Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Prepared for:
Oregon Department of Environmental Quality

March 25, 2014
2025-00

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1.0 Introduction

This report documents the implementation of remedial action for the Portland Willamette Inlet site (Site) located in Portland, Oregon (Figure 1). The objective of the remedial action was to remove more highly impacted sediments and cap lesser impacted sediments. Sediments were impacted with primarily copper and lead resulting from a combination of historical sources including city sewer outfalls, private outfalls, and possible overland flow into the inlet. Following a brief description of the Site, this report describes the sediment removal and capping activities, confirmation sampling, and data evaluation conducted by Multnomah County Drainage District (MCDD) and Apex Companies, LLC (Apex). Remedial action activities were conducted in accordance with the Remedial Design/Remedial Action Work Plan (Work Plan) prepared by Apex (2013).

2.0 Background

2.1 Site Location, Description, and History

2.1.1 Location

The Site is located on the Whitaker Slough, a branch of the Columbia Slough, approximately 1.11 to 1.17 miles upstream from the Whitaker Slough's confluence with the main stem of the Columbia Slough. The physical address of the adjacent business, Portland Willamette Company (PWC), located on the south and west sides of the inlet, is 6800 NE 59th Place, Portland, Oregon (Figure 1). The Site is located in Section 18, Township 1 North, Range 2 East, Willamette Meridian.

2.1.2 Physical Features

The Site is an inlet along the main stem of the Whitaker slough approximately one acre in size. Figure 2 is a Site Vicinity Plan of the inlet and vicinity. Water depth in the inlet is generally less than 6 feet (Oregon Department of Environmental Quality [DEQ], 2013). Active springs are present on the south side of the inlet. The inlet is bordered to the west and south by the PWC property and to the east and southeast by residential, farm-zoned properties. Water flow in this section of the Columbia Slough system is managed by MCDD. Water levels are controlled via a series of pumps for the purposes of stormwater management and flood control. Within the inlet, MCDD has historically maintained a channel to allow for irrigation water intake at the southwestern and southern end. This channel was maintained using excavation equipment in the 1970s and early 1980s, with removal of the excavated sediment from the inlet. After the 1980s, sediment removal was completed by hand and the sediment was side cast within the inlet. The most recent channel maintenance was performed approximately five years ago. The area adjacent to the southeast shore of the inlet is relatively flat, with a gentle slope toward the inlet. Stormwater runoff from the PWC facility drains primarily to the inlet via two outfalls and incidental overland sheet flow. An area of mixed

industrial/commercial/residential usage along NE Columbia Boulevard also drains to the Portland Willamette inlet via City Outfall 77A. Outfall locations are shown on Figure 3.

2.1.3 Site History

Current and historical operations at the PWC facility include metal plating. Metal plating wastes were historically land-farmed on site. Overland flows from these areas and/or treatment system upset events are possible sources of contamination detected in the inlet. Before 1978, process wastewater was discharged to a lined settling pond at the northeast corner of the building prior to discharge to the inlet. After 1978, wastewater was treated before discharge, and after 1993, wastewater was evaporated in tanks. Direct discharge of treated wastes from the PWC facility is likely the primary source of contamination to the inlet. Drainage from the City of Portland OF 77A has also contributed to the sediment contamination.

The upland area adjacent to the Site was investigated and cleaned up with DEQ oversight in the early 1990s. Contaminated soils in the upland sludge treatment area were removed, the historical settling pond was filled, and DEQ issued a No Further Action (NFA) determination for these areas in 1996. In 2007, PWC entered into a cleanup agreement with DEQ under which they completed an investigation to characterize the extent of contamination in the inlet (PNG Environmental, Inc., 2010) and completed a stormwater source control evaluation. As a result of the stormwater evaluation, PWC cleaned out a ditch containing roofing debris and implemented best management practices for stormwater runoff, which have been incorporated into the facility's stormwater pollution control plan. Stormwater management at the facility continues under the facility's stormwater discharge permit (#71443), overseen by the City of Portland.

Site investigation and cleanup history is described in further detail in Section 2.3. In 2009, PWC entered into a settlement with DEQ and received a release from liability for sediment contamination associated with historical releases from their facility. Funds from that settlement are being used to conduct this cleanup.

Sediment in lines and catch basins draining to City of Portland OF 77A were collected and analyzed as part of the PWC investigation and subsequently by the City of Portland Bureau of Environmental Services. Elevated levels of metals were detected at several locations and follow-up measures are under investigation.

2.2 Geology and Hydrogeology

According to prior studies, sediment conditions within the Whitaker Slough and the Portland Willamette inlet area consist of an upper layer of soft sediments ranging from 0.25 to 5 feet in thickness with some interbedded gravels. The soft surface sediments were underlain by firm sandy silts to silty sands. The Site is underlain by Columbia River alluvium (overbank deposits). This formation overlies the Pliocene- to Pleistocene-aged Troutdale Formation coarse sands and gravels (PNG, 2010).

Soils surrounding the inlet are Sauvie-Rafton-Urban Land Complex. These soils are described as poorly drained silt loam, silt clay loam, and very fine sandy loam. These soils form in flood plains. Soils described as "Urban Land Complex" are typically comprised of fills and reworked soils associated with developed areas.

2.3 Previous Investigations

In 1995, PWC entered into DEQ's Cleanup Program to investigate upland site contamination from past waste handling practices. In July 1996, after performing necessary actions, PWC received an NFA determination from DEQ for upland site soil and groundwater issues. At that time, DEQ did not require PWC to address potential contamination issues in slough sediments in the area adjacent to the facility. DEQ evaluated a remedial action approach for the Columbia slough in a Slough-Wide Feasibility Study completed in March 2005 (DEQ, 2005a). In July 2005, DEQ issued the Record of Decision, Remedial Action Approach for Columbia Slough Sediment which laid out Slough-wide remedial action objectives. In October 2005, DEQ informed PWC that it had reopened its investigation of inlet sediments at the Site.

2.3.1 Expanded Preliminary Assessment and Stormwater/Source Control Assessment Report

In November 2007 and June 2008, PWI collected sediment samples in the Whitaker Slough inlet and main channel. The goal was to determine the nature and extent of sediment contamination in the area of the Whitaker Slough proximate to the PWC property. This included an assessment of whether the PWC property was presently contributing constituents of interest (COIs) to the Whitaker Slough, as well as an evaluation of the impact of historical releases. The work included collection of bank-line soil and sediment samples from outfall locations and surface and subsurface sediment samples from locations in Whitaker Slough.

Sediment sampling was also used to determine the COIs for the Whitaker Slough. Based on sampling results, the COIs for the Whitaker Slough and off-channel bay (the Site) were determined to be metals and petroleum hydrocarbons. The highest concentrations of these COIs were detected in the southeastern area of the inlet, near PWC Outfall-1 and City Outfall 77A. Benthic invertebrates and other ecological receptors that prey upon them are the ecological receptors with the highest potential for exposure and effects due to these COIs.

2.3.2 Columbia Slough Sediment Study – Whitaker Slough Between River Mile 0 and 3.2

In 2011, DEQ conducted an investigation of sediment contamination in an extensive reach of the Whitaker Slough. The purpose of this sediment study was to identify areas of sediment contamination that may warrant cleanup. It was also designed to fill in data gaps from previous studies. Incremental sampling was

used to identify baseline concentrations in the Slough. Fifty sample increments were collected using a grid overlain on the entire 3.2-mile study reach. Material from the 50 locations was randomly combined into three replicates such that each of three samples contained sediment from 30 sample locations. Targeted, composite samples consisting of 5 to 8 subsamples were collected in the vicinity of public and private outfalls and areas of known contamination.

The Portland Willamette Inlet was identified for sediment cleanup based on concentrations of copper and lead detected in this and the 2007/08 studies. Copper was the metal most frequently detected at concentrations significantly above its baseline concentration for the Whitaker Slough.

2.4 Feasibility Study and Staff Report Summary

A Feasibility Study (FS) was prepared to evaluate cleanup options for the Portland Willamette Inlet (DEQ, 2012). The FS evaluated remedial actions consistent with the Record of Decision (ROD) issued for the Columbia Slough in 2005 (DEQ, 2005b). The FS was used to select a protective and feasible remedial alternative to be implemented at the Site. Following a public comment period, DEQ issued a Record of Decision (DEQ, 2013) documenting the selected remedial action for the Site.

The selected remedial action for the Site was removing sediment with a barge-mounted dredge from the central portion of the inlet and placing it on contaminated sediments closer to the eastern and western shorelines. The sediments would be covered with 6 to 12 inches of clean sediment dredged from below the contaminated sediments in the inlet. The wetland benches created by the capped sediments along the eastern and western shorelines of the inlet would be planted with native vegetation. To maintain quality water habitat in the inlet, benches would extend no more than 20 feet (including slope) from the shoreline into the inlet. To maintain optimum conditions for wetland vegetation, the height of the benches would be limited to no more than two feet above the winter water level. There was also a provision for dredging additional clean material, which would be placed over remaining areas of the inlet to further reduce metals concentrations in surface sediment throughout the inlet. At the time the ROD was written, an up-to-date survey of the inlet was not available. Consequently, the ROD provided that if the restrictions on the bench sizes precluded putting the entire volume of sediments in the benches, some or all of the contaminated sediments would be removed from the inlet and disposed of at an acceptable off-site location.

2.5 Remedial Action Objectives

Remedial action objectives (RAOs) were identified to address pathways that pose the potential for unacceptable risk. RAOs for sediment are presented below.

1. The ultimate RAO for the Columbia Slough and associated side channels is to reduce sediment concentrations to protective risk-based levels.

2. The specific RAO for the cleanup of the Portland Willamette Inlet is to actively remediate sediment with the highest concentrations of metals to the extent that natural recovery processes can further reduce concentrations to risk-based levels in a reasonable time frame. Specifically, the objective of this action is to reduce surface sediment concentrations to Whitaker Slough baseline levels (DEQ, 2012). These baseline levels are:

    - 45 milligrams/kilogram (mg/kg) for copper; and
    - 74 mg/kg for lead.

To achieve the Site-specific RAO, active removal/capping was targeted for sediments with surface concentrations greater than or equal to 700 mg/kg for copper or 220 mg/kg for lead. These remediation levels (RLs) were derived by DEQ using an area-weighted average approach throughout the Whitaker Slough. Surface sediment areas associated with the sample containing the highest concentrations were sequentially reduced to baseline concentrations until the resulting area-weighted average concentrations for the Whitaker Slough were at or below the baseline concentrations. Remediating sediment concentrations above the RLs described should result in average sediment concentrations in the Whitaker Slough that are consistent with baseline levels.

Due to restrictions placed on bench construction (height above winter water level and slope), a bench along the shore of the inlet would only hold or cover 11% of the sediment with concentrations above the RLs. Due to the limited capacity of the benches and the fixed cost for building and maintaining them, the value of utilizing shoreline benches for confinement of the contaminated sediment was determined to be minimal. The selected remedy for the inlet was changed to removal and off-site disposal of sediment with concentrations above RLs, followed by capping of the remaining sediment that exceeded Whitaker Slough baseline concentrations (Apex, 2013).

3.0 Remedial Actions Completed

Work associated with the implementation of the Work Plan (Apex, 2013) was completed from November 15, 2013 through February 27, 2014 and is documented in this report. In general, this work included preparatory activities, contaminated sediment removal, confirmation sampling, sediment capping, and site restoration. A photograph log is presented in Appendix A.

3.1 Preparatory Activities

3.1.1 Site Health and Safety Plan Preparation

A Site-Specific Health and Safety Plan (SSHASP) was prepared for the project and included specific job hazards associated with excavation, traffic control, and other construction activities. This SSHASP included detailed information regarding the known Site and chemical hazards. The SSHASP was included in

Appendix B of the Work Plan (Apex, 2013). The SSHASP and the general Apex Health and Safety Plan were on-site at all times during field work and were reviewed in a tailgate meeting prior to the day's activities and when personnel new to the Site arrived.

3.1.2 Mussel Relocation

Allan Smith of Pacific Northwest Native Mussel Work Group sampled for mussels in the inlet on October 28, 2013. Mr. Smith was accompanied by Carmen Owens of Apex. Four north-south and two east-west transects were sampled for the presence of mussels. Sampling equipment consisted of a hardware cloth dredge (opening 20 inches wide, 6 to 9 inches high) with a metal frame and 8-foot handle. No mussels were found during the sampling event. Mr. Smith concluded that the unsuitably soft substrate and lack of shells is evidence that there are no living mussels present in the inlet. Based on the lack of evidence of mussel presence in the inlet, mussel relocation was not required.

3.1.3 Turbidity and Erosion Controls

Typical erosion control best management practices (BMPs) and DEQ 401 Water Quality Certification guidelines were followed, including:

- A silt fence was installed at the base of the west bank of the inlet to protect the inlet from erosion prior to construction of the offload bench (described below; Photograph 3);
- Prior to in-water work, two silt curtains were installed at the mouth of the inlet (Photograph 7);
- A sheetpile dam was constructed across the mouth of the inlet (see Section 3.1.5);
- Straw wattles were placed around the storm drains in the parking lot near the area used for truck loading (Photograph 8); and
- Turbidity monitoring was conducted throughout the remedial action.

Turbidity monitoring was conducted prior to and during the project in accordance with the minimum requirements defined in Appendix C of the Work Plan. Turbidity monitoring was conducted at monitoring points approximately 100 feet downstream of the mouth of the inlet, approximately 100 feet upstream from the mouth of the inlet, and within the inlet.

Turbidity readings were collected by MCDD personnel during the project work hours. Readings were taken every 2 hours in the designated upstream and downstream monitoring locations. A summary of the turbidity data collected by MCDD is provided in Appendix B, including a brief description of activities conducted during the project and any changes to the BMPs required throughout the project to maintain compliance.

