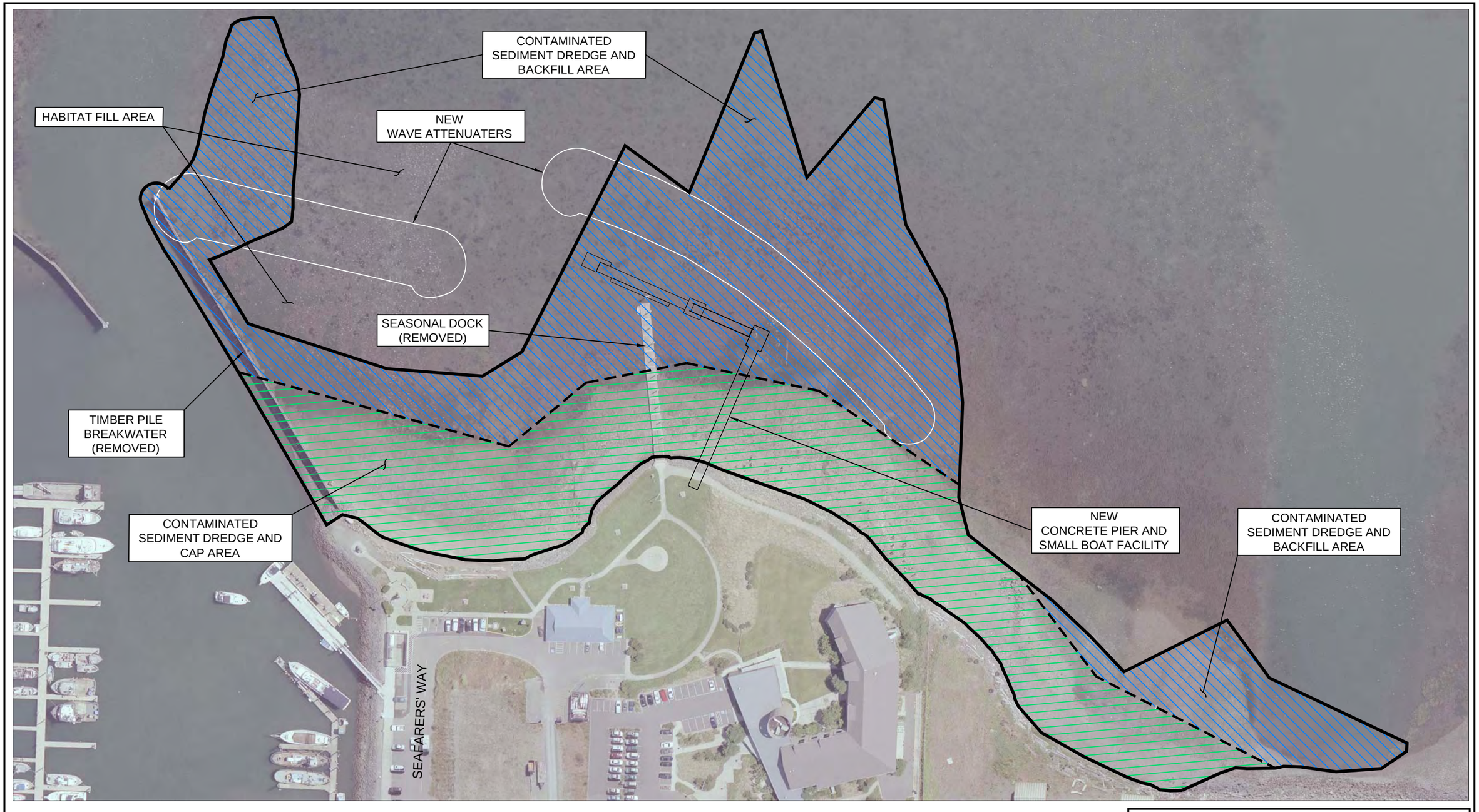

LEGEND

Dredge Boundary

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

N E S W

120 0 120

FEET

Marine Area Dredge Overview

Former Scott Paper Mill Site
Anacortes, Washington

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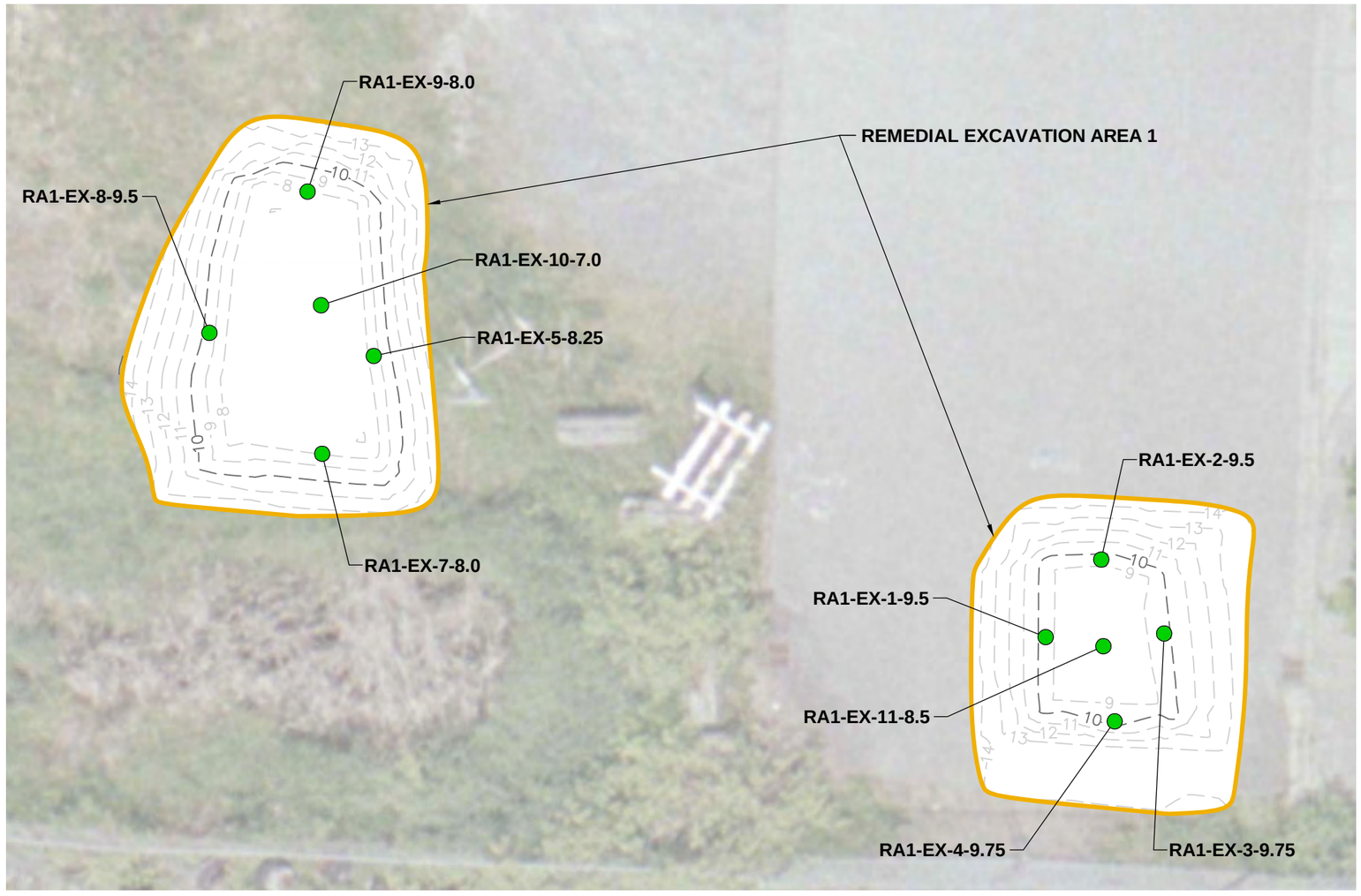
Figure 4

P:\15\14700719\CAD\Completion Report Figures\15I4700719 Dredge Overview Fig 4.dwg\TAB:Fig 4 modified by tmichaud on Dec 22, 2011 - 15:33



LEGEND

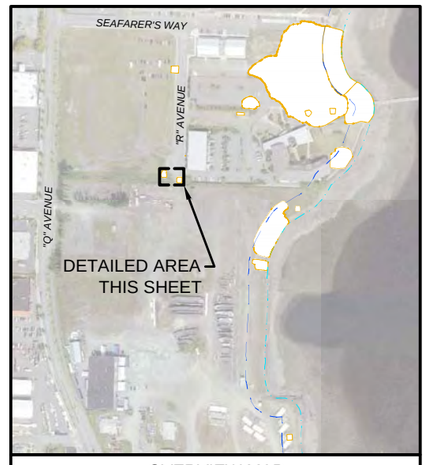
- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 3)

RA1-EX-1-9.5 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 124 cubic yards were removed from Remedial Excavation Area 1 to complete the cleanup action between July 1, 2009 and July 8, 2009.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

REMEDIAL EXCAVATION AREA 1

SCALE: 1"=10'

N

GRAPHIC SCALE

10 0 10

FEET

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 1	
Former Scott Paper Mill Site Anacortes, Washington	
GeoEngineers	**Figure 5**