3.1.4 Offload Area Preparation

A bench was constructed on the west bank of the inlet to facilitate removal of sediment from the barges. Stackable concrete ecology blocks were placed on the west bank of the inlet and the area behind them backfilled with crushed rock (see Photographs 1 and 2 in Appendix A). This created a flat bench at the approximate elevation of the parking lot. From this platform, an excavator removed sediments from the material barge and placed them directly into 20-yard drop boxes located adjacent to the platform and parking lot loading area (Photograph 3). Equipment used within the inlet during the remedial action, including the spyder hoe and barges, was placed into the work area via the slope adjacent to the platform on the west bank of the inlet. Vegetation removed from the bank was taken off site for use as compost.

3.1.5 Temporary Dam Construction

A sheetpile cofferdam was constructed to isolate the inlet from the Whitaker Slough. The cofferdam was created by driving piles into the sediment at the mouth of the inlet using the barge-mounted spyder hoe (Photographs 4 and 5). The cofferdam was used to raise the water level in the inlet for ease of barge movement and to contain the turbid water within the inlet work area.

3.1.6 Solid Waste and Woody Debris Removal

Solid waste, such as tires, concrete fragments, and other debris, was removed from the inlet and disposed of prior to beginning excavation. Woody debris was moved onto the shore of the inlet after the water level was raised.

3.1.7 Preliminary Location and Depth Control

The remedial action area consisted of six polygons, each with a different removal depth (see Figure 3). Prior to sediment removal activities, the corners of the six polygons were located by MCDD using a survey-grade GPS unit. At each corner, PVC poles were inserted into the sediment and left in place during removal (Photograph 6). These poles were used to guide the excavator operator during sediment removal and capping.

A range pole, calibrated to the tenth of a foot, was used to take preliminary depth soundings within each polygon relative to water levels measured on a staff gauge installed on the cofferdam. Soundings were conducted in accordance with the minimum frequency guidelines defined in Appendix C of the Work Plan. These sounding depths were averaged and used as a baseline for verifying removal depths in each polygon.

3.2 Waste Designation Sampling

The objective of the waste designation sampling was to collect data to evaluate re-use or disposal options for dredged sediment. A volume-weighted composite sample was taken in the inlet prior to dredging that included a sample from each polygon of the remedial action area to the depth of removal. The waste designation sample was analyzed for leachable lead using EPA Method 1131. The laboratory report and chain-of-custody documentation are provided in Appendix C.

Leachable lead was not detected in the waste designation sample WD-1. Since the concentration in the sample was below 5.0 parts per million (ppm), the removed sediment was considered non-hazardous waste and acceptable for disposal at the Wasco County Landfill in The Dalles, Oregon.

3.3 Dredging Activities

3.3.1 Sediment Removal

The equipment used to remove sediment consisted of a barge-mounted spyder hoe and a material barge. The spyder hoe was secured onto the floating barge platform. The floating platform used hydraulically controlled metal piles (spuds) driven into the sediment to stabilize the platform during dredging (Photograph 9).

Sediment was removed using the barge-mounted spyder hoe and placed on the material barge (Photographs 10 through 12). Scupper holes in the side of the material barge allowed the sediment to initially dewater prior to offload. When loaded, the barge was floated to the Sediment Transfer Area at the west bank of the Inlet adjacent to the offload platform (Photograph 13). The excavator on the shore then placed the sediment on top of the bank within the 20-yard drop boxes used as mixing containers (Photographs 14 and 15). The material barge was floated back to the dredging area and the process was repeated (Photograph 16).

Observed sediment conditions encountered during the 2013 remedial action were similar to conditions described in prior studies. Soft, silty surface sediment was underlain by firm sandy silts in the west end of the Inlet (Removal Area #1 and #2, as shown on Figure 3). Soft silt was interbedded with gravelly layers in Removal Area #3. Sediment in Removal Areas #4, #5, and #6 consisted of soft silt at depths ranging from 1 to 3 feet below mud line (bml) underlain by stiff, red, clayey silt. The clayey silt material was stiff to very stiff in Removal Areas #5 and #6 below depths of 1 to 2 feet bml and hard in Removal Area #4 below depths of 3 feet bml.

Paper by-product was used as drying agent to prepare the sediment for transport in trucks. A total of 112 tons of drying agent was used during the remedial action. The drying agent was loaded into the mixing trailers with a bucket loader at a ratio of approximately 10% by volume (Photograph 17). Sediment was

transferred from the mixing trailers into dump trucks for transport to Wasco County Landfill (Photograph 18). Dump trucks were lined and covered with plastic during transport (Photographs 19 and 20).

A range pole, calibrated to the tenth of a foot, was used to verify the final sediment depth in each polygon after dredging. Depth soundings were conducted in accordance with the minimum requirements defined in Appendix C of the Work Plan. Removal depth within each polygon was achieved if each individual measurement was a minimum of 90% of the target removal depth and the average depth of the soundings was greater than the target removal depth. Target removal depths for the six polygons are provided in Table 1. Total final removal depths are provided on Figure 4. The removal depths provided on Figure 4 do not include any additional removal to obtain sediment cap material. Sediment capping is described in Section 3.3.6.

A total of 1,283 tons of sediment were removed from the Inlet and disposed of at Wasco County Landfill in The Dalles, Oregon. Disposal tickets are provided in Appendix B.

3.3.2 Confirmation Sampling

When planned removal depths were achieved within each removal area polygon, representative confirmation sampling was conducted in each area. In accordance with the Work Plan, a total of five 5-point composite confirmation samples were collected over the six removal areas to confirm that copper and lead in the remedial action area were below baseline concentrations (74 ppm for lead and 45 ppm for copper). Surface samples (0 to 6 inches bml) were collected in accordance with the Sampling and Analysis Plan (SAP) presented in Appendix A of the Work Plan. Sample locations are shown on Figure 6.

3.3.3 Chemical Analysis

Confirmation sediment samples were sent to Apex Laboratories in Tigard, Oregon following chain-of-custody procedures. Confirmation sediment samples were analyzed for lead and copper using EPA Method 6010. Laboratory analytical reports, chain-of-custody documentation, and a quality assurance review are provided in Appendix C.

3.3.4 Chemical Results and Data Evaluation

For each removal area, sediment management determinations were based upon the portion of each removal area represented by each composite confirmation sample (PWI-1 through PWI-5). A summary of chemical results and data evaluation for each sample is presented below.

- Sample PWI-1. Composite sample PWI-1 represented the west half of Removal Area #1. Removal Areas are shown on Figure 3 and sample locations are shown on Figure 6. For initial confirmation sampling, sample PWI-1 concentrations were 348 mg/kg for copper and 197 mg/kg for lead, exceeding Whitaker Slough baseline levels (45 mg/kg and 74 mg/kg, respectively). Based on

the PWI-1 concentrations, Apex recommended contingency dredging of an additional 1 foot of sediment from the western half of Removal Area #1.

- Sample PWI-2. Composite sample PWI-2 represented the east half of Removal Area #1 and west half of Removal Area #2. Concentrations in sample PWI-2 were 78.0 mg/kg for copper and 53.3 mg/kg for lead, slightly exceeding Whitaker Slough baseline levels (45 mg/kg and 74 mg/kg, respectively) for copper, but not lead. Based on these concentrations, no additional dredging was recommended for the area represented by confirmation sample PWI-2.
- Sample PWI-3. Composite sample PWI-3 represented the east half of Removal Area #2 and Removal Area #3. Concentrations in sample PWI-3 were 405 mg/kg for copper and 137 mg/kg for lead, exceeding Whitaker Slough baseline levels (45 mg/kg and 74 mg/kg, respectively) for both copper and lead. Based on the PWI-2 concentrations and limited historical analytical data at depths below the removal depth, Apex recommended capping the east half of Removal Area #2 and Removal Area #3.
- Sample PWI-4. Composite sample PWI-4 represented Removal Area #4. Concentrations in sample PWI-4 were 78.5 mg/kg for copper and 29.9 mg/kg for lead, exceeding Whitaker Slough baseline levels (45 mg/kg and 74 mg/kg, respectively) for copper, but not lead. Based on these concentrations, no additional dredging was recommended for the area represented by confirmation sample PWI-4.
- Sample PWI-5. Composite sample PWI-5 represents Removal Area #5 and Removal Area #6. For initial confirmation sampling, sample PWI-5 concentrations were 251 mg/kg for copper and 170 mg/kg for lead, exceeding Whitaker Slough baseline levels (45 mg/kg and 74 mg/kg, respectively). Based on the PWI-5 concentrations, Apex recommended contingency dredging of an additional 1 foot of sediment from Removal Area #5 and #6.

3.3.5 Contingency Dredging

Concentrations of lead and copper in confirmation samples PWI-1 and PWI-5 at the planned removal depth exceeded baseline concentrations by factors of 1.9 to 2.7 for lead and 5.6 to 7.7 for copper. Based on these concentrations, additional dredging was recommended for each removal area represented by samples PWI-1 and PWI-5. MCDD dredged a minimum of 1 foot of additional sediment from each of these areas.

Following contingency dredging, concentrations of lead in follow-up confirmation samples PWI-1a and PWI-5a were below Whitaker Slough baseline concentrations. Concentrations of copper in follow-up confirmation samples were below baseline levels in sample PWI-1 and exceeded baseline concentrations in sample PWI-5 by a factor of 1.3. Based on these concentrations, no additional dredging was recommended for the areas represented by confirmation samples PWI-1 and PWI-5.

With the exception of the area represented by sample PWI-3 (recommended for capping), each of the final depth samples were below Whitaker Slough baseline concentrations for lead. Baseline concentrations for copper were achieved only in sample PWI-1 in secondary confirmation samples that followed contingency removal. For each of the other final removal depth confirmation samples (PWI-2, PWI-3, and PWI-5), copper concentrations exceeded baseline levels by a factor of 1.3 to 1.7.

The final depths of removal for portions of removal areas represented by each confirmation sample are shown in Table 1. Confirmation sample results at the final removal depth are shown on Figure 6.

3.3.6 Sediment Capping

As presented in the Work Plan, a sediment cap 4 to 12 inches thick was planned for portions of the dredged area with sediment concentrations above baseline concentrations but below RLs as determined by confirmation sampling. In addition, a sediment cap was proposed for areas outside of the dredging area with surface sediment concentrations above baseline levels based on historical sample results. According to the Work Plan, the sediment for the cap was to be excavated from borrow areas with lead and copper concentrations below baseline levels as determined by confirmation sediment sampling results.

Based on the results of the actual confirmation sampling and sediment conditions at the final removal depth, limited areas of usable borrow meeting the baseline concentrations for both lead and copper were available. On the east side of the inlet, sediment in Removal Areas #4, #5, and #6 consisted stiff, red, clayey silt at depths ranging from 1 to 3 feet bml. The material below the removal depth from area #4 was unsuitable for use as borrow. The material below the removal depth from areas #5 and #6 was marginally suitable for borrow. As a result of these conditions, the material available for capping was limited within the Inlet.

Based on the lead and copper concentrations in confirmation sample PWI-3 (137 mg/kg and 405 mg/kg, respectively) and limited historical data below the planned removal depth, Apex recommended capping of the sediment within the portions of Removal Area #2 and #3 represented by this sample. Based on the limited borrow available for use as cap material, the remaining removal areas were not capped. The cap and borrow areas are shown on Figure 5. The final lead and copper concentrations within the Inlet, including areas of removal and capping, are shown on Figure 6.

Borrow was used from sections of Removal Areas #1, #2, #5, and #6, represented by samples PW-1, PW-2, and PW-5. In general, sediment borrow used for capping was removed from the upper foot of sediment in the sediment borrow areas. The sediment was then either spread directly onto the sediment cap area (Photograph 21) or placed on a barge if the sediment required pulverizing or transport to the capping area.

Cap thickness was confirmed by comparison of preliminary and post-cap soundings within each cap area. Depth soundings were conducted with a range pole, calibrated to the tenth of a foot, and was completed in accordance with the minimum requirements defined in Appendix C of the Work Plan. Depth soundings

within each area verified the sediment cap was greater than 6 inches in thickness in all cap areas. A total of 7,348 square feet of sediment surface within the Inlet was capped.

3.4 Site Restoration

3.4.1 Site Restoration

The temporary bench constructed for the excavator to transfer sediment was removed on January 7, 2014. The parking lot fence was reinstalled on January 24, 2014 (Photograph 22). On February 27, 2014, the area was re-graded, planted with native plants, and hydroseeded by the City of Portland ReVeg group according to their Intergovernmental Agreement with MCDD (Photograph 23).

3.4.2 Removal of Temporary Dam

The temporary dam and silt curtains were removed on December 31, 2013 after turbidity in the inlet had settled to background levels.

3.5 Deviations from the Work Plan

3.5.1 Change in Removal Area Outline

During designation of the removal area as outlined in Section 3.1.7, it was found that the north end of Removal Area #4 and the east ends of Removal Areas #5 and #6 were upland areas within the inlet and therefore not representative of areas targeted for contaminated sediment removal. Based on these observations, upland areas within the removal area were delineated and adjustments were made to the removal areas accordingly. The planned and actual removal areas are shown on Figure 4.

3.5.2 Additional Sediment Sampling

DEQ requested that the area northeast of Removal Area #1 be sampled to determine its suitability as capping material. The sample (PWI-6) location and results are shown on Figure 6. Copper concentrations in the composite sample were above Whitaker Slough baseline levels and therefore the sediment was not used for capping.

4.0 Conclusions

From November 15, 2013 through February 27, 2014, MCDD conducted the remedial action for the Portland Willamette inlet. The project consisted of removal of 1,283 tons of sediment and capping of 7,348 square feet of sediment surface within the Inlet.

The completed remedial action achieves the RAO of the Portland Willamette inlet to actively remediate sediment with the highest concentrations of metals to the extent that natural recovery processes can further reduce concentrations to risk-based levels in a reasonable time frame. The remedial actions completed also support the ultimate RAO for the Columbia Slough and associated side channels to reduce sediment concentrations to protective risk-based levels.

5.0 References

Apex, 2013. *Remedial Design/Remedial Action Work Plan Portland Willamette Inlet.* August 26, 2013.

DEQ, 2005a. *Feasibility Study – Columbia Slough*. March 5, 2005.

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DEQ, 2012. *Feasibility Study, Portland Willamette Inlet to the Whitaker Slough*. December 4, 2012.

DEQ, 2013. *Record of Decision, Portland Willamette Inlet off Whitaker Slough*. April 2013.

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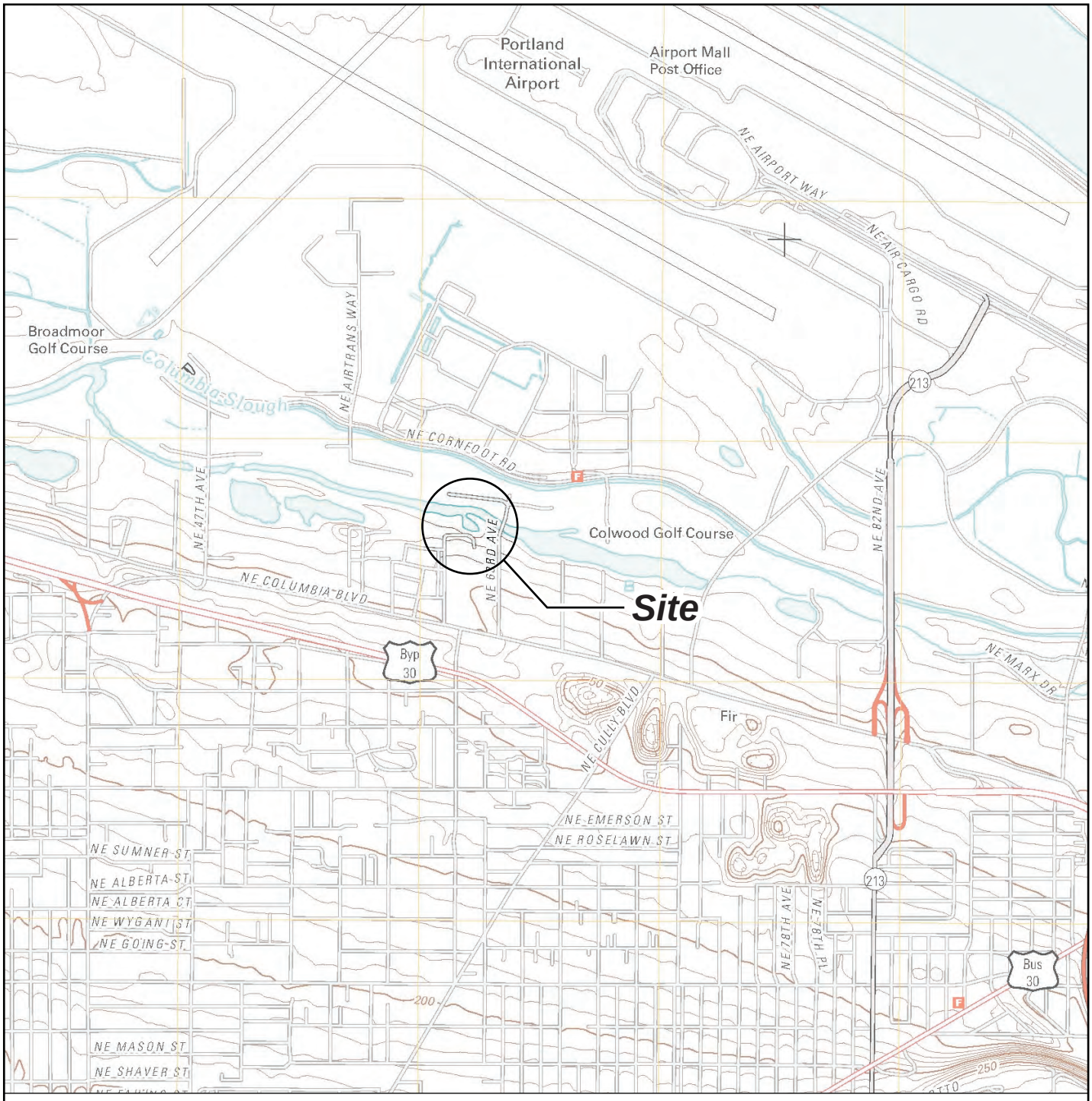
Table 1
Sediment Removal Depths
Portland Willamette Inlet

Confirmation Sample	Removal Area Represented by Confirmation Sample	Minimum Planned Removal Depth (feet)	Depth of Sediment Removed (feet)		
			Before Confirmation Sampling	After Confirmation Sampling	Total
PWI-1	West End of Removal Area #1	1	1.7	1.4	3.1
PWI-2	East End of Removal Area #1	1	1.7	0.0	1.7
	West End of Removal Area #2	2	2.2	0.0	2.2
PWI-3	East End of Removal Area #2	2	2.2	0.0	2.2
	Removal Area #3	3	3.2	0.0	3.2
PWI-4	Removal Area #4	4	4.8	0.0	4.8
PWI-5	Removal Area #5	1	1.4	1.1	2.5
	Removal Area #6	2	2.8	1.1	3.9

Table 2
Confirmation Sample Results
Portland Willamette Inlet

Confirmation Sample Number	Date	Lead	Copper
		mg/kg	
PWI-1	12/3/2013	**197**	**348**
PWI-1a	12/16/2013	21.0	30.8
PWI-2	12/9/2013	53.3	**78.0**
PWI-3	12/9/2013	**137**	**405**
PWI-4	12/5/2013	29.9	**78.5**
PWI-5	12/11/2013	**170**	**251**
PWI-5a	12/18/2013	34.0	**59.4**
PWI-6[4]	12/16/2013	66.3	**99.9**
Whitaker Slough Baseline Levels		74	45

Notes:
1. Bold = concentration above Whitaker Slough baseline levels
2. Shaded = Results are from intial confirmation sampling, before additional contingency dredging (PWI-1, PWI-2) or capping (PWI-3) was completed.
3. mg/kg = milligrams per kilogram
4. Sample PWI-6 was a non-removal area sample collected to determine material suitability as possible cap borrow.



Note: Base map prepared from USGS 7.5-minute quadrangle of Mt. Tabor, OR, dated 2011 as provided by USGS.gov.

0 2,000 4,000

Approximate Scale in Feet

Site Location Map

Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	2025-00	Figure
March 2014		1

0 100 200

Scale in Feet

Legend:

——- - - —— Tax Lot Line

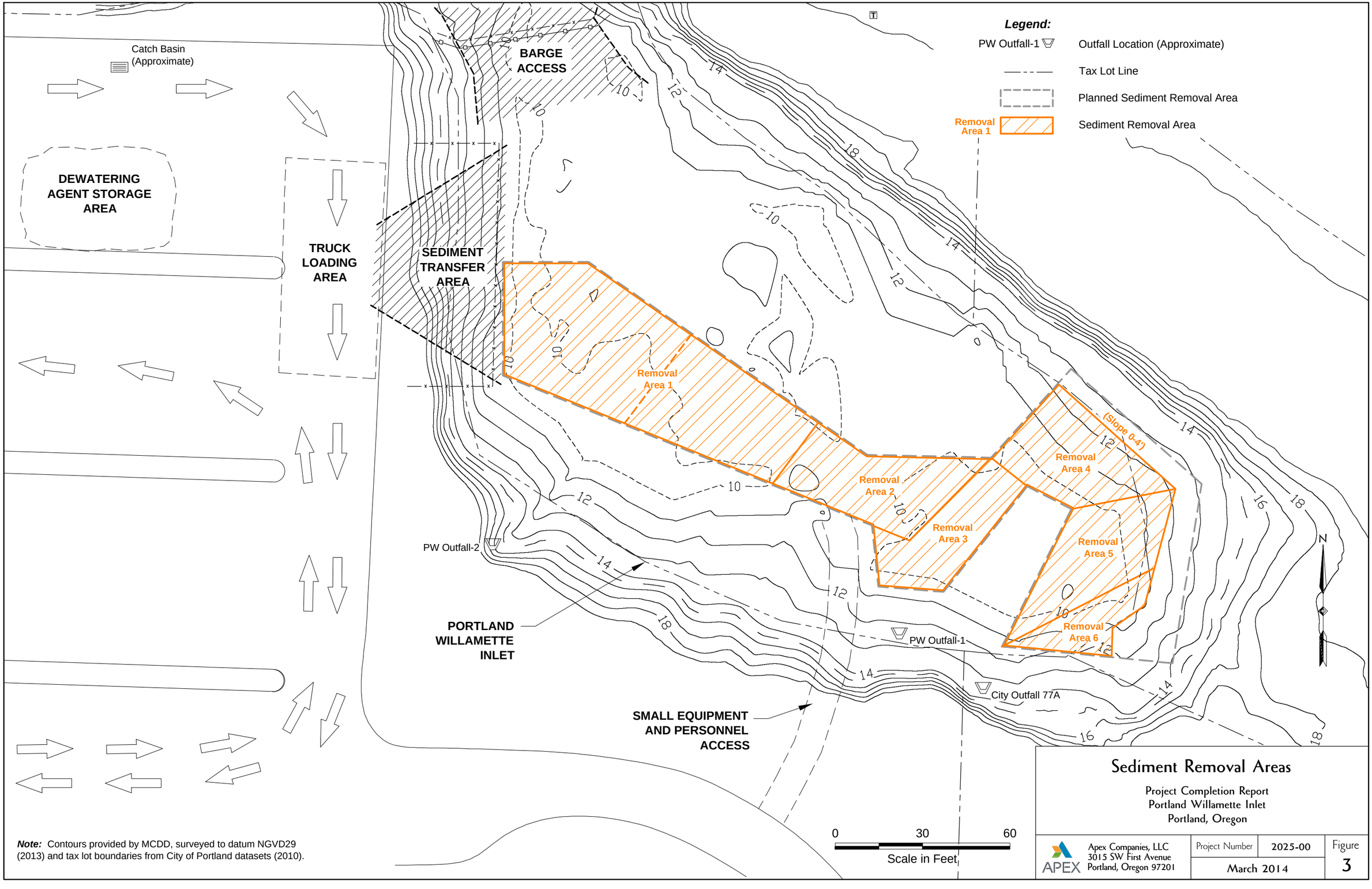
Site Vicinity Plan

Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Note: Base map prepared from Google Maps (aerial dated August 22, 2011) and tax lot boundaries from City of Portland datasets (2010).

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	2025-00	Figure
March 2014		2



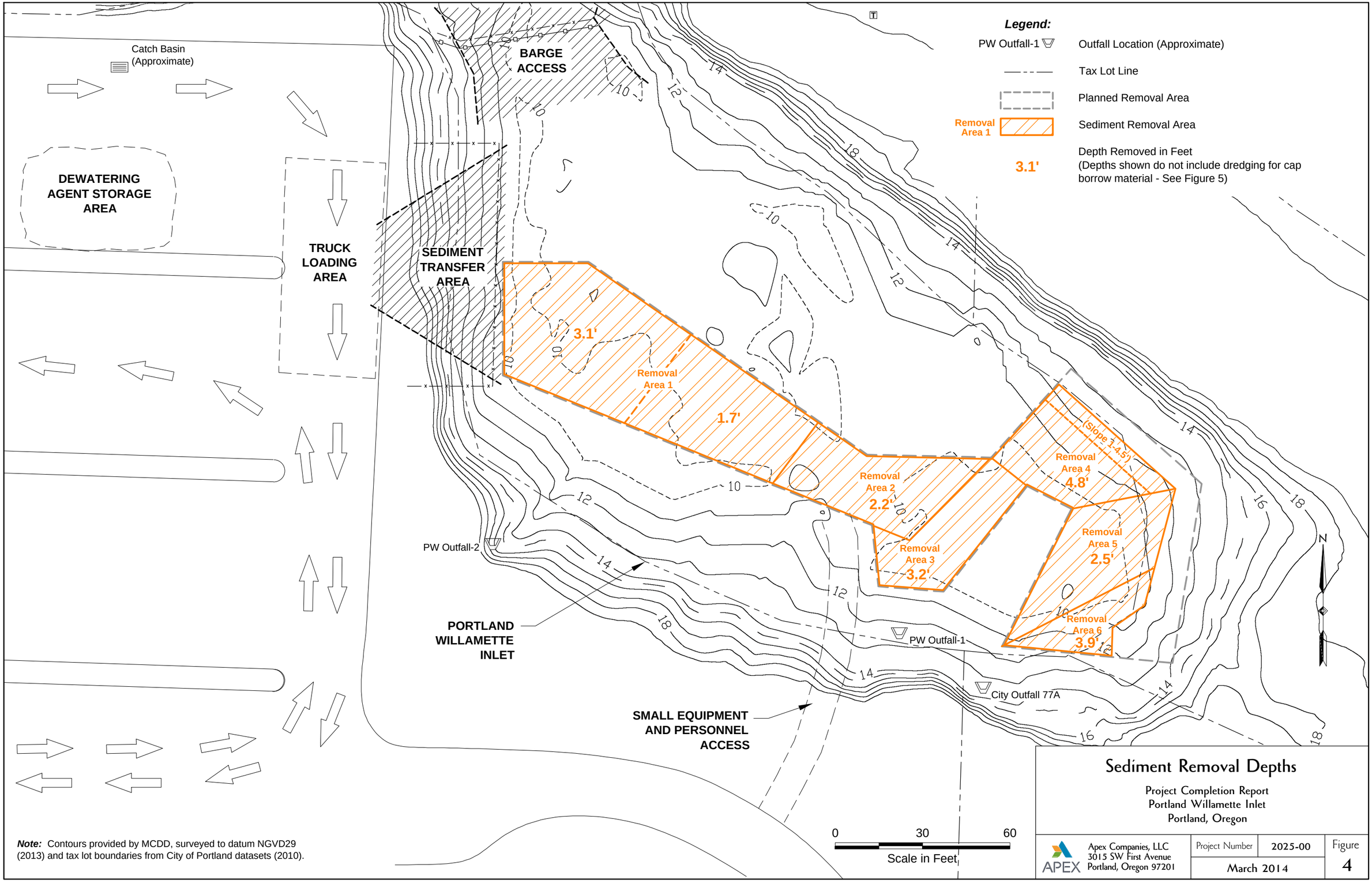
Note: Contours provided by MCDD, surveyed to datum NGVD29 (2013) and tax lot boundaries from City of Portland datasets (2010).