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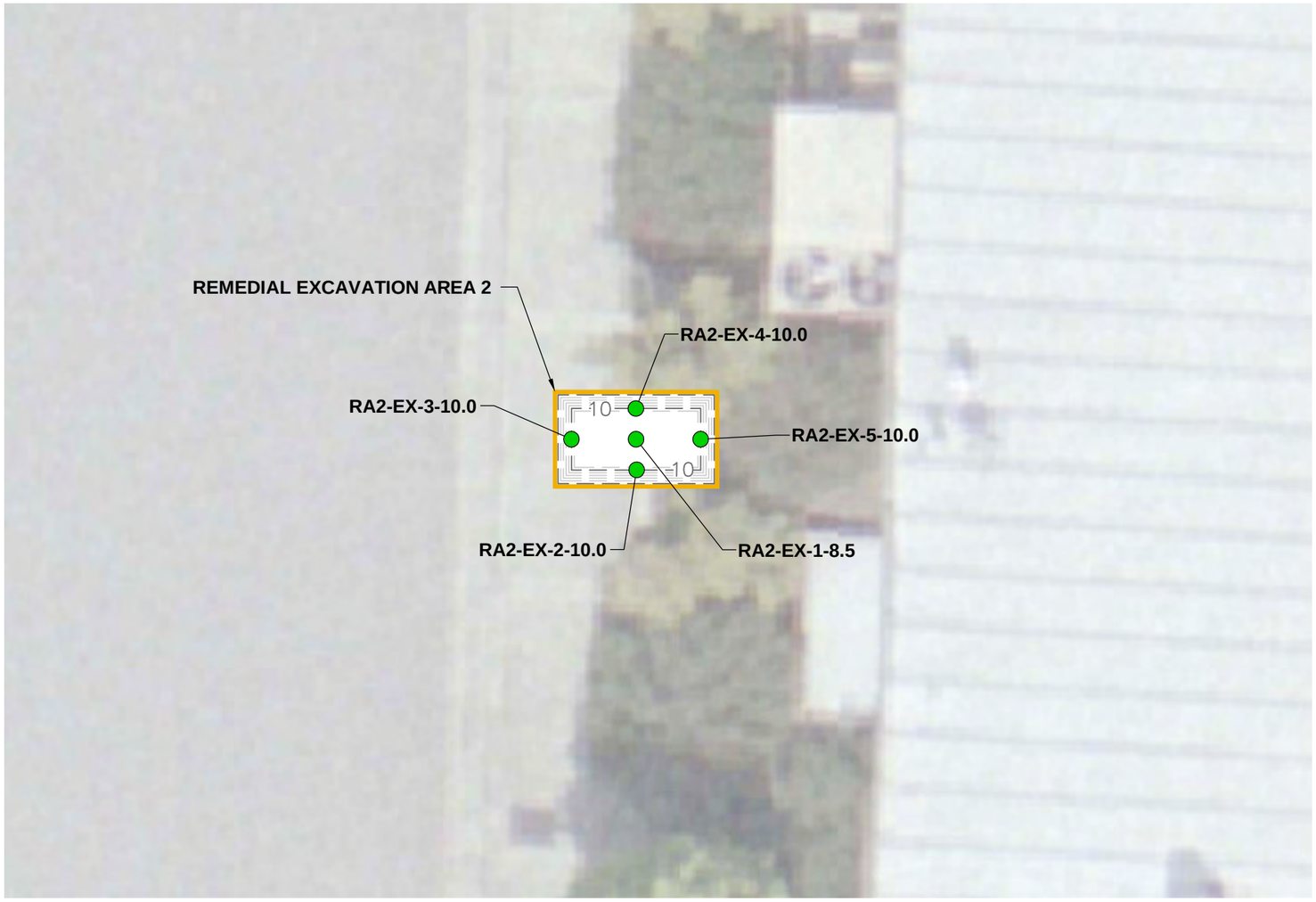


REMEDIAL EXCAVATION AREA 2
SCALE: 1"=5'

N

GRAPHIC SCALE

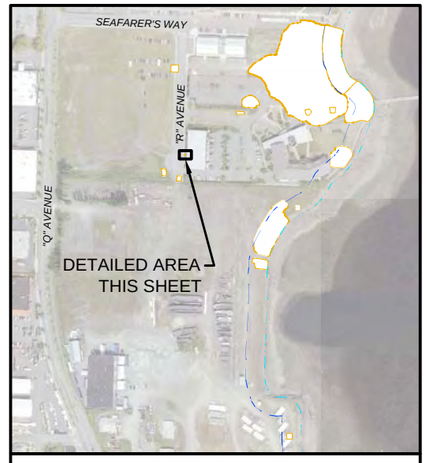
5 0 5
FEET

LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 4)
- **RA2-EX-1-8.5** Sample Identification
  - Sample Elevation (feet)[1]
  - Sample Number
  - Remedial Excavation Area

Approximately 4 cubic yards were removed from Remedial Excavation Area 2 to complete the cleanup action on July 13, 2009.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 2

Former Scott Paper Mill Site
Anacortes, Washington

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Figure 6

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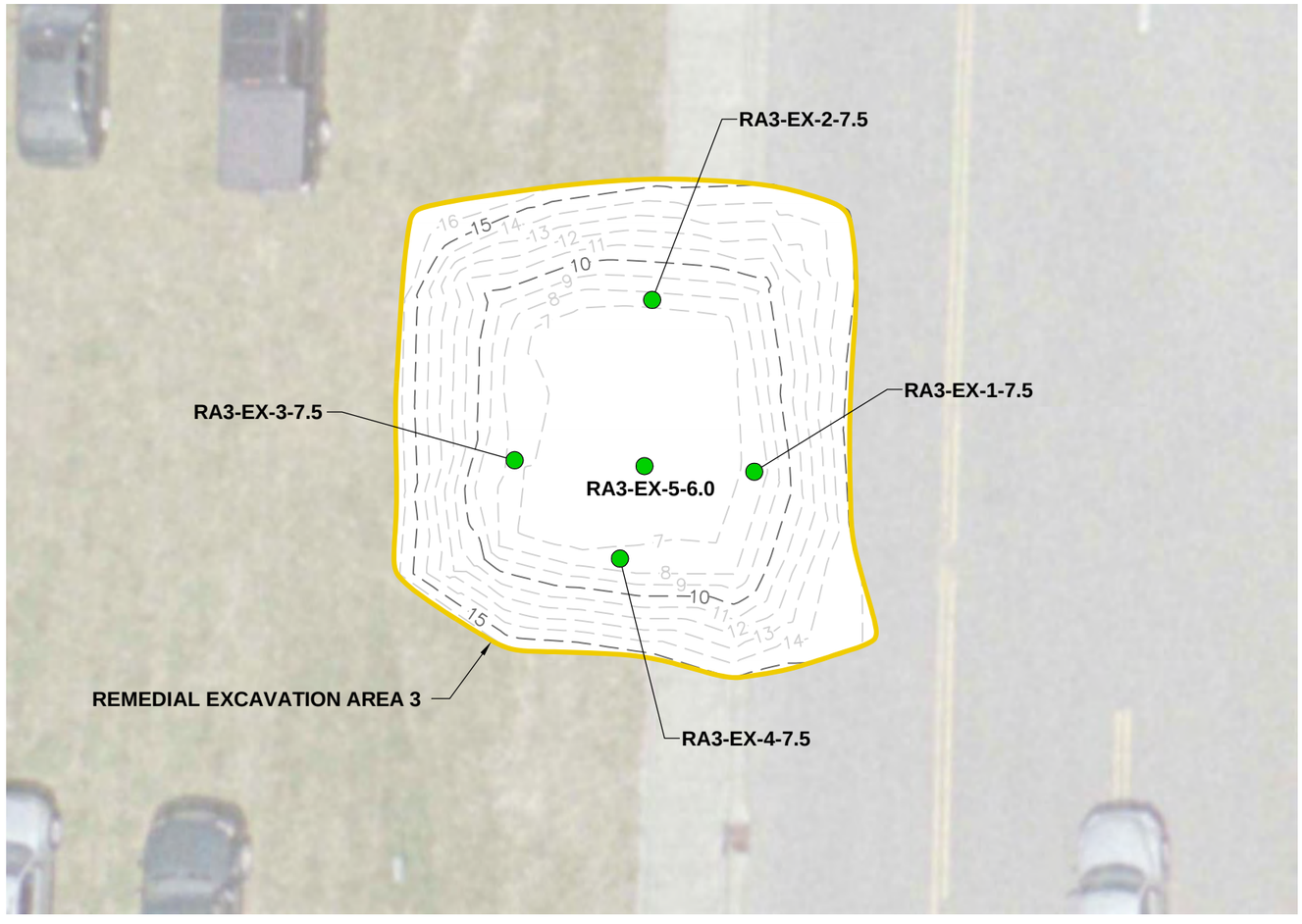


REMEDIAL EXCAVATION AREA 3

SCALE: 1"=10'

N

GRAPHIC SCALE

10 0 10

FEET

LEGEND

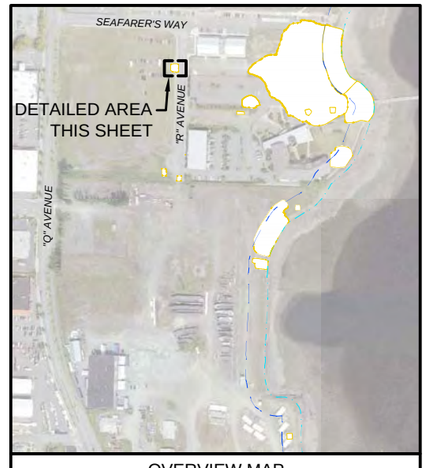
- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 5)

RA3-EX-1-7.5 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 169 cubic yards were removed from Remedial Excavation Area 3 to complete the cleanup action on July 6, 2009.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 3

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 7

P:\5\5147007\19\CAD\Completion Report Figures\5147007I9 RA3 Pass Fail.dwg\TAB:RE3 modified by tmichaud on Dec 20, 2011 - 17:01

REMEDIAL EXCAVATION AREA 4

SCALE: 1"=20'

N

GRAPHIC SCALE

20 0 20

FEET

LEGEND

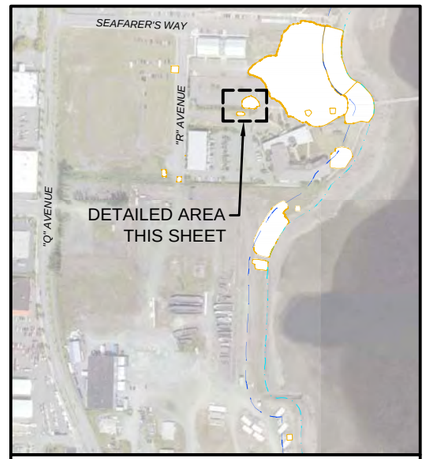
- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 6)

RA4-EX-1-16.0 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 432 cubic yards were removed from Remedial Excavation Area 4 to complete the cleanup action between July 7, 2009 and August 3, 2009.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

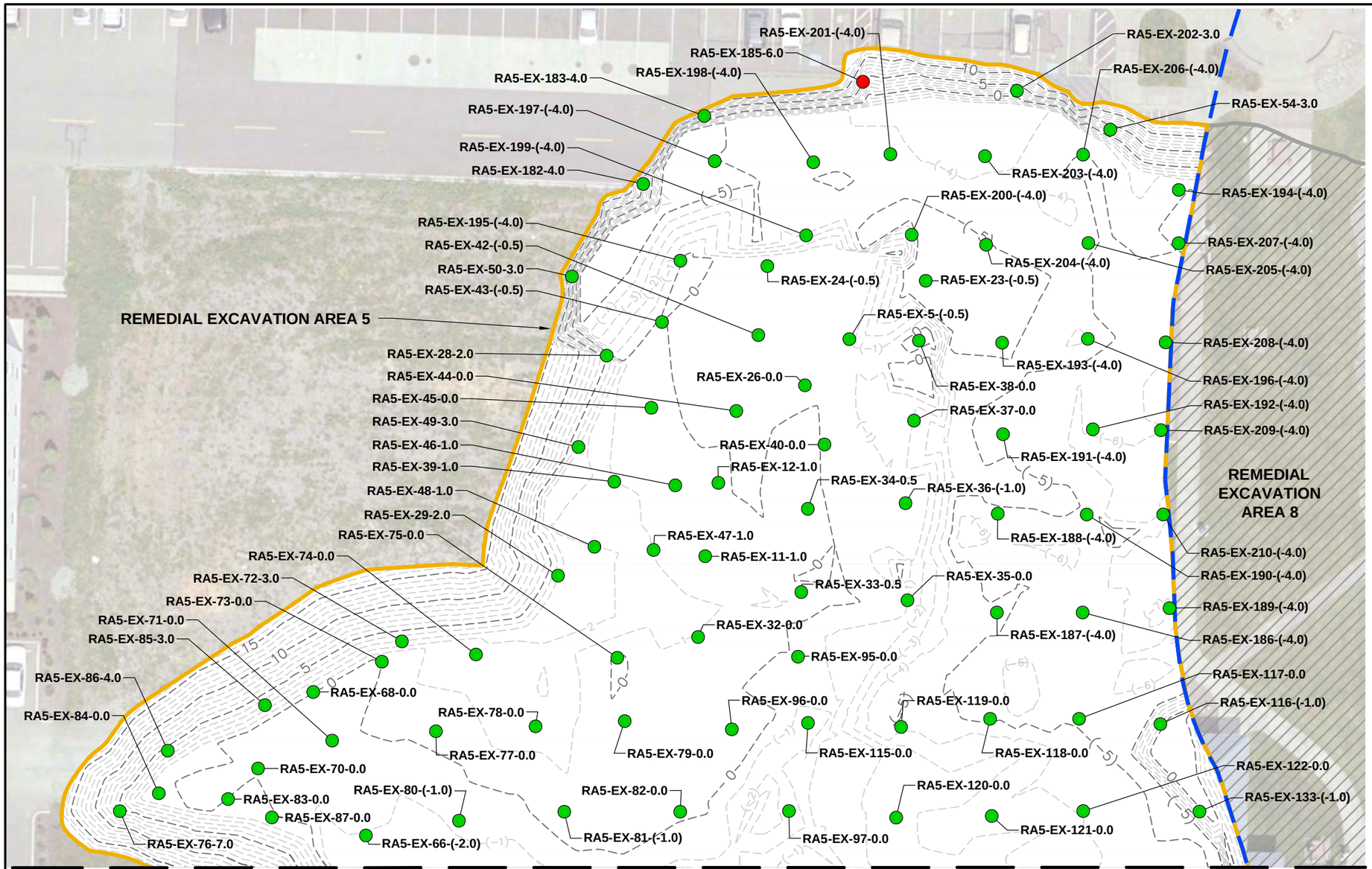
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 4

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 8

P:\15\14700719\CAD\Completion Report Figures\15147007\19 RA4 Pass Fail.dwg\TAB:RE4 Modified by TMICHAUD on JAN 06, 2012 - 10:48



REMEDIAL EXCAVATION AREA 5 - NORTH

SCALE: 1"=30'

N

GRAPHIC SCALE

30 0 30

FEET

LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 7)
- Approximate verification soil sample location in which analyte(s) exceeded site-specific cleanup levels (chemical analytical results are summarized in Table 7)

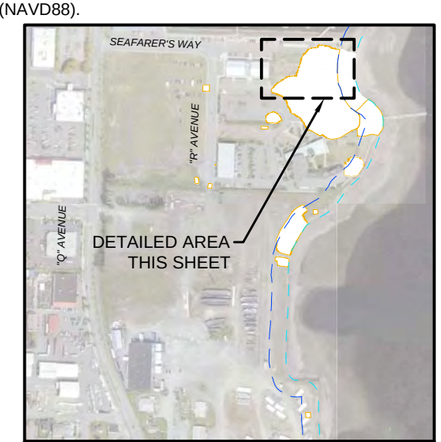
RA4-EX-11-1.0 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Soil sample RA5-EX-88-3.0 and RA5-EX-212-3.0 (not shown) are composite sidewall samples obtained from the northwestern and northern excavation sidewalls, respectively. Samples were submitted for dioxin and furan analysis to document soil conditions at the final excavation limits (chemical analytical results are summarized in Table 7).

Approximately 56,228 cubic yards were removed from Remedial Excavation Area 5 to complete the cleanup action between May 20, 2010 and November 19, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