Sediment Removal Areas

Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	2025-00	Figure
March 2014		3



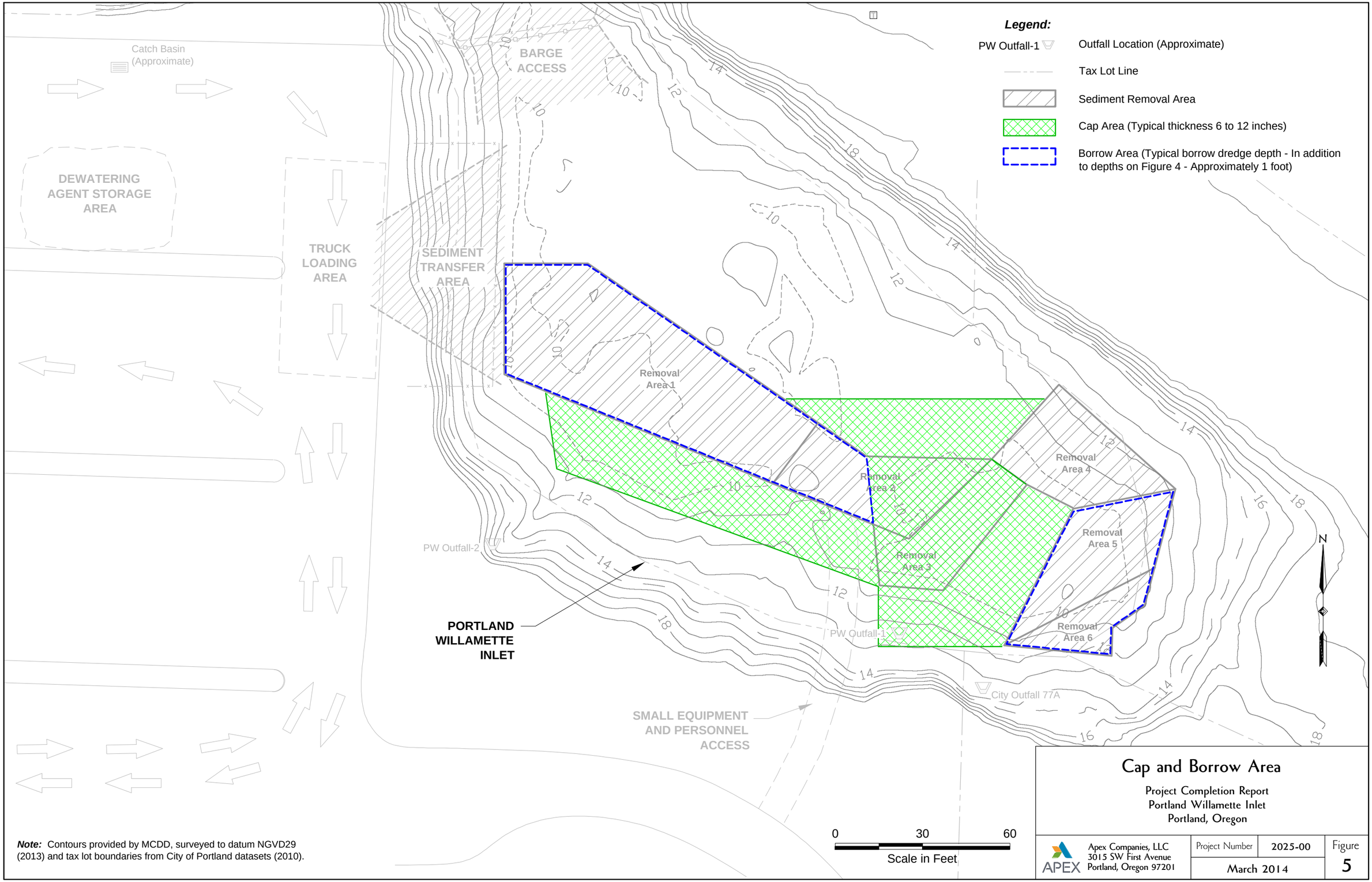
Note: Contours provided by MCDD, surveyed to datum NGVD29 (2013) and tax lot boundaries from City of Portland datasets (2010).

Sediment Removal Depths

Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	2025-00	Figure
March 2014		4



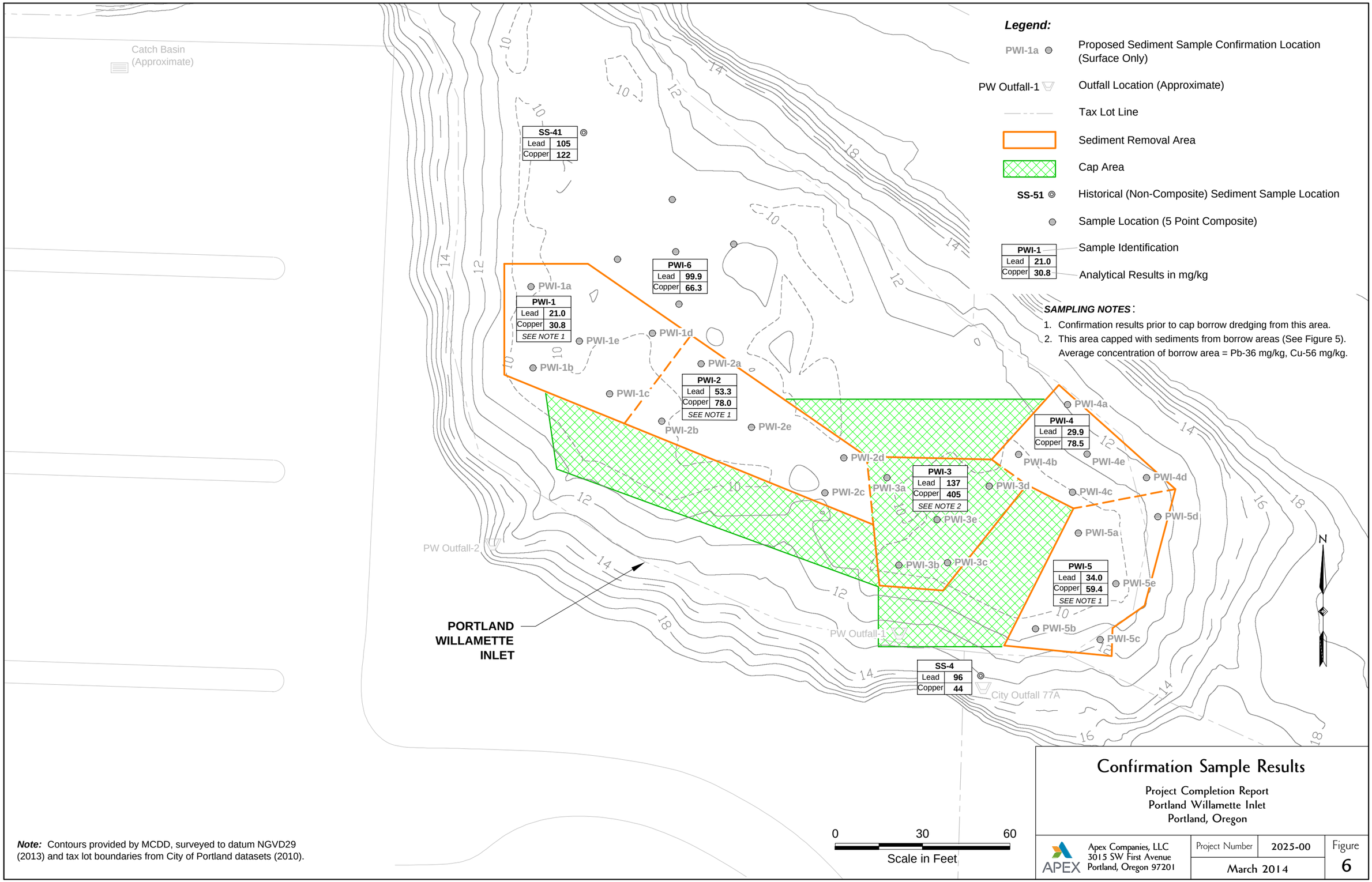
Note: Contours provided by MCDD, surveyed to datum NGVD29 (2013) and tax lot boundaries from City of Portland datasets (2010).

Cap and Borrow Area

Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	2025-00	Figure
March 2014		5



Note: Contours provided by MCDD, surveyed to datum NGVD29 (2013) and tax lot boundaries from City of Portland datasets (2010).

Confirmation Sample Results

Project Completion Report
Portland Willamette Inlet
Portland, Oregon

Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	2025-00	Figure
March 2014		6

Appendix A

Photograph Log

Photo 1

Placing stackable concrete blocks on west bank of inlet to create bench.

Facing north.

Photo 2

Placing stackable concrete blocks on west bank of inlet to create bench.

Facing northwest.

Photo 3

Completed bench for off-loading sediment from barge.

Facing west.

Photo 4

Spyder hoe excavator driving piles into sediment during construction of temporary dam at mouth of inlet.

Facing north.

Photo 5

Temporary dam installed at mouth of inlet to raise water level and contain turbidity during sediment removal.

Facing northwest.

Photo 6

PVC poles used to mark removal polygons and capping areas in inlet.

Facing east.

Photo 7

Silt curtains placed at mouth of inlet prior to construction of temporary dam.

Facing northwest.

Photo 8

Straw wattle installed around storm drain in parking lot.

Facing east.

Photo 9

Spyder hoe secured onto floating platform. Hydraulically controlled piles used to control location of platform in inlet (see rust colored post on right side of platform).

Facing north.

Photo 10

Spyder hoe excavator removing sediment from inlet bottom.

Facing north.

Photo 11

Spyder hoe moving sediment towards barge.

Facing northeast.

Photo 12

Sediment being loaded onto barge for transport to west bank loading area.

Facing east.

Photo 13

Barge secured to west bank for unloading of sediment. Note scupper holes in side of barge for dewatering.

Facing east.

Photo 14

Excavator removing sediment from barge.

Facing southeast.

Photo 15

Sediment being loaded into mixing boxes on west shore of inlet.

Facing northeast.

Photo 16

Empty barge being moved back to floating platform to continue sediment removal.

Facing southeast.

Photo 17

Dewatering agent being added to sediment in mixing trailers.

Facing north.

Photo 18

Loading truck with sediment for transport off site.

Facing north.

Photo 19

Truck bed lined with plastic before being loaded with sediment.

Facing north.

Photo 20

Covered truck leaving site.

Facing east.

Photo 21

Spreading cap sediment with barge-mounted Spyder hoe excavator in cap area south of removal polygon 1.

Facing east.

Photo 22

Fence restored in parking area.

Facing northeast.

Photo 23

West slope of inlet re-planted and seeded by City of Portland ReVeg department.

Facing north.

Appendix B

Documentation Provided by MCDD

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/21/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Preparation Completed- Commence Dredging of Area #1 Filled boxes and removed one truck from the site.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			8.50		$45		$383
OPERATOR #2			8.50		$45		$383
UTILITY			5.00		$20		$100
DAILY LABOR SUB-TOTAL							$1,030

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	3.00	$306		$918
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	3.00	$15		$45
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,515

DAILY TOTAL	$3,545

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/22/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging of Area #1 removed four truck loads from the site.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			4.00		$55		$220
OPERATOR #1			10.50		$45		$473
OPERATOR #2			10.00		$45		$450
UTILITY			10.00		$20		$200
DAILY LABOR SUB-TOTAL							$1,343

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	9.00	$160		$1,440
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,598

DAILY TOTAL	$4,941

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/25/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued dredging removed three truck loads of sediment and received one load of drying agent. Finishing section #1 and starting on section #2

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.50		$55		$138
OPERATOR #1			11.00		$45		$495
OPERATOR #2			11.00		$45		$495
UTILITY			9.50		$20		$190
DAILY LABOR SUB-TOTAL							$1,318

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	10.00	$160		$1,600
BOAT	7.00	$15		$105
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,773

DAILY TOTAL		$5,091

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/26/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed three truck loads. Working in sections #2 and #3. Break down at the end of the day. Repairs estimated eairly tomorrow.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.50		$55		$193
OPERATOR #1			8.50		$45		$383
OPERATOR #2			9.50		$45		$428
UTILITY			9.50		$20		$190
DAILY LABOR SUB-TOTAL							$1,193

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.00	$160		$1,280
BOAT	7.00	$15		$105
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,453

DAILY TOTAL			$4,646

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/27/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed one truck load and filled mixing boxes. Working in sections #2 and #3 and #4. Repairs to excavator.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			6.00		$55		$330
OPERATOR #1			7.00		$45		$315
OPERATOR #2			7.00		$45		$315
UTILITY			6.00		$20		$120
DAILY LABOR SUB-TOTAL							$1,080

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	6.00	$160		$960
BOAT	4.00	$15		$60
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,436

DAILY TOTAL	$3,516

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/2/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed four truck loads. Working in section #4

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY			3.00		$20		$60
DAILY LABOR SUB-TOTAL							$1,080

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.50	$306		$1,989
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,671

DAILY TOTAL		$4,751

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/3/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed one truck load. Working in section #4. Barge Repair.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			4.00		$45		$180
OPERATOR #2			3.00		$45		$135
UTILITY			2.00		$20		$40
DAILY LABOR SUB-TOTAL							$465

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	3.00	$306		$918
CASE EXCAVATOR	4.00	$160		$640
BOAT	2.00	$15		$30
BACK HOE	1.00	$40		$40
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,740

DAILY TOTAL	$2,205

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/4/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed two truck loads. Working in section #4.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY			3.00		$20		$60
DAILY LABOR SUB-TOTAL							$1,080

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	5.00	$306		$1,530
CASE EXCAVATOR	6.00	$160		$960
BOAT	5.00	$15		$75
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,797

DAILY TOTAL		$3,877

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/5/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed three truck loads and filled boxes. Working in section #4 and section #3

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			8.50		$45		$383
OPERATOR #2			8.50		$45		$383
UTILITY			1.00		$20		$20
DAILY LABOR SUB-TOTAL							$950

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.00	$160		$1,280
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,438

DAILY TOTAL			$4,388

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET **12/6/2013**

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed one truck load. Working in section #2 and section #3.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			5.00		$45		$225
OPERATOR #2			5.00		$45		$225
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$560

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	5.00	$160		$800
BOAT	2.00	$15		$30
BACK HOE	1.00	$40		$40
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,206

DAILY TOTAL	$2,766

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/9/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Three truck loads. Working in section #5 and section #6.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$910

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,518

DAILY TOTAL			$4,428

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/10/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed two truck loads. Completed all sections to specified depths.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			8.50		$45		$383
OPERATOR #2			8.50		$45		$383
UTILITY			5.00		$20		$100
DAILY LABOR SUB-TOTAL							$920

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.00	$160		$1,280
BOAT	5.00	$15		$75
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,383

DAILY TOTAL	$4,303

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/11/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging section #1 west area filled boxes. Marked/sounded section #1 west area.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			5.00		$45		$225
OPERATOR #2			5.00		$45		$225
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$505

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	4.00	$160		$640
BOAT	5.00	$15		$75
BACK HOE	1.00	$40		$40
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,091

DAILY TOTAL	$2,596

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/12/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed four trucks. Dredging in west section #1

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$965

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	7.00	$306		$2,142
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	3.00	$15		$45
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,739

DAILY TOTAL	$4,704

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/13/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Two Trucks. Dredging in west section #1

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			5.00		$45		$225
OPERATOR #2			5.00		$45		$225
UTILITY			1.00		$20		$20
DAILY LABOR SUB-TOTAL							$525

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	5.00	$160		$800
BOAT	2.00	$15		$30
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,246

DAILY TOTAL	$2,771

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/16/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging filled boxes. Dredging in west sections 1-5-6

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			7.00		$45		$315
OPERATOR #2			7.00		$45		$315
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$740

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	2.00	$160		$320
BOAT	4.00	$15		$60
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,796

DAILY TOTAL		$2,536

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/17/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Four Trucks. Dredging sections #5 &#6

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY			2.00		$20		$40
DAILY LABOR SUB-TOTAL							$1,005

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	7.00	$306		$2,142
CASE EXCAVATOR	9.00	$160		$1,440
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,904

DAILY TOTAL		$4,909

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/18/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Two Trucks. Dredging sections #5 & #6

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			7.00		$45		$315
OPERATOR #2			7.00		$45		$315
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$740

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	6.00	$160		$960
BOAT	6.00	$15		$90
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,466

DAILY TOTAL	$3,206

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/19/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Dredging activities clean up and quality control measures. Begin capping

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1					$45		$0
OPERATOR #2			7.00		$45		$315
UTILITY			7.00		$20		$140
DAILY LABOR SUB-TOTAL							$620

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE		$306		$0
CASE EXCAVATOR	4.00	$160		$640
BOAT	6.00	$15		$90
BACK HOE	4.00	$40		$160
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,002

DAILY TOTAL			$1,622

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/20/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Removed one / final truck load of sediments. Final mix box cleanout and dredging clean up including dredging sediments from in front of the off load area.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			5.00		$55		$275
OPERATOR #1			8.00		$45		$360
OPERATOR #2			2.00		$45		$90
UTILITY			18.00		$20		$360
DAILY LABOR SUB-TOTAL							$1,085

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	1.00	$306		$306
CASE EXCAVATOR	6.00	$160		$960
BOAT	6.00	$15		$90
BACK HOE	4.00	$40		$160
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,628

DAILY TOTAL	$2,713

PORTLAND WILLAMETTE INLET DREDGING TIME AND MATERIALS DAILY (ESTIMATE)

DATE	Ticket #	QTY. TON	STAND BY HR.	DRY AGENT TON	MCDD T&M DREDGING	Capping	Materials Rental Dredging	Total
11/19/2013				31.39				
11/21/2013					$3,545			
11/22/2013	109333	32.74	0.5		$4,941			
	113083	31.04	0.5					
	107544	31.46	0.5					
11/25/2013	113084	30.15	0.25	30.65	$5,091			
	113208	31.39	0.5					
	107545	29.46	1					
11/26/2013	113209	29.9	0		$4,646			
	112751	30.57	0					
	113086	30.92	0					
	107182	29.59	0.5					
11/27/2013	109337	31.52	0.5		$3,516			
	107183	31.13	0.75					
12/2/2013	107185	32.26	0.75	24.35	$4,751			
	113214	30.88	0.5					
	113092	31.46	1					
12/3/2013	113215	31.49	0		$2,205			
	113093	32.72	0					
12/4/2013	112240	29.95	0.25		$3,877			
	113096	32.41	0					
12/5/2013	109341	31.3	0.75		$4,388			
	112243	31.32	0.25					
	113098	30.62	0					
12/6/2013	109342	32.94	0		$2,766			
	113218	31.46	0					
12/9/2013					$4,428			

PORTLAND WILLAMETTE INLET DREDGING TIME AND MATERIALS DAILY (ESTIMATE)

12/10/2013	112901	32.27	0.25		$4,303			
	113220	30.93	0					
12/11/2013	112903	31.31	0.25	25.24	$2,596			
	113221	31.48	0					
12/12/2013	113224	31.56	0.25		$4,704			
	113225	31.14	0.25			30%		
12/13/2013	112437	31.86	1		$2,771	2204		
	112775	32.41	0			$0.49		
	112906	31.48	0.25					
12/16/2013	112757	30.95	0		$2,536	$1,079.96		
12/17/2013	113457	30.85	0.25		$4,909			
	112440	31.52	0			70%		
12/18/2013	112441	62.51	0.5		$3,206	5144		
	104893	29.15	0.5			$1.47		
	113458	31.27	0					
12/19/2013					$1,622	$7,561.68		
12/20/2013					$2,713			
12/23/2013	112605	33.58	0					
		1282.95	12	111.63		7,348	2	
		TN	HR	TN		SQ Feet	MTH	
		$36.00	$105.00	$110.00		$8,641.64	$5,500.00	
	$46,186.20		**$1,260.00**	**$12,279.30**	**$73,514.00**	**$8,641.64**	**$11,000.00**	
	Truck/Disposal		Stand By	Dry Agent	MCDD Labor&Equip	Capping	Rental Eqip.	
	Disposal and Transport				Dredging		Dredging	
								$152,881.14

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-22-13

Sold To: WASCO / Multnomah CD

Address:

City:

Driver: B Mitchum | Truck & Trailer: 8503 / 8908

Qty.	Description	Price	Amount	
32.74	Spoils to WASCO			
	LANDFILL			
	# 120675 ticket			
	# 136067 506 #			
	Arrive 1:20 pm			
	Leave 2:20 pm			
	1/2 hr Standby			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax		
	Total		

246115 / 4055211

109333

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13085		11-25-13

Sold To: Multi County Drainage

Address:

City:

Driver: Mike

Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount
30.15	Ton Draggings Hauled		
	to Wasco Landfill		
	Tic # 127766		
	45 min load time		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Tax	
Total	

Rec'd By

248115 / 4055211

113084

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-17-13

Sold To: MCDD

Address:

City:

Driver: Mike | Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount	
30.85	Ton Spoils Hauled			
	to Waste Landfill			
	Tic # 128696			
	Load time 45 min			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By:

Tax		
Total		

248115 / 4055211

113457

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-11-13

Sold To: Multnomah County Drainage District

Address:

City: Portland to Wasco

Driver	Truck & Trailer
Tim	8506-8906

Qty.	Description	Price	Amount	
	tons of dredgings			
31.31	# 128435			
	Load time .75 2:09-2:51			
	Stand by time .25 2:40-2:51			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112903

Thank You

Project Work Order # Year 2013 Month 11 Number 1 (13-11-1)

PROJECT WORK ORDER	Work Orders Must be Filled Out Electronically and Approved Prior to Starting a Project
Work To Be Performed In	( ) Pen 1 ( ) Pen 2 (x) MCDD ( ) SDIC
Work Order Issued By (Int. Box)	( ) BW (x) JM ( ) SL Date:
Estimated Completion	Date:1/1/14
Project Name and Location	Portland Willamette Inlet
Project Code/Budget Line	DEQ-MCDD IGA
Project Contract # and Sub Section Purchase Order # to do work on a cor	
Project Description	
Project Perfomed By	
Contractor Name Contractors	
Equipment Required (x) Rent ( ) On Hand	
Personnel Required	
Material Requirments ( ) On Hand (x) Purchase Purchase Order # (s)	
Reviewed Permit Conditions	
Special Permit Conditions	
Notified Property Owner	
Special Concerns or Requirments	
Work Order Approved By	
Work Order Submitted to Accounti	

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-16-13
Sold To Wasco / MCDD		
Address		
City		

Driver B. Mitchum | Truck & Trailer 8908 / 8908

Qty.	Description	Price	Amount
30.95	Spoils to Wasco		
	landfill		
	# 128596 ticket		
	# 136067 Job #		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

248115 / 4055211

112757

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12/19/2015

Sold To

Address

City McMinnville, Or. Stew

Driver Michael Jackson | Truck & Trailer 8507 - 8504

Qty.	Description	Price	Amount	
	#1 Lords Mill			
	#128709 31.52 T.			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

112440

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		7/18/2013

Sold To

Address

City Hutchinson Station

Driver Michael Jamison | Truck & Trailer 8501 - 8901

Qty.	Description	Price	Amount
2	loads HUD		
	# 128735 31.16 T		
	# 128769 31.35 T		
	1 hour load on 2ND load		
	1ST was a preload		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax	
	Total	

248115 / 4055211

112441

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-18-13
Sold To MULTNOMAH City DRAINAGE		
Address ~~PDX~~		
City PORTLAND ORE		

Driver Skip Dougherty	Truck & Trailer 6513 - 8901

Qty.	Description	Price	Amount	
1	Contaminated Soil			
	START 7:00 AM			
	END 8:00 AM on Site			
	WASH 10:00 AM			
	END 10:35 AM			
	Order # 136067			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

14893

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13-6067		12-18-13

Sold To: MCDD

Address:

City:

Driver: Mika

Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount	
31.27	Ton Spoils Hauled			
	to Waste Landfill			
	Lic # 128740			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

113458

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-23-13

Sold To: MULTNOMAH County Drainage #1

Address:

City: WASCO County Fill

Driver	Truck & Trailer
Ray Morris	8565/8911

Qty	Description	Price	Amount	
	DREDGE SPOILS 13137			
	WASCO # - 128935			
	TONS # - 33.58			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

112605

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136069		12/2/13

Sold To: MULTNOMAH COUNTY DRAINAGE

Address: PORTLAND TO WASCO LANDFILL

City: (PRELOAD)

Driver: ERIC

Truck & Trailer: 8509 / 8909

Qty.	Description	Price	Amount	
32.26	TONS CONT. Ord # 128131			
	.75 HRS STANDBY TIME			
	>			
	Not Responsible for Damage Behind Curb Line		—	

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

107185

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-6-13

Sold To: WASCO / Multnomah County Drain

Address:

City:

Driver: B Mitchem | Truck & Trailer: 8509 / 8908

Qty.	Description	Price	Amount	
32.14	SDIS to WASCO			
	Invoice			
	# 128309 ticket			
	# 136067 Job #			
	* Pre load			
	>			
	Not Responsible for Damage Behind Curb Line			
	All claims and returned goods MUST be accompanied by this bill.	Tax		
	Rec'd By	Total		

248115 / 4055211

109342

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-6-13

Sold To: Multifamily 59th PL -

Address: TO WHSCO.

City:

Driver: Monty H.

Truck & Trailer: 503-8903

Qty.	Description	Price	Amount
31.64	Dirt - 128320		
	Loading - 7 hrs SE.		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax	
	Total	

248115 / 4055211

113218

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-10-13

Sold To: Multnomah Drainage

Address:

City: Portland to Wesco

Driver: Tim

Truck & Trailer: 8506-8906

Qty.	Description	Price	Amount	
	tons of dredgings			
32.27	# 128386			
	Load time .75 3:04-3:47			
	Stand by time .75 3:30-3:47			
	>			
	Not Responsible for Damage Behind Curb Line			
	All claims and returned goods MUST be accompanied by this bill.	Tax		
	Rec'd By	Total		

248115 / 4055211

112901

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-10-13

Sold To: Multi Norman Drainage

Address: 59th PL

City:

Driver: Wally H

Truck & Trailer: 8503-8903

Qty.	Description	Price	Amount	
30.93	U.T - 128382			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

113220

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136667		12-11-13

Sold To: Multnomah Channel.

Address: 59th PL

City: Portland -

Driver: Monty H.

Truck & Trailer: 8503-8903

Qty.	Description	Price	Amount	
31.48	D.T - 1254111			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax		
	Total		

248115 / 4055211

113221

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
P36867		12-12-13

Sold To: Multnomah Channel

Address: 5th, PL.

City: Portland

Driver: Mark H.

Truck & Trailer: 8502 - 8704

Qty.	Description	Price	Amount
31 SC	D.T - 125478		
	20 mins Standing		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

113224

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136069		12-12-13

Sold To: Multnomah Channel.