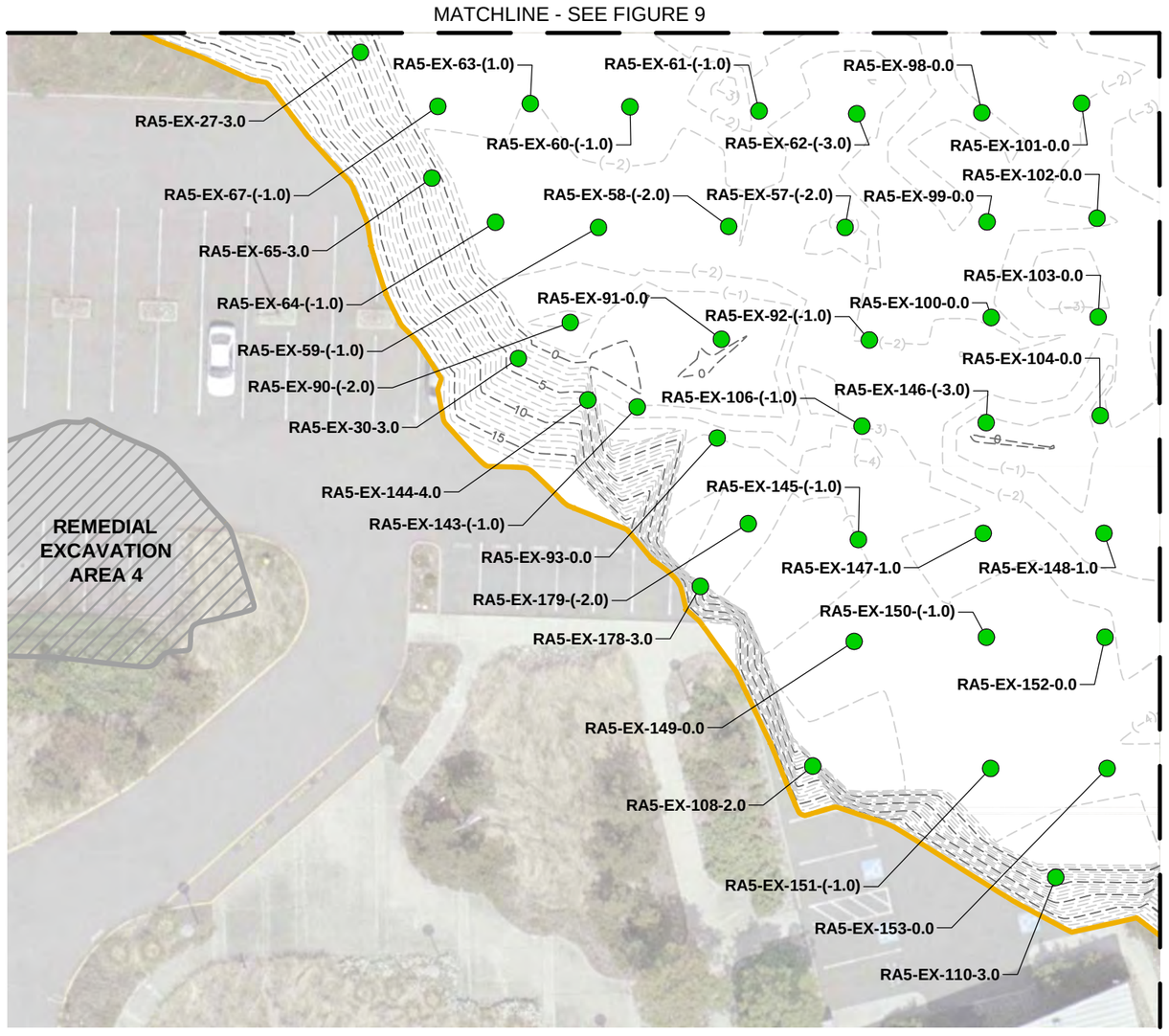
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 5 North

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 9

P:\15\14700719\CAD\Completion Report Figures\15147007019 RA5 Pass Fail.dwg\TAB:North modified by TMichaud on Dec 20, 2011 - 17:07



REMEDIAL EXCAVATION AREA 5 - SOUTHWEST

SCALE: 1"=30'

N

GRAPHIC SCALE

30 0 30

FEET

LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 7)

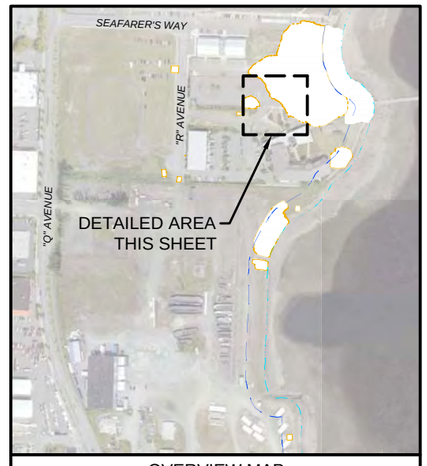
RA5-EX-11-1.0 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Soil sample RA5-EX-89-3.0 (not shown) is a composite sidewall sample obtained from the southwestern excavation sidewall. This samples was submitted for dioxin and furan analysis to document soil conditions at the final excavation limits (chemical analytical results are summarized in Table 7).

Approximately 56,228 cubic yards were removed from Remedial Excavation Area 5 to complete the cleanup action between May 20, 2010 and November 19, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

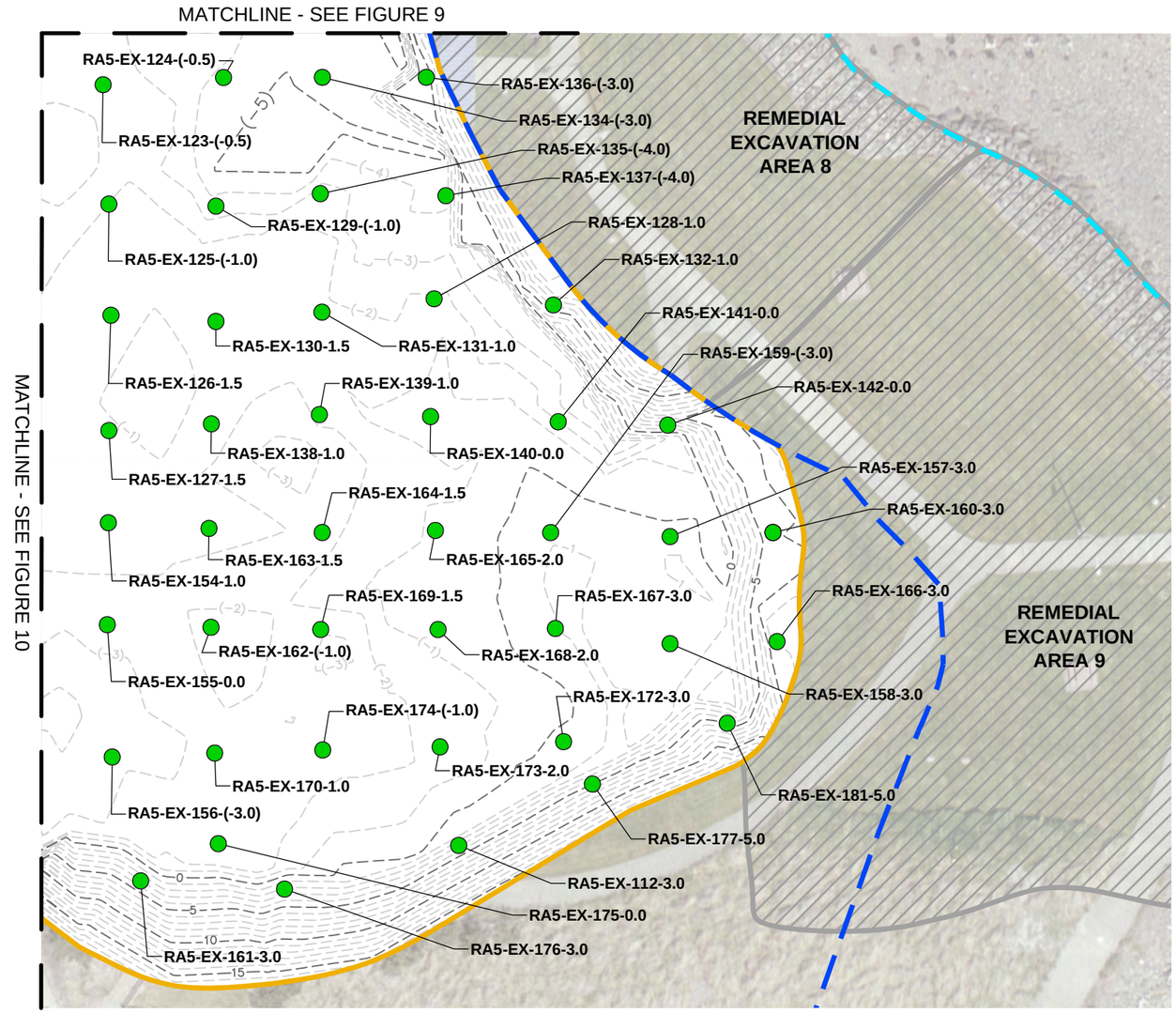
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 5 Southwest

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 10

P:\15\15147007\19\CAD\Completion Report Figures\15147007I9 RA5 Pass Fail.dwg\TAB:SW modified by TMichaud on Jan 06, 2012 - 11:34



REMEDIAL EXCAVATION AREA 5 - SOUTHEAST

SCALE: 1"=30'

N

GRAPHIC SCALE

30 0 30

FEET

LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 7)

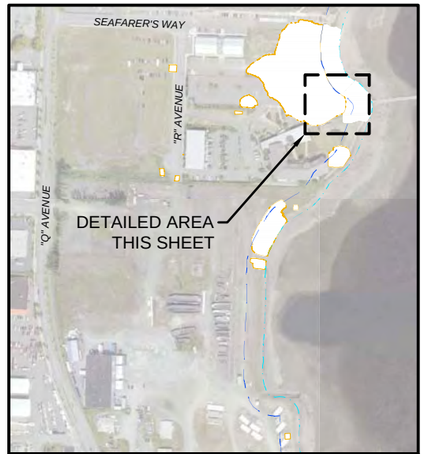
RA5-EX-11-1.0 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Soil sample RA5-EX-212-3.0 (not shown) is a composite sidewall sample obtained from the southern excavation sidewall. This sample was submitted for dioxin and furan analysis to document soil conditions at the final excavation limits (chemical analytical results are summarized in Table 7).