Address: 5944 PL.

City: portland

Driver: Monty H. | Truck & Trailer: 8502 - 8903

Qty.	Description	Price	Amount	
31.14	DIRT - 1255 32			
	45 min load time			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

248115 / 4055211

113225

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13606		12/13/07

Sold To: Multnomah County Drainage

Address:

City:

Driver: Michael Jackson | Truck & Trailer: 8504-8804

Qty.	Description	Price	Amount	
1	Load mud.			
	#128548 31.86 T			
	load time 1.5 hr			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112437

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
1360671		12-13-13

Sold To: Wasco / MCD

Address

City

Driver: B Mitchem | Truck & Trailer: 8508 / 8908

Qty.	Description	Price	Amount	
32.41	SOILS to Wasco			
	landfill			
	# 128514 ticket			
	# 136067 500#			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112755

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-13-13

Sold To: Multnomah County Drainage

Address:

City: Portland to Wasco

Driver	Truck & Trailer
Tim	8506 - 8906

Qty.	Description	Price	Amount	
	tons of dredgings			
31.48	T# 128513			
	Load time .75 2:30-3:10			
	Stand by time .25 3:00-3:10			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax			
Total			

248115 / 4055211

112906

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 26065	Phone	Date 11/15/13
Sold To Multnomah Co Drainage District		
Address		
City		

Driver Mike Easton	Truck & Trailer 857-8923			
Qty.	Description	Price	Amount	
	Delivered Drop Boxes		150	00
	PO # 9868			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

103304

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 126067	Phone	Date 11-22-13
Sold To Mult County Drainage Dist		
Address		
City		

Driver: Mika | Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount	
31.64	Ton Drudge Spoils			
	Hauled to Wasco			
	County Landfill			
	Lic # 127703			
	1.5 hours Standby			
	>			
	Not Responsible for Damage Behind Curb Line			
	All claims and returned goods MUST be accompanied by this bill.	Tax		
	Rec'd By	Total		

248115 / 405521

113083

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-22-13

Sold To: Multnomah County Drainage

Address:

City: Portland to Wasco

Driver: Tim

Truck & Trailer: 8506-8906

Qty.	Description	Price	Amount	
	tons of dredgings			
31.46	#127722			
	Stand by time 1/2 Hr			
	Load time 1 Hr			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

107544

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136057	Phone	Date 11-25-13
Sold To C.O.P.		
Address 59th, Pl.		
City Portland		

Driver Monty H.	Truck & Trailer 8503 - 8903		
Qty.	Description	Price	Amount
31.39	Dirt		
	Loading Time - 1 HR. 30 min. Haul Each		
30.65	Drying Agent		
	Dirt Preload - 1 HR 30 min Standby.		
	Dirt - Loading - 1 HR (Preload) 30 min Standby		
	>		
	Not Responsible for Damage Behind Curb Line		
	All claims and returned goods MUST be accompanied by this bill.	Tax	
	Rec'd By	Total	

248115 / 4055211

113208

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-25-13

Sold To: Multnomah County Drainage Dist

Address:

City: Portland to Wasco

Driver: Tim

Truck & Trailer: 8506-8706

Qty	Description	Price	Amount
	tons of dredgings		
29.46	# 127741		
	Stand by time 1 hr		
	Load time 1.5 hrs		
	Loaded to 104,000 Fr;		
	105K 2500 Lbs in water		
	over weekend		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax	
	Total	

248115 / 4055211

107545

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-26-13

Sold To C.O.P. 59th Pl.

Address

City Portland TO Wash

Driver Monty H. Truck & Trailer 8503-8703

Qty.	Description	Price	Amount	
29.50	Dirt - 127834			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

113209

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 11-26-13
Sold To Wasco / Multnomah County Drain		
Address		
City		

Driver B Mitchem | Truck & Trailer 8508 / 8908

Qty.	Description	Price	Amount
30.57	Spoils to Wasco		
	landfill		
	# 127852 ticket		
	# 136067 Job #		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 405521

112751

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
35007		11-26-13

Sold To: Mult County Drainage

Address:

City:

Driver: Mike

Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount
30.92	Tow Spoils Hauled to Wasco Landfill		
	Tic # 127848		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055213

113086

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136167		11/26/13

Sold To: MULTNOMAH CO. DRAINAGE DIST #1

Address: PORTLAND TO WASCO LANDFILL

City:

Driver	Truck & Trailer
ERIC	8509/8909

Qty.	Description	Price	Amount	
29.59	TONS CONT. DIRT # 127875			
	1/2 HR STAND BY TIME			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

107182

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-27-13

Sold To: Wasco / Mitchum & County Plan

Address:

City:

Driver: B Mitchum | Truck & Trailer: 8503 / 8908

Qty.	Description	Price	Amount
31.52	Soils to Wasco landfill		
	# 127934 ticket		
	# 136067 Job		
	Re loaded 11-26		
	1/2 hr Standby		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 4055211

109337

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11/27/13

Sold To: MULTNOMAH COUNTY DRAINAGE DIST # 1

Address: PORTLAND TO WASCO LANDFILL

City: (PRELOAD)

Driver: ERIC

Truck & Trailer: 8509 / 8909

Qty.	Description	Price	Amount
31.13	TONS CONT. DIRT # 127933		
	.75 HR STANDBY TIME		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 4055211

107183

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136057	Phone	Date 12-2-13
Sold To Multnomah 59th P.L. - portland -		
Address TO wasco		
City		

Driver Monty H.	Truck & Trailer 8503 - 8703

Qty.	Description	Price	Amount	
3088	Det. T - 128094 Stockpile 30 min			
2435	Drying Agent -			
	Det. Unload - 345 Det. Loading time 415			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.	Tax		
Rec'd By	Total		

248115 / 4055211

113214

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-2-13
Sold To MCDD		
Address		
City		

Driver Mike	Truck & Trailer 8565-8911

Qty.	Description	Price	Amount	
31.46	Tan Spoils Hauled To Wasco Landfill			
	T.C.# 128073			
1ST	1 hour to load			
2ND	preload 1 hour to load			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax		
	Total		

246115 / 4055211

113092

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date 12-3-13
136061		

Sold To Multnomah Paving - Sylvan

Address

City Portland

Driver Monty H | Truck & Trailer 5503-5903

Qty.	Description	Price	Amount
31.49	Dirt - 128127		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

24811S / 4055211

113215

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
130067		12-3-13

Sold To: McDO

Address:

City:

Driver: Mike | Truck & Trailer: 8565 8911

Qty.	Description	Price	Amount	
32.72	Ton Spoils Hauled to Waste Land Fill			
	Tic # 128134			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

24B115 / 4055211

113093

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13606		12-4-2013

Sold To: MULTNOMAH DRAINAGE

Address:

City:

Driver: BRIAN JONES

Truck & Trailer: 8505 - 8905

Qty.	Description	Price	Amount
29.95	MUD		
	TKT 128186		
	Load time: 45 mins		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

248115 / 4055211

112240

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 56067	Phone	Date 12-9-13
Sold To MCDR		
Address		
City		

Driver M.Ka	Truck & Trailer 8563 - 8911

Qty.	Description	Price	Amount	
32 4t	Ton Spoils Hauled			
	to Wasco Landfill			
	T.C.# 128212			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

113096

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-5-13
Sold To Multnomah County Drain		
Address		
City		

Driver Brittnem | Truck & Trailer 8508 / 89708

Qty	Description	Price	Amount	
31.30	Spoils to Wasco			
	landfill			
	# 128264 ticket			
	# 136067 Job			
	1st load - 1 hour			
	2nd load - 45 min			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

109341

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13-6067		12-5-2013

Sold To: MULTNOMAH DRAINAGE #1

Address:

City:

Driver: BRIAN JONES | Truck & Trailer: 8505 - 8905

Qty.	Description	Price	Amount	
	DREDGE			
31.32	TKT 128290			
	Load Time .75			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112243

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
LW067		12-5-13
Sold To	MCDQ	
Address		
City		

Driver	Truck & Trailer
Mike	8565 8911

Qty.	Description	Price	Amount
30 62	Tons Spoils Hauled to Waste Landfill		
	Ticket # 128257		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 4055211

113098

Thank You

Date	Truck #	Light Weight	Heavy Weight	Net Weight	
11/19/13	8503	40200	102980	31.39	
11/25/13	8503	40200	101500	30.65	
12/02/13	8503	40000	88700	24.35	
12/11/13	8503	40060	90540	25.24	111.63
				0	
TOTAL				111.63	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	

Portland Willamette Inlet

Date	Time	PT 1 Background Point (NTU)	Compliance Point (NTU)	Difference			Comments	BMP modifications made prior to restart
Before Dredging								
11/13/2013	9:00	5.9	4	-1.9			Background	
11/14/2013	12:02	4	3.6	-0.4			Install BMP's	
11/15/2013	7:16	11.9	25.2	13.3			Set Up	
11/15/2013	9:09	9.9	15.3	5.4			Offload	
11/15/2013	11:18	7.12	9.45	2.33			Equipment Set Up	
11/15/2013	13:23	5.82	4.27	-1.55			"	
11/18/2013	8:33	9.42	7.56	-1.86			"	
11/18/2013	10:45	9.5	9.79	0.29			Sheet pile	
11/18/2013	12:30	5.72	6.53	0.81			"	
11/20/2013	9:15	10.8	21.1	10.3			"	
11/20/2013	11:20	11.2	16.6	5.4			"	
11/20/2013	13:30	8.5	12.9	4.4			"	
After Start of Dredging								
11/21/2013	8:15	5.2	4.6	-0.6			First day of Dredging	
11/21/2013	10:20	4.7	9	4.3				
11/21/2013	12:15	6.7	9.4	2.7				
11/21/2013	14:38	6.4	6.8	0.4				
11/22/2013	8:00	5.2	5.4	0.2				
11/22/2013	11:45	6.7	9.6	2.9				
11/22/2013	14:38	4.6	7.8	3.2				Sheet pile adjusted to maintain consistent level and outflow from the inlet.
11/25/2013	7:30	2.8	2.8	0				
11/25/2013	9:30	3.3	3.4	0.1				
11/25/2013	11:20	4.5	6.6	2.1				
11/25/2013	14:10	3.7	8.1	4.4				
11/26/2013	7:40	4.2	6.3	2.1				
11/26/2013	9:35	2.8	4.5	1.7			In Dredge Area 98 NTU Between silt curtains 23.2 NTU	
11/26/2013	11:25	2.9	6.5	3.6				
11/26/2013	14:00	4.5	6.5	2				
11/27/2013	10:30	4.7	6.3	1.6				
11/27/2013	12:30	3	4.5	1.5				
11/27/2013	14:30	3.1	7	3.9				
12/2/2013	8:00	4.3	12.1	7.8				
12/2/2013	10:00	5.8	11.3	5.5			In Dredge Area 10' from Dredge 58.0 NTU Between Silt Curtains and Set Pile 44.2 NTU Between Two Silt Curtains 41.3 NTU	

12/2/2013	12:00	9.1	11.4	2.3				
12/2/2013	14:00	11.5	13.3	1.8				
12/2/2013	15:30	14.1	16	1.9				
12/3/2013	7:30	9.4	16.6	7.2				
12/3/2013	10:00	13.8	16.7	2.9				
12/4/2013	7:35	15.3	23	7.7				
12/4/2013	9:30	13.9	16.9	3				
12/4/2013	11:30	22	23.4	1.4				
12/4/2013	13:30	12.2	14.9	2.7				
12/4/2013	15:30	11.1	16.5	5.4				
12/5/2013	7:30	5.7	14.1	8.4				
12/5/2013	9:30	6.6	14.4	7.8				
12/5/2013	11:30	6.2	11.4	5.2				
12/5/2013	13:30	8.8	15.9	7.1				
12/9/2013	7:30	6.7	8.3	1.6				
12/9/2013	9:30	10.1	11.7	1.6				
12/9/2013	11:30	9.3	16.5	7.2				
12/9/2013	13:25	12	12.5	0.5				
12/9/2013	15:30	6.2	16.4	10.2				
12/10/2013	7:30	5.2	9	3.8				
12/10/2013	9:30	8.9	9.5	0.6				
12/10/2013	11:30	9.1	9.8	0.7				
12/10/2013	13:30	14.3	16.2	1.9				
12/12/2013	7:30	5.1	14.8	9.7				
12/12/2013	9:30	6.6	8.5	1.9				
12/12/2013	11:30	8.5	10.1	1.6				
12/12/2013	13:30	6.1	9.4	3.3				
12/13/2013	7:30	9.8	12.1	2.3				
12/13/2013	9:30	10.4	13.02	2.62				
12/17/2013	7:30	7.2	9	1.8				
12/17/2013	9:30	7.3	7.5	0.2				
12/17/2013	11:30	5.2	7.7	2.5				
12/17/2013	1:30	6.8	10.7	3.9				
12/18/2013	8:30	8.6	17.9	9.3				
12/18/2013	9:30	10.6	18.1	7.5				
12/18/2013	11:30	7.3	18.4	11.1				
12/19/2013	9:00	11.2	23.3	12.1				
12/19/2013	10:45	6	25.1	19.1			Adjusted Silt Curtains	
12/19/2013	12:45	5.9	20.7	14.8				
12/19/2013	14:02	5.3	30.5	25.2				
12/20/2013	8:00	7.7	16.7	9				
12/20/2013	10:00	10.6	22	11.4			Silt Curtain #1 247 (NTU) Silt Curtain #2 132 (NTU)	
12/20/2013	12:00	11.6	21.3	9.7				
12/20/2013	14:00	12	30.1	18.1				
12/23/2013	7:30	6	7.6	1.6				