Approximately 56,228 cubic yards were removed from Remedial Excavation Area 5 to complete the cleanup action between May 20, 2010 and November 19, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

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2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

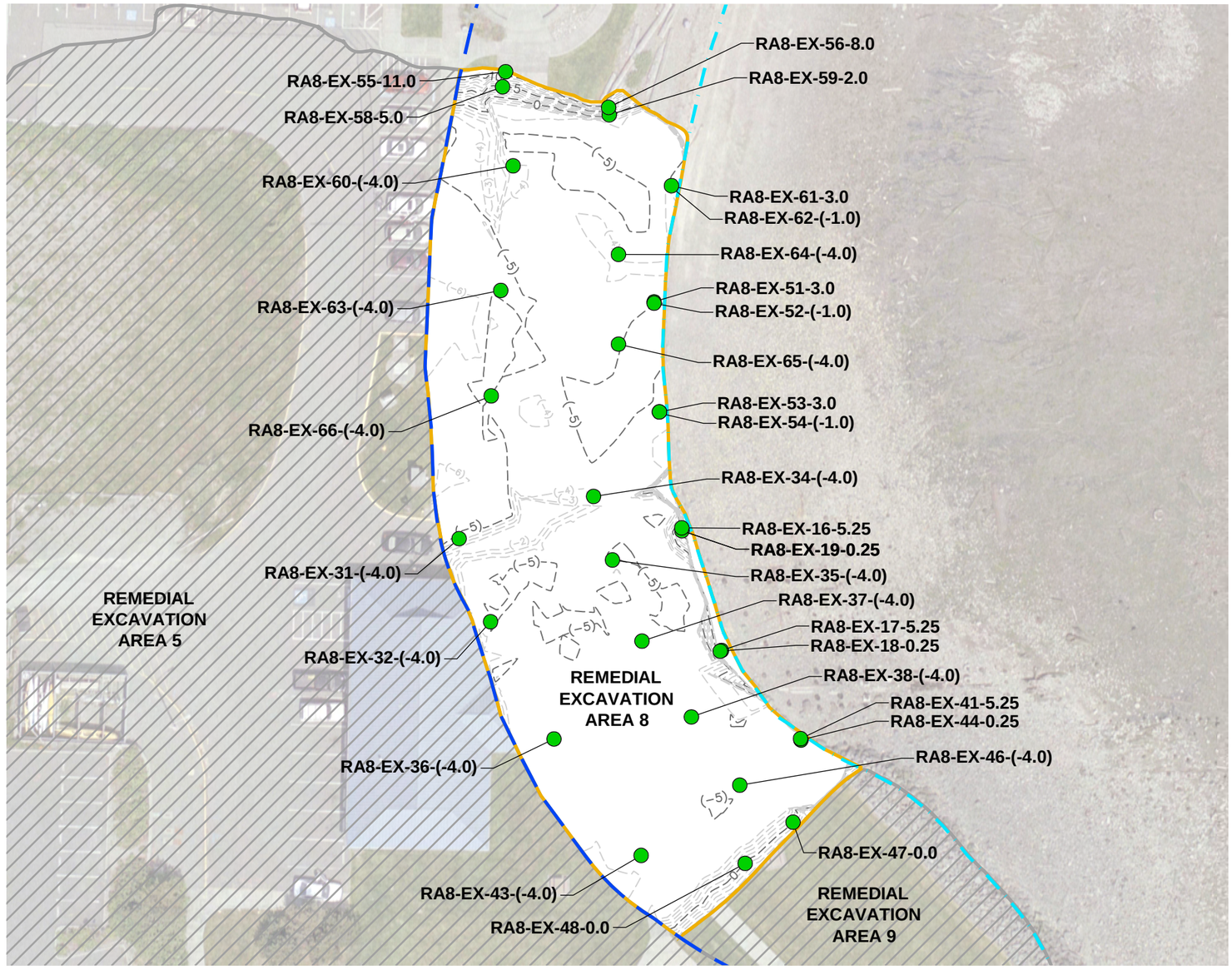
Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 5 Southeast

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 11



REMEDIAL EXCAVATION AREA 8

SCALE: 1"=30'

N

GRAPHIC SCALE

30 0 30

FEET

LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 8)

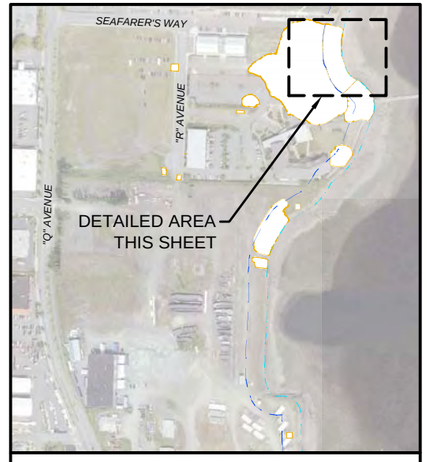
RA8-EX-56-8.0 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Soil sample RA8-EX-57-8.0 (not shown) is a composite sidewall sample obtained from the northern and eastern excavation sidewalls. This sample was submitted for dioxin and furan analysis to document soil conditions at the final excavation limits (chemical analytical results are summarized in Table 8).

Approximately 13,133 cubic yards were removed from Remedial Excavation Area 8 to complete the cleanup action between January 7, 2010 and November 19, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

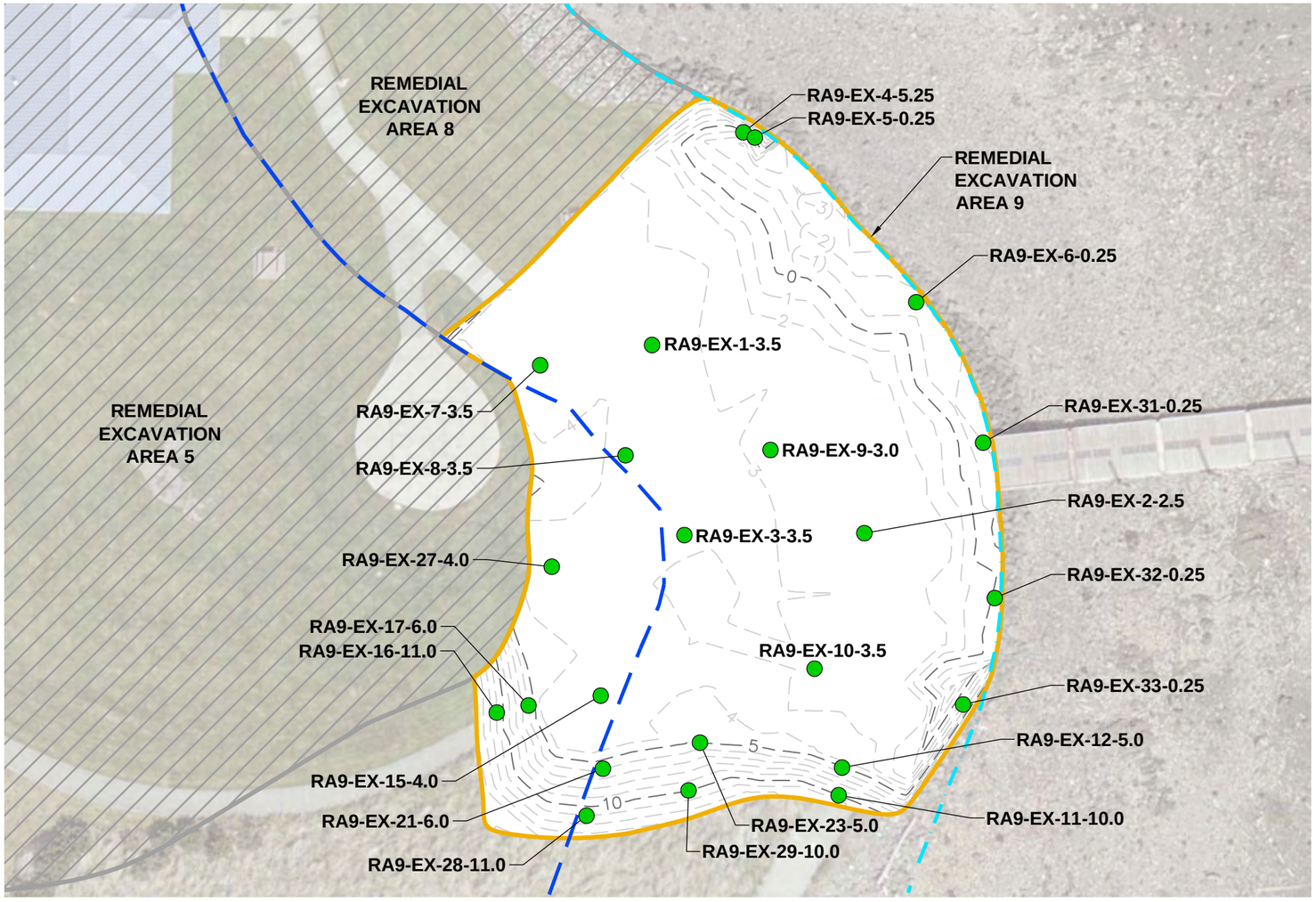
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 8

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 12

P:\15\14700719\CAD\Completion Report Figures\1514700719 RA8 Pass Fail.dwg\TAB:X modified by thichaud on Dec 21, 2011 - 9:23



REMEDIAL EXCAVATION AREA 9

SCALE: 1"=30'

N

GRAPHIC SCALE

30 0 30

FEET

LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 9)

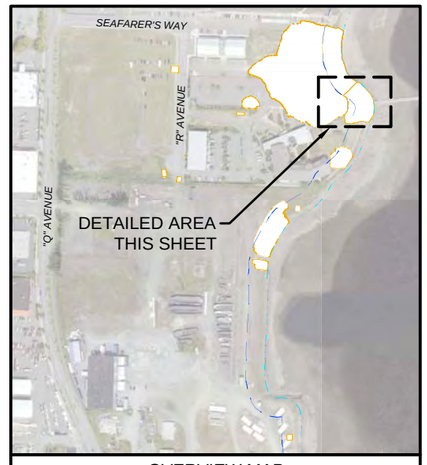
RA9-EX-1-3.5 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Soil sample RA9-EX-30-11.0 (not shown) is a composite sidewall sample obtained from the eastern and southern excavation sidewalls. This sample was submitted for dioxin and furan analysis to document soil conditions at the final excavation limits (chemical analytical results are summarized in Table 9).