12/23/2013	9:30	9	9	0			While Capping Area 328 (NTU)	Cap
12/23/2013	11:30	8	10	2				
12/23/2013	1:30	6	12	6				
12/27/2013	10:30	7.3	7.4	0.1				
12/27/2013	12:30	7.4	7.8	0.4				
12/30/2013	8:00	6	6	0			Dredge area 8:00 (NTU)	6
12/31/2013	8:00	7	9	2				
12/31/2013	10:00	7	7	0				
12/31/2013	12:15	7	15	8				
12/31/2013	14:00	7	17	10				
1/2/2013	9:00	8	8	0				
1/2/2013	11:00	7	8	1				
1/2/2013	13:05	8	8	0				
1/3/2013	8:00	4	4	0				
1/3/2013	10:15	6	6	0				
1/3/2013	12:15	6	5	-1				
1/6/2013	8:30	5	5	0				
1/6/2013	10:30	4	5	1				
1/6/2013	1:30	7	7	0				
1/7/2013	12:30	6	6	0				
				0				
				0				

MCDD Documentation

Daily Work Reports (T&M Dredging only)

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/21/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Preparation Completed- Commence Dredging of Area #1 Filled boxes and removed one truck from the site.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			8.50		$45		$383
OPERATOR #2			8.50		$45		$383
UTILITY			5.00		$20		$100
DAILY LABOR SUB-TOTAL							$1,030

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	3.00	$306		$918
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	3.00	$15		$45
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,515

DAILY TOTAL	$3,545

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/22/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging of Area #1 removed four truck loads from the site.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			4.00		$55		$220
OPERATOR #1			10.50		$45		$473
OPERATOR #2			10.00		$45		$450
UTILITY			10.00		$20		$200
DAILY LABOR SUB-TOTAL							$1,343

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	9.00	$160		$1,440
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,598

DAILY TOTAL	$4,941

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/25/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued dredging removed three truck loads of sediment and received one load of drying agent. Finishing section #1 and starting on section #2

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.50		$55		$138
OPERATOR #1			11.00		$45		$495
OPERATOR #2			11.00		$45		$495
UTILITY			9.50		$20		$190
DAILY LABOR SUB-TOTAL							$1,318

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	10.00	$160		$1,600
BOAT	7.00	$15		$105
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,773

DAILY TOTAL		$5,091

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/26/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed three truck loads. Working in sections #2 and #3. Break down at the end of the day. Repairs estimated eairly tomorrow.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.50		$55		$193
OPERATOR #1			8.50		$45		$383
OPERATOR #2			9.50		$45		$428
UTILITY			9.50		$20		$190
DAILY LABOR SUB-TOTAL							$1,193

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.00	$160		$1,280
BOAT	7.00	$15		$105
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,453

DAILY TOTAL			$4,646

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 11/27/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed one truck load and filled mixing boxes. Working in sections #2 and #3 and #4. Repairs to excavator.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			6.00		$55		$330
OPERATOR #1			7.00		$45		$315
OPERATOR #2			7.00		$45		$315
UTILITY			6.00		$20		$120
DAILY LABOR SUB-TOTAL							$1,080

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	6.00	$160		$960
BOAT	4.00	$15		$60
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,436

DAILY TOTAL	$3,516

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/2/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed four truck loads. Working in section #4

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY			3.00		$20		$60
DAILY LABOR SUB-TOTAL							$1,080

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.50	$306		$1,989
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,671

DAILY TOTAL		$4,751

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/3/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed one truck load. Working in section #4. Barge Repair.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			4.00		$45		$180
OPERATOR #2			3.00		$45		$135
UTILITY			2.00		$20		$40
DAILY LABOR SUB-TOTAL							$465

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	3.00	$306		$918
CASE EXCAVATOR	4.00	$160		$640
BOAT	2.00	$15		$30
BACK HOE	1.00	$40		$40
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,740

DAILY TOTAL	$2,205

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/4/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed two truck loads. Working in section #4.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY			3.00		$20		$60
DAILY LABOR SUB-TOTAL							$1,080

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	5.00	$306		$1,530
CASE EXCAVATOR	6.00	$160		$960
BOAT	5.00	$15		$75
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,797

DAILY TOTAL		$3,877

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/5/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed three truck loads and filled boxes. Working in section #4 and section #3

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1			8.50		$45		$383
OPERATOR #2			8.50		$45		$383
UTILITY			1.00		$20		$20
DAILY LABOR SUB-TOTAL							$950

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.00	$160		$1,280
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,438

DAILY TOTAL			$4,388

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET **12/6/2013**

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed one truck load. Working in section #2 and section #3.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			5.00		$45		$225
OPERATOR #2			5.00		$45		$225
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$560

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	5.00	$160		$800
BOAT	2.00	$15		$30
BACK HOE	1.00	$40		$40
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,206

DAILY TOTAL	$2,766

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/9/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Three truck loads. Working in section #5 and section #6.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$910

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,518

DAILY TOTAL			$4,428

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/10/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed two truck loads. Completed all sections to specified depths.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			8.50		$45		$383
OPERATOR #2			8.50		$45		$383
UTILITY			5.00		$20		$100
DAILY LABOR SUB-TOTAL							$920

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	6.00	$306		$1,836
CASE EXCAVATOR	8.00	$160		$1,280
BOAT	5.00	$15		$75
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,383

DAILY TOTAL	$4,303

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/11/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging section #1 west area filled boxes. Marked/sounded section #1 west area.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			5.00		$45		$225
OPERATOR #2			5.00		$45		$225
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$505

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	4.00	$160		$640
BOAT	5.00	$15		$75
BACK HOE	1.00	$40		$40
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,091

DAILY TOTAL	$2,596

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/12/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed four trucks. Dredging in west section #1

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$965

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	7.00	$306		$2,142
CASE EXCAVATOR	8.50	$160		$1,360
BOAT	3.00	$15		$45
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,739

DAILY TOTAL	$4,704

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/13/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Two Trucks. Dredging in west section #1

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			1.00		$55		$55
OPERATOR #1			5.00		$45		$225
OPERATOR #2			5.00		$45		$225
UTILITY			1.00		$20		$20
DAILY LABOR SUB-TOTAL							$525

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	5.00	$160		$800
BOAT	2.00	$15		$30
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,246

DAILY TOTAL	$2,771

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/16/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging filled boxes. Dredging in west sections 1-5-6

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			7.00		$45		$315
OPERATOR #2			7.00		$45		$315
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$740

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	2.00	$160		$320
BOAT	4.00	$15		$60
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,796

DAILY TOTAL		$2,536

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/17/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Four Trucks. Dredging sections #5 &#6

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			9.50		$45		$428
OPERATOR #2			9.50		$45		$428
UTILITY			2.00		$20		$40
DAILY LABOR SUB-TOTAL							$1,005

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	7.00	$306		$2,142
CASE EXCAVATOR	9.00	$160		$1,440
BOAT	6.00	$15		$90
BACK HOE	3.00	$40		$120
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$3,904

DAILY TOTAL		$4,909

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/18/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Continued Dredging removed Two Trucks. Dredging sections #5 & #6

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			2.00		$55		$110
OPERATOR #1			7.00		$45		$315
OPERATOR #2			7.00		$45		$315
UTILITY					$20		$0
DAILY LABOR SUB-TOTAL							$740

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	4.00	$306		$1,224
CASE EXCAVATOR	6.00	$160		$960
BOAT	6.00	$15		$90
BACK HOE	2.00	$40		$80
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$2,466

DAILY TOTAL	$3,206

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/19/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Dredging activities clean up and quality control measures. Begin capping

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			3.00		$55		$165
OPERATOR #1					$45		$0
OPERATOR #2			7.00		$45		$315
UTILITY			7.00		$20		$140
DAILY LABOR SUB-TOTAL							$620

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE		$306		$0
CASE EXCAVATOR	4.00	$160		$640
BOAT	6.00	$15		$90
BACK HOE	4.00	$40		$160
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,002

DAILY TOTAL			$1,622

DAILY WORK REPORT - T&M TASKS

PROJECT: DEQ - PORTLAND WILLAMETTE INLET 12/20/2013

TASK : DREDGING

DESCRIPTION OF THE DAY'S WORK ACTIVITY: Removed one / final truck load of sediments. Final mix box cleanout and dredging clean up including dredging sediments from in front of the off load area.

LABOR

LABOR CATEGORY	WORK HOURS		BILLABLE HOURS (ONSITE WORK, BILLABLE SHOP TIME, BILLABLE STAND-BY)	NON-BILLABLE HOURS (LUNCH, EQUIPMENT DOWN TIME, NON-BILLABLE STAND-BY, NON-BILLABLE SHOP TIME)	RATE		TOTAL (BILLABLE TIME X RATE)
	START	STOP					
SUPERVISOR			5.00		$55		$275
OPERATOR #1			8.00		$45		$360
OPERATOR #2			2.00		$45		$90
UTILITY			18.00		$20		$360
DAILY LABOR SUB-TOTAL							$1,085

EQUIPMENT

EQUIPMENT TYPE	HOURS	RATE		TOTAL (HOURS X RATE)
SPYDER ON BARGE	1.00	$306		$306
CASE EXCAVATOR	6.00	$160		$960
BOAT	6.00	$15		$90
BACK HOE	4.00	$40		$160
TRUCK	DAILY	$112		$112
DAILY EQUIPMENT SUB-TOTAL				$1,628

DAILY TOTAL	$2,713

MCDD Documentation

Daily Summary

PORTLAND WILLAMETTE INLET DREDGING TIME AND MATERIALS DAILY (ESTIMATE)

DATE	Ticket #	QTY. TON	STAND BY HR.	DRY AGENT TON	MCDD T&M DREDGING	Capping	Materials Rental Dredging	Total
11/19/2013				31.39				
11/21/2013					$3,545			
11/22/2013	109333	32.74	0.5		$4,941			
	113083	31.04	0.5					
	107544	31.46	0.5					
11/25/2013	113084	30.15	0.25	30.65	$5,091			
	113208	31.39	0.5					
	107545	29.46	1					
11/26/2013	113209	29.9	0		$4,646			
	112751	30.57	0					
	113086	30.92	0					
	107182	29.59	0.5					
11/27/2013	109337	31.52	0.5		$3,516			
	107183	31.13	0.75					
12/2/2013	107185	32.26	0.75	24.35	$4,751			
	113214	30.88	0.5					
	113092	31.46	1					
12/3/2013	113215	31.49	0		$2,205			
	113093	32.72	0					
12/4/2013	112240	29.95	0.25		$3,877			
	113096	32.41	0					
12/5/2013	109341	31.3	0.75		$4,388			
	112243	31.32	0.25					
	113098	30.62	0					
12/6/2013	109342	32.94	0		$2,766			
	113218	31.46	0					
12/9/2013					$4,428			

PORTLAND WILLAMETTE INLET DREDGING TIME AND MATERIALS DAILY (ESTIMATE)

12/10/2013	112901	32.27	0.25		$4,303			
	113220	30.93	0					
12/11/2013	112903	31.31	0.25	25.24	$2,596			
	113221	31.48	0					
12/12/2013	113224	31.56	0.25		$4,704			
	113225	31.14	0.25			30%		
12/13/2013	112437	31.86	1		$2,771	2204		
	112775	32.41	0			$0.49		
	112906	31.48	0.25					
12/16/2013	112757	30.95	0		$2,536	$1,079.96		
12/17/2013	113457	30.85	0.25		$4,909			
	112440	31.52	0			70%		
12/18/2013	112441	62.51	0.5		$3,206	5144		
	104893	29.15	0.5			$1.47		
	113458	31.27	0					
12/19/2013					$1,622	$7,561.68		
12/20/2013					$2,713			
12/23/2013	112605	33.58	0					
		1282.95	12	111.63		7,348	2	
		TN	HR	TN		SQ Feet	MTH	
		$36.00	$105.00	$110.00		$8,641.64	$5,500.00	
	$46,186.20		**$1,260.00**	**$12,279.30**	**$73,514.00**	**$8,641.64**	**$11,000.00**	
	Truck/Disposal		Stand By	Dry Agent	MCDD Labor&Equip	Capping	Rental Eqip.	
	Disposal and Transport				Dredging		Dredging	
								$152,881.14

MCDD Documentation

Turbidity Monitoring Results

Portland Willamette Inlet

Date	Time	PT 1 Background Point (NTU)	Compliance Point (NTU)	Difference			Comments	BMP modifications made prior to restart
Before Dredging								
11/13/2013	9:00	5.9	4	-1.9			Background	
11/14/2013	12:02	4	3.6	-0.4			Install BMP's	
11/15/2013	7:16	11.9	25.2	13.3			Set Up	
11/15/2013	9:09	9.9	15.3	5.4			Offload	
11/15/2013	11:18	7.12	9.45	2.33			Equipment Set Up	
11/15/2013	13:23	5.82	4.27	-1.55			"	
11/18/2013	8:33	9.42	7.56	-1.86			"	
11/18/2013	10:45	9.5	9.79	0.29			Sheet pile	
11/18/2013	12:30	5.72	6.53	0.81			"	
11/20/2013	9:15	10.8	21.1	10.3			"	
11/20/2013	11:20	11.2	16.6	5.4			"	
11/20/2013	13:30	8.5	12.9	4.4			"	
After Start of Dredging								
11/21/2013	8:15	5.2	4.6	-0.6			First day of Dredging	
11/21/2013	10:20	4.7	9	4.3				
11/21/2013	12:15	6.7	9.4	2.7				
11/21/2013	14:38	6.4	6.8	0.4				
11/22/2013	8:00	5.2	5.4	0.2				
11/22/2013	11:45	6.7	9.6	2.9				
11/22/2013	14:38	4.6	7.8	3.2				Sheet pile adjusted to maintain consistent level and outflow from the inlet.
11/25/2013	7:30	2.8	2.8	0				
11/25/2013	9:30	3.3	3.4	0.1				
11/25/2013	11:20	4.5	6.6	2.1				
11/25/2013	14:10	3.7	8.1	4.4				
11/26/2013	7:40	4.2	6.3	2.1				
11/26/2013	9:35	2.8	4.5	1.7			In Dredge Area 98 NTU Between silt curtains 23.2 NTU	
11/26/2013	11:25	2.9	6.5	3.6				
11/26/2013	14:00	4.5	6.5	2				
11/27/2013	10:30	4.7	6.3	1.6				
11/27/2013	12:30	3	4.5	1.5				
11/27/2013	14:30	3.1	7	3.9				
12/2/2013	8:00	4.3	12.1	7.8				
12/2/2013	10:00	5.8	11.3	5.5			In Dredge Area 10' from Dredge 58.0 NTU Between Silt Curtains and Set Pile 44.2 NTU Between Two Silt Curtains 41.3 NTU	