Approximately 5,338 cubic yards were removed from Remedial Excavation Area 9 to complete the cleanup action between April 12, 2010 and June 7, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

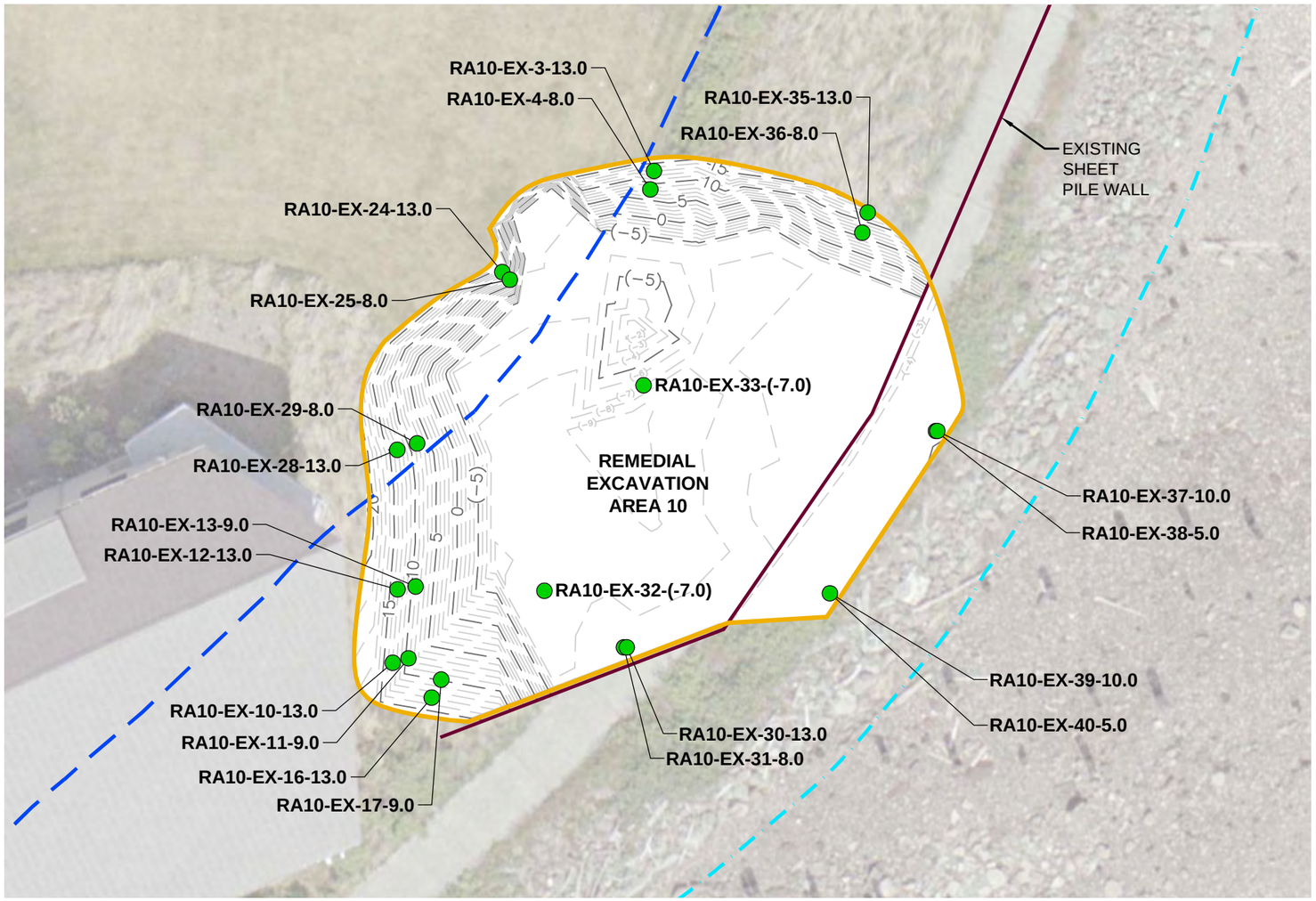
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 9

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 13

P:\15\15147007\19\CAD\Completion Report Figures\15147007l9 RA9 Pass Fail.dwg\TAB:X modified by THICHAUD on Dec 21, 2011 - 9:21



REMEDIAL EXCAVATION AREA 10

SCALE: 1"=20'

N

GRAPHIC SCALE

20 0 20

FEET

LEGEND

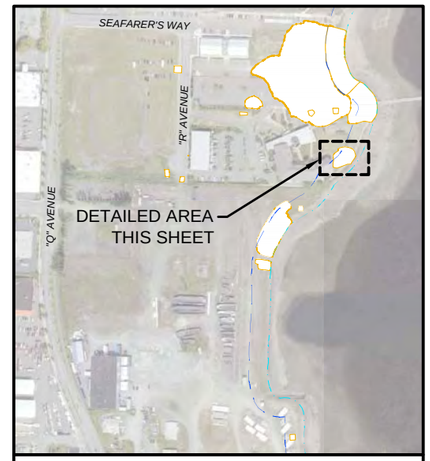
- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 10)

RA10-EX-35-13.0 — Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 4,008 cubic yards were removed from Remedial Excavation Area 10 to complete the cleanup action between November 3, 2010 and December 1, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

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3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

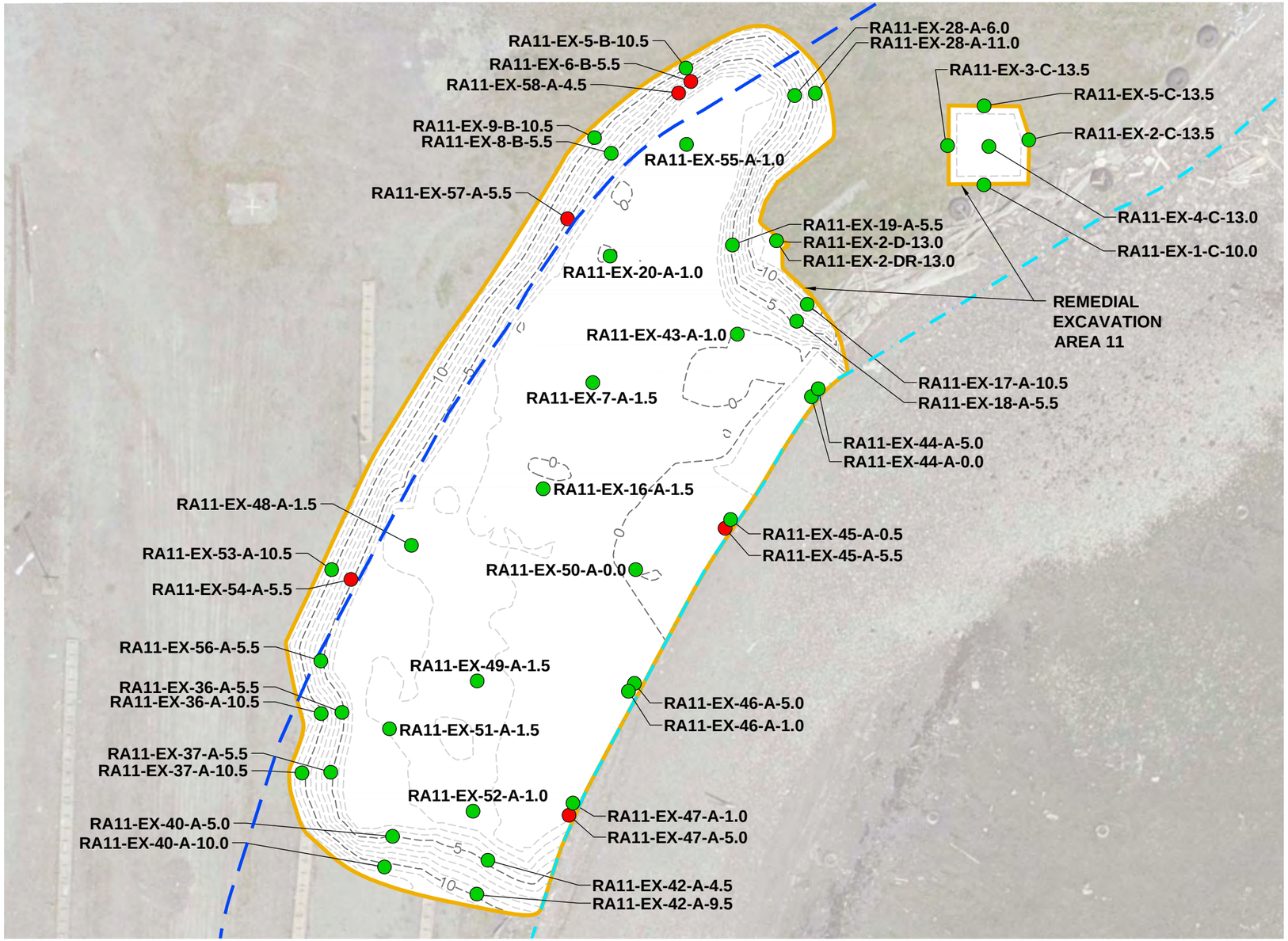
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 10