12/2/2013	12:00	9.1	11.4	2.3				
12/2/2013	14:00	11.5	13.3	1.8				
12/2/2013	15:30	14.1	16	1.9				
12/3/2013	7:30	9.4	16.6	7.2				
12/3/2013	10:00	13.8	16.7	2.9				
12/4/2013	7:35	15.3	23	7.7				
12/4/2013	9:30	13.9	16.9	3				
12/4/2013	11:30	22	23.4	1.4				
12/4/2013	13:30	12.2	14.9	2.7				
12/4/2013	15:30	11.1	16.5	5.4				
12/5/2013	7:30	5.7	14.1	8.4				
12/5/2013	9:30	6.6	14.4	7.8				
12/5/2013	11:30	6.2	11.4	5.2				
12/5/2013	13:30	8.8	15.9	7.1				
12/9/2013	7:30	6.7	8.3	1.6				
12/9/2013	9:30	10.1	11.7	1.6				
12/9/2013	11:30	9.3	16.5	7.2				
12/9/2013	13:25	12	12.5	0.5				
12/9/2013	15:30	6.2	16.4	10.2				
12/10/2013	7:30	5.2	9	3.8				
12/10/2013	9:30	8.9	9.5	0.6				
12/10/2013	11:30	9.1	9.8	0.7				
12/10/2013	13:30	14.3	16.2	1.9				
12/12/2013	7:30	5.1	14.8	9.7				
12/12/2013	9:30	6.6	8.5	1.9				
12/12/2013	11:30	8.5	10.1	1.6				
12/12/2013	13:30	6.1	9.4	3.3				
12/13/2013	7:30	9.8	12.1	2.3				
12/13/2013	9:30	10.4	13.02	2.62				
12/17/2013	7:30	7.2	9	1.8				
12/17/2013	9:30	7.3	7.5	0.2				
12/17/2013	11:30	5.2	7.7	2.5				
12/17/2013	1:30	6.8	10.7	3.9				
12/18/2013	8:30	8.6	17.9	9.3				
12/18/2013	9:30	10.6	18.1	7.5				
12/18/2013	11:30	7.3	18.4	11.1				
12/19/2013	9:00	11.2	23.3	12.1				
12/19/2013	10:45	6	25.1	19.1			Adjusted Silt Curtains	
12/19/2013	12:45	5.9	20.7	14.8				
12/19/2013	14:02	5.3	30.5	25.2				
12/20/2013	8:00	7.7	16.7	9				
12/20/2013	10:00	10.6	22	11.4			Silt Curtain #1 247 (NTU) Silt Curtain #2 132 (NTU)	
12/20/2013	12:00	11.6	21.3	9.7				
12/20/2013	14:00	12	30.1	18.1				
12/23/2013	7:30	6	7.6	1.6				

12/23/2013	9:30	9	9	0			While Capping Area 328 (NTU)	Cap
12/23/2013	11:30	8	10	2				
12/23/2013	1:30	6	12	6				
12/27/2013	10:30	7.3	7.4	0.1				
12/27/2013	12:30	7.4	7.8	0.4				
12/30/2013	8:00	6	6	0			Dredge area 8:00 (NTU)	6
12/31/2013	8:00	7	9	2				
12/31/2013	10:00	7	7	0				
12/31/2013	12:15	7	15	8				
12/31/2013	14:00	7	17	10				
1/2/2013	9:00	8	8	0				
1/2/2013	11:00	7	8	1				
1/2/2013	13:05	8	8	0				
1/3/2013	8:00	4	4	0				
1/3/2013	10:15	6	6	0				
1/3/2013	12:15	6	5	-1				
1/6/2013	8:30	5	5	0				
1/6/2013	10:30	4	5	1				
1/6/2013	1:30	7	7	0				
1/7/2013	12:30	6	6	0				
				0				
				0				

MCDD Documentation

Trucking Tickets

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-22-13

Sold To: WASCO / Multnomah CD

Address:

City:

Driver: B Mitchum | Truck & Trailer: 8503 / 8908

Qty.	Description	Price	Amount	
32.74	Spoils to WASCO			
	LANDFILL			
	# 120675 ticket			
	# 136067 506 #			
	Arrive 1:20 pm			
	Leave 2:20 pm			
	1/2 hr Standby			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax		
	Total		

246115 / 4055211

109333

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13085		11-25-13

Sold To: Multi County Drainage

Address:

City:

Driver: Mike

Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount
30.15	Ton Draggings Hauled		
	to Wasco Landfill		
	Tic # 127766		
	45 min load time		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Tax	
Total	

Rec'd By

248115 / 4055211

113084

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-17-13

Sold To: MCDD

Address:

City:

Driver: Mike | Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount	
30.85	Ton Spoils Hauled			
	to Waste Landfill			
	Tic # 128696			
	Load time 45 min			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By:

Tax		
Total		

248115 / 4055211

113457

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-11-13

Sold To: Multnomah County Drainage District

Address:

City: Portland to Wasco

Driver	Truck & Trailer
Tim	8506-8906

Qty.	Description	Price	Amount	
	tons of dredgings			
31.31	# 128435			
	Load time .75 2:09-2:51			
	Stand by time .25 2:40-2:51			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112903

Thank You

Project Work Order # Year 2013 Month 11 Number 1 (13-11-1)

PROJECT WORK ORDER	Work Orders Must be Filled Out Electronically and Approved Prior to Starting a Project
Work To Be Performed In	( ) Pen 1 ( ) Pen 2 (x) MCDD ( ) SDIC
Work Order Issued By (Int. Box)	( ) BW (x) JM ( ) SL Date:
Estimated Completion	Date:1/1/14
Project Name and Location	Portland Willamette Inlet
Project Code/Budget Line	DEQ-MCDD IGA
Project Contract # and Sub Section Purchase Order # to do work on a cor	
Project Description	
Project Perfomed By	
Contractor Name Contractors	
Equipment Required (x) Rent ( ) On Hand	
Personnel Required	
Material Requirments ( ) On Hand (x) Purchase Purchase Order # (s)	
Reviewed Permit Conditions	
Special Permit Conditions	
Notified Property Owner	
Special Concerns or Requirments	
Work Order Approved By	
Work Order Submitted to Accounti	

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-16-13
Sold To Wasco / MCDD		
Address		
City		

Driver B. Mitchum | Truck & Trailer 8908 / 8908

Qty.	Description	Price	Amount
30.95	Spoils to Wasco		
	landfill		
	# 128596 ticket		
	# 136067 Job #		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

248115 / 4055211

112757

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12/19/2015

Sold To

Address

City McMinnville, Or. Stew

Driver Michael Jackson | Truck & Trailer 8507 - 8504

Qty.	Description	Price	Amount	
	#1 Lords Mill			
	#128709 31.52 T.			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

112440

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		7/18/2013

Sold To

Address

City Hutchinson Station

Driver Michael Jamison | Truck & Trailer 8501 - 8901

Qty.	Description	Price	Amount
2	loads HUD		
	# 128735 31.16 T		
	# 128769 31.35 T		
	1 hour load on 2ND load		
	1ST was a preload		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax	
	Total	

248115 / 4055211

112441

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-18-13
Sold To MULTNOMAH City DRAINAGE		
Address ~~PDX~~		
City PORTLAND ORE		

Driver Skip Dougherty	Truck & Trailer 6513 - 8901

Qty.	Description	Price	Amount	
1	Contaminated Soil			
	START 7:00 AM			
	END 8:00 AM on Site			
	WASH 10:00 AM			
	END 10:35 AM			
	Order # 136067			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

14893

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13-6067		12-18-13

Sold To: MCDD

Address:

City:

Driver: Mika

Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount	
31.27	Ton Spoils Hauled			
	to Waste Landfill			
	Lic # 128740			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

113458

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-23-13

Sold To: MULTNOMAH County Drainage #1

Address:

City: WASCO County Fill

Driver	Truck & Trailer
Ray Morris	8565/8911

Qty	Description	Price	Amount	
	DREDGE SPOILS 13137			
	WASCO # - 128935			
	TONS # - 33.58			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

112605

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136069		12/2/13

Sold To: MULTNOMAH COUNTY DRAINAGE

Address: PORTLAND TO WASCO LANDFILL

City: (PRELOAD)

Driver: ERIC

Truck & Trailer: 8509 / 8909

Qty.	Description	Price	Amount	
32.26	TONS CONT. Ord # 128131			
	.75 HRS STANDBY TIME			
	>			
	Not Responsible for Damage Behind Curb Line		—	

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

107185

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-6-13

Sold To: WASCO / Multnomah County Drain

Address:

City:

Driver: B Mitchem | Truck & Trailer: 8509 / 8908

Qty.	Description	Price	Amount	
32.14	SDIS to WASCO			
	Load #1			
	# 128309 ticket			
	# 136067 Job #			
	* Pre load			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

109342

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-6-13

Sold To: Multifamily 59th PL -

Address: TO WHSCO.

City:

Driver: Monty H.

Truck & Trailer: 503-8903

Qty.	Description	Price	Amount
31.64	Dirt - 128320		
	Loading - 7 hrs SE.		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax	
	Total	

248115 / 4055211

113218

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-10-13

Sold To: Multnomah Drainage

Address:

City: Portland to Wesco

Driver: Tim

Truck & Trailer: 8506-8906

Qty.	Description	Price	Amount	
	tons of dredgings			
32.27	# 128386			
	Load time .75 3:04-3:47			
	Stand by time .75 3:30-3:47			
	>			
	Not Responsible for Damage Behind Curb Line			
	All claims and returned goods MUST be accompanied by this bill.	Tax		
	Rec'd By	Total		

248115 / 4055211

112901

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-10-13

Sold To: Multi Norman Drainage

Address: 59th PL

City:

Driver: Wally H

Truck & Trailer: 8503-8903

Qty.	Description	Price	Amount	
30.93	U.T - 128382			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

113220

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136667		12-11-13

Sold To: Multnomah Channel.

Address: 59th PL

City: Portland -

Driver: Monty H.

Truck & Trailer: 8503-8903

Qty.	Description	Price	Amount	
31.48	D.T - 1254111			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax		
	Total		

248115 / 4055211

113221

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
P36867		12-12-13

Sold To: Multnomah Channel

Address: 5th, PL.

City: Portland

Driver: Mark H.

Truck & Trailer: 8502 - 8704

Qty.	Description	Price	Amount
31 SC	D.T - 125478		
	20 mins Standing		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

113224

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136069		12-12-13

Sold To: Multnomah Channel.

Address: 5944 PL.

City: portland

Driver: Monty H. | Truck & Trailer: 8502 - 8903

Qty.	Description	Price	Amount	
31.14	DIRT - 1255 32			
	45 min load time			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

248115 / 4055211

113225

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13606		12/13/07

Sold To: Multnomah County Drainage

Address:

City:

Driver: Michael Jackson | Truck & Trailer: 8504-8804

Qty.	Description	Price	Amount	
1	Load mud.			
	#128548 31.86 T			
	load time 1.5 hr			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112437

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
1360671		12-13-13

Sold To: Wasco / MCD

Address

City

Driver: B Mitchem | Truck & Trailer: 8508 / 8908

Qty.	Description	Price	Amount	
32.41	SOILS to Wasco			
	landfill			
	# 128514 ticket			
	# 136067 500#			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112755

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		12-13-13

Sold To: Multnomah County Drainage

Address:

City: Portland to Wasco

Driver	Truck & Trailer
Tim	8506 - 8906

Qty.	Description	Price	Amount	
	tons of dredgings			
31.48	T# 128513			
	Load time .75 2:30-3:10			
	Stand by time .25 3:00-3:10			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax			
Total			

248115 / 4055211

112906

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 26065	Phone	Date 11/15/13
Sold To Multnomah Co Drainage District		
Address		
City		

Driver Mike Easton	Truck & Trailer 857-8923			
Qty.	Description	Price	Amount	
	Delivered Drop Boxes		150	00
	PO # 9868			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

103304

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 126067	Phone	Date 11-22-13
Sold To Mult County Drainage Dist		
Address		
City		

Driver: Mika | Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount	
31.64	Ton Drudge Spoils			
	Hauled to Wasco			
	County Landfill			
	Lic # 127703			
	1.5 hours Standby			
	>			
	Not Responsible for Damage Behind Curb Line			
	All claims and returned goods MUST be accompanied by this bill.	Tax		
	Rec'd By	Total		

248115 / 405521

113083

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-22-13

Sold To: Multnomah County Drainage

Address:

City: Portland to Wasco

Driver: Tim

Truck & Trailer: 8506-8906

Qty.	Description	Price	Amount	
	tons of dredgings			
31.46	#127722			
	Stand by time 1/2 Hr			
	Load time 1 Hr			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

107544

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136057	Phone	Date 11-25-13
Sold To C.O.P.		
Address 59th, Pl.		
City Portland		

Driver Monty H.	Truck & Trailer 8503 - 8903		
Qty.	Description	Price	Amount
31.39	Dirt		
	Loading Time - 1 HR. 30 min. Haul Each		
30.65	Drying Agent		
	Dirt Preload - 1 HR 30 min Standby.		
	Dirt - Loading - 1 HR (Preload) 