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 14

P:\15\47007\19\CAD\Completion Report Figures\15147007I9 RA10 Pass Fail.dwg\TAB:X Modified by TMichaud on Dec 21, 2011 - 10:14



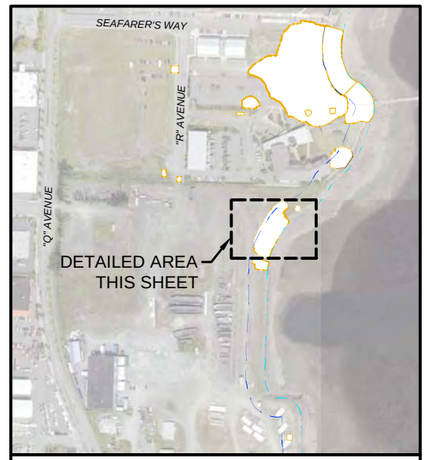
LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 11)
- Approximate verification soil sample location in which analyte(s) exceeded site-specific cleanup levels (chemical analytical results are summarized in Table 11)

RA11-EX-1-C-10.0 — Sample Identification
- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 6,332 cubic yards were removed from Remedial Excavation Area 11 to complete the cleanup action between October 26, 2009 and February 11, 2010.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

REMEDIAL EXCAVATION AREA 11

SCALE: 1"=30'

N

GRAPHIC SCALE

30 0 30

FEET

Notes

1. The locations of all features shown are approximate.
2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
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Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

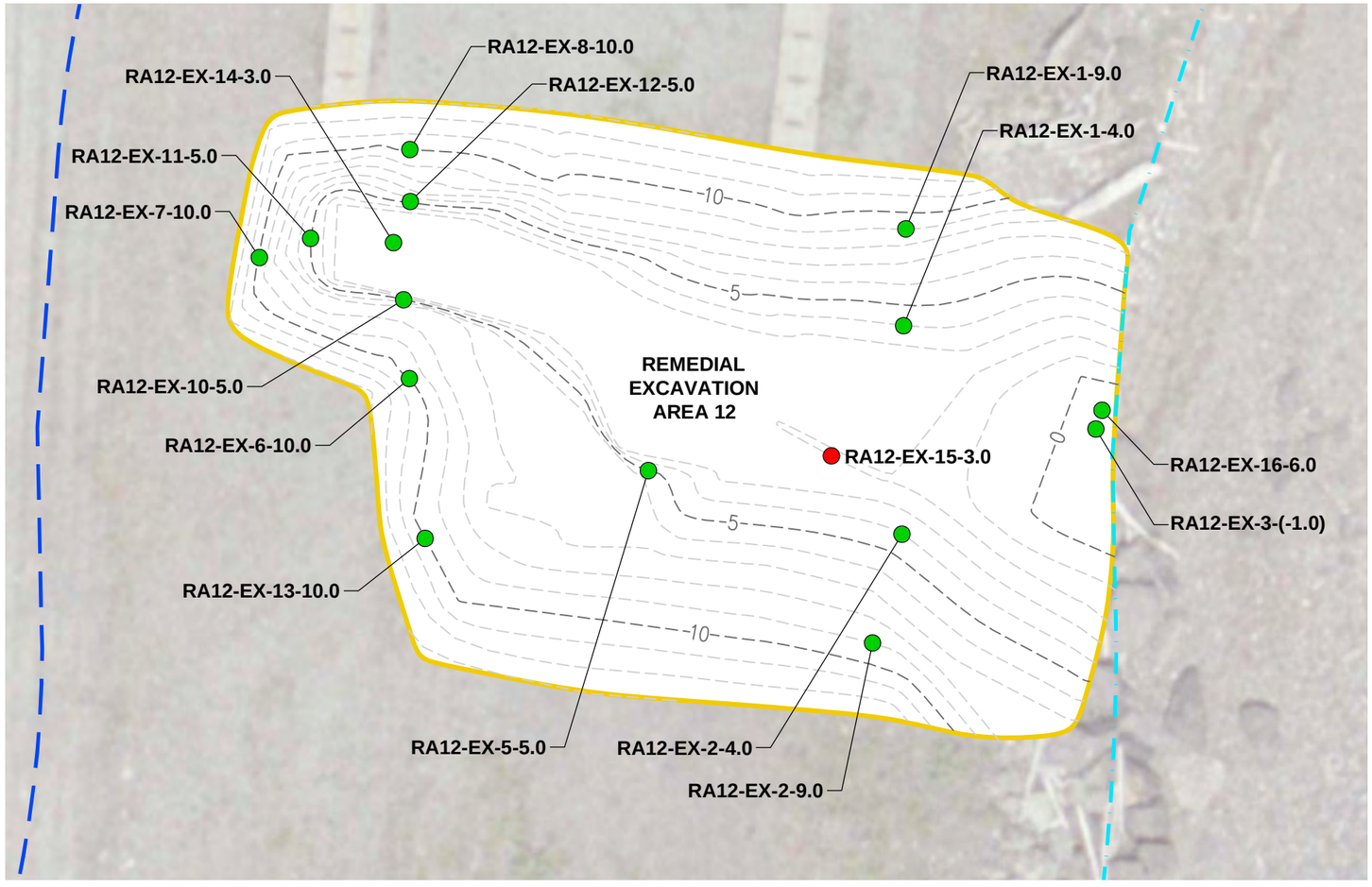
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 11

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 15

P:\15\47007\09\CAD\Completion Report Figures\15I47007I9 RAII Pass Fail.dwg\TAB:REII Modified by TMichaud on Feb 07, 2012 - 17:39



REMEDIAL EXCAVATION AREA 12

SCALE: 1"=10'

N

GRAPHIC SCALE

10 0 10

FEET

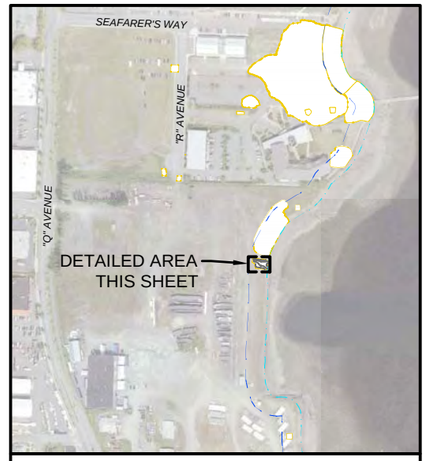
LEGEND

- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 12)
- Approximate verification soil sample location in which analyte(s) exceeded site-specific cleanup levels (chemical analytical results are summarized in Table 12)

RA12-EX-12-10.0 — Sample Identification
- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 510 cubic yards were removed from Remedial Excavation Area 12 to complete the cleanup action between October 30, 2009 and December 18, 2009.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

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3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

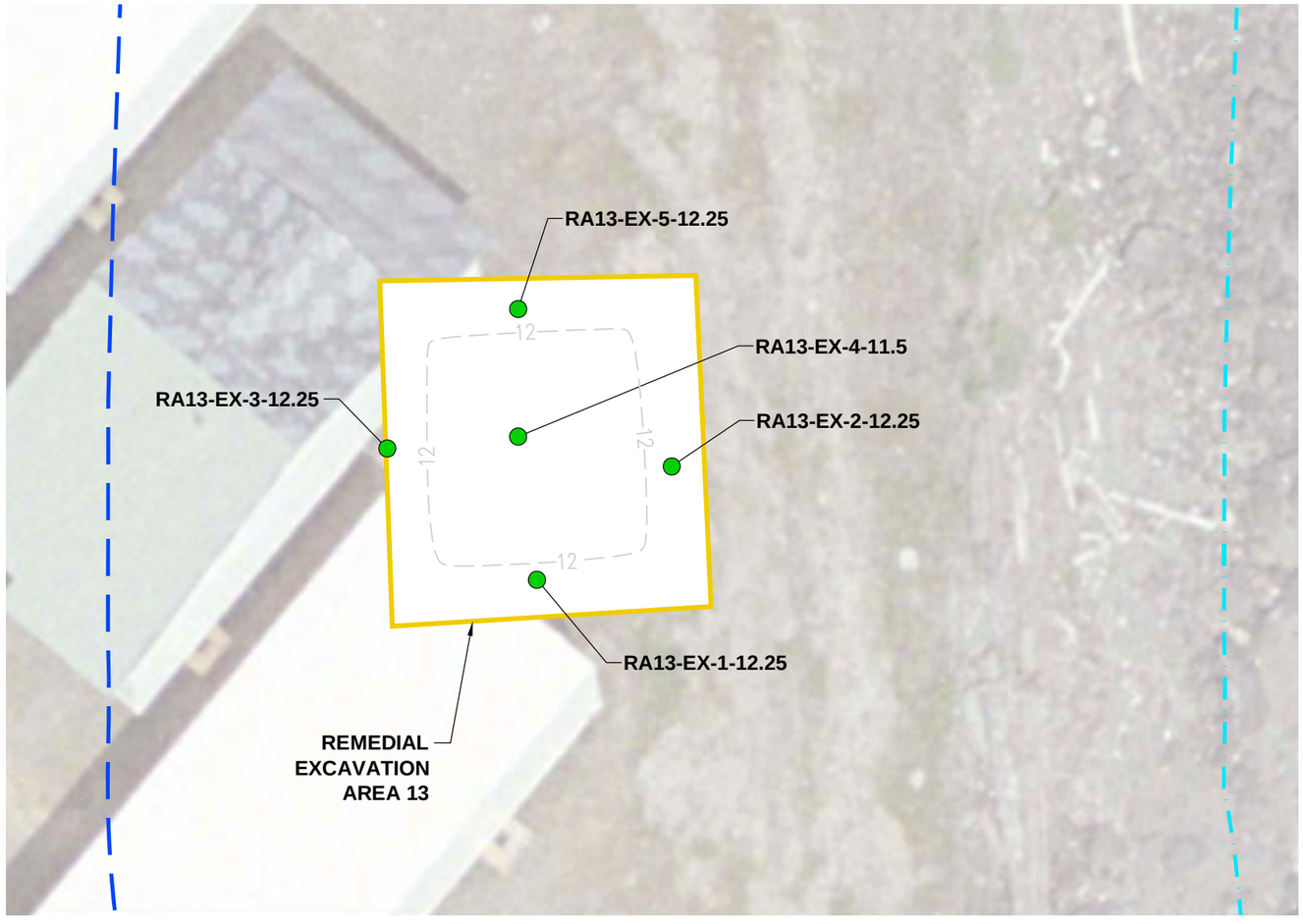
Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 12

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 16

P:\15\15147007\19\CAD\Completion Report Figures\15147007I9 RAI2 Pass Fail.dwg\TAB:REII modified by tmichaud on Dec 21, 2011 - 10:30



REMEDIAL EXCAVATION AREA 13

SCALE: 1"=10'

N

GRAPHIC SCALE

10 0 10

FEET

LEGEND

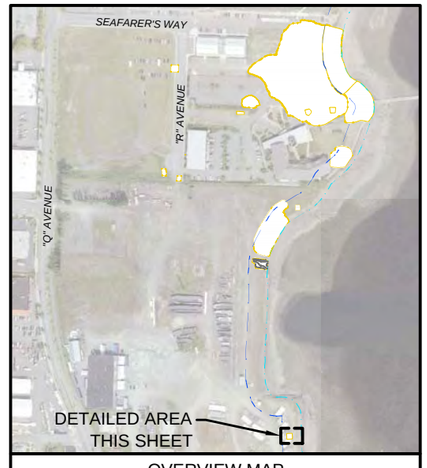
- Remedial Excavation Area
- Mean High Higher Water (MHHW)
- 75' Shoreline Buffer
- Approximate verification soil sample location in which analyte(s) either were not detected or were detected at concentrations less than site-specific cleanup levels (chemical analytical results are summarized in Table 13)

RA13-EX-1-12.25 Sample Identification

- Sample Elevation (feet)[1]
- Sample Number
- Remedial Excavation Area

Approximately 27 cubic yards were removed from Remedial Excavation Area 13 to complete the cleanup action on October 30, 2009.

[1]Elevation referenced to the 1988 North American Vertical Datum (NAVD88).



OVERVIEW MAP

Notes

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2. Remedial excavation contours are based on contractor provided surveys and/or field observations.
3. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

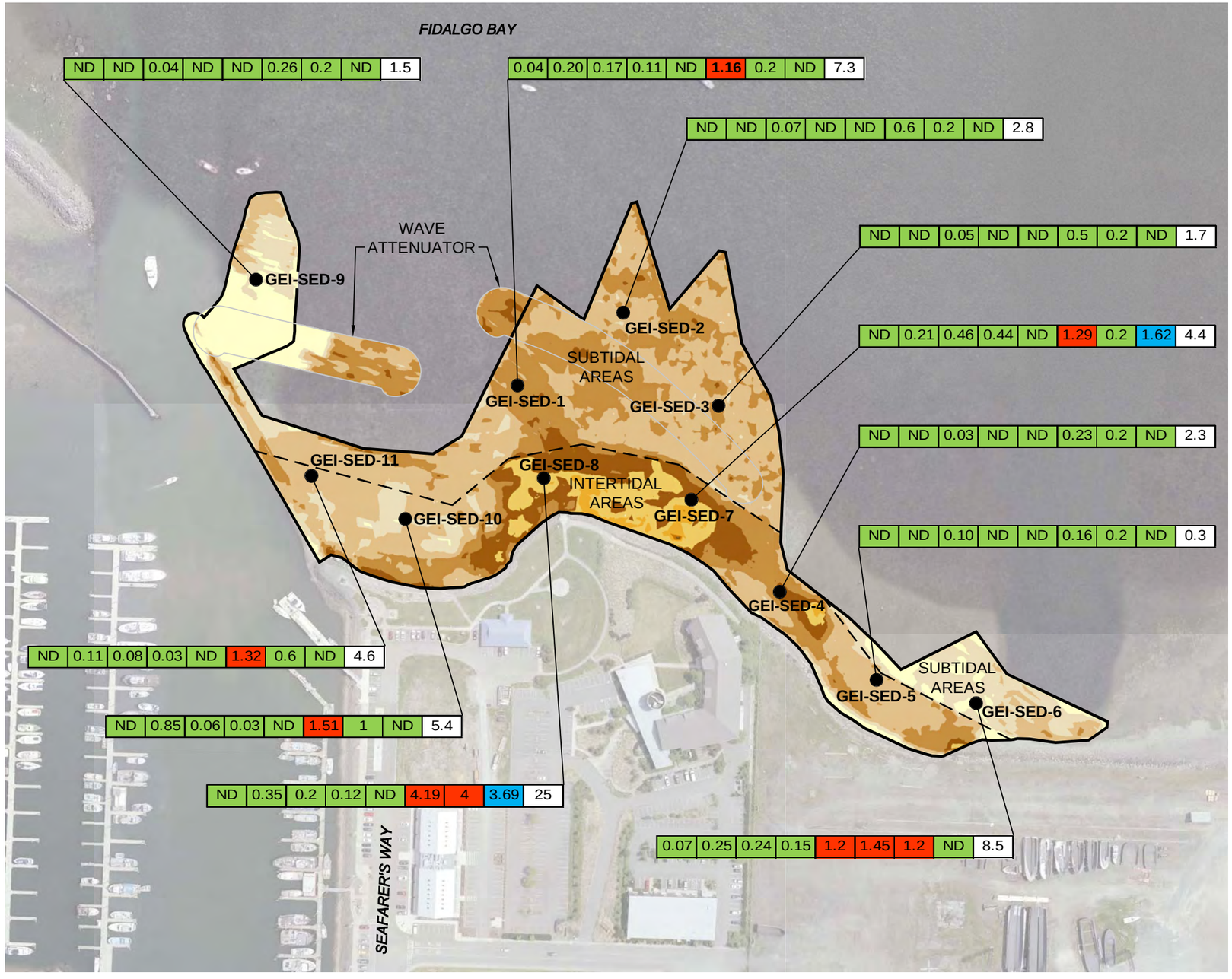
Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

Final Excavation Limits and Soil Sample Locations - Remedial Excavation Area 13

Former Scott Paper Mill Site
Anacortes, Washington

GeoEngineers

Figure 17



LEGEND

Dredge Boundary

Sediment Sample Location

Sediment Chemistry Data Summary

Analyte Groups	Diesel	Heavy Oil	Copper	Lead	Mercury	TVS	Wood Debris	PCBs	TOC in % by weight
Example:	ND	0.21	0.46	0.44	ND	1.29	0.2	1.62	4.4

Red Shading Indicates Site-Specific Sediment Cleanup Level Exceedance

Green Shading Indicates No Site-Specific Sediment Cleanup Level and/or LAET Exceedance

Blue Shading Indicates LAET Exceedance

No Shading Indicates that there is No Site-Specific Sediment Cleanup Level and/or LAET established for the analyte group. Number tabulated is in percentage and not an exceedance ratio

Exceedance ratio of detections to the site-specific sediment cleanup levels or LAET for each analyte group are tabulated.

LAET	Puget Sound Lowest Applicable Effects Threshold
TOC	Total Organic Carbon
TVS	Total Volatile Solids
PCBs	Polychlorinated Biphenyls
ND	Analyte was not detected above laboratory practical quantitation limit (PQL)

Depth of Dredge (ft)	Color
0.00 - 1.00	
1.00 - 2.00	
2.00 - 3.00	
3.00 - 4.00	
4.00 - 5.00	
5.00 - 6.00	
6.00 - 7.00	

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base aerial provided by David C. Smith & Associates, Inc. dated 5-25-09.

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FEET

Final Limits of Dredging and Sediment Sample Locations

Former Scott Paper Mill Site
Anacortes, Washington

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Figure 18

P:\15\14700719\CAD\Completion Report Figures\1514700719 Final Limits of Dredging Fig 18.dwg\TAB:Port modified by tmichaud on Dec 22, 2011 - 15:37

APPENDICES

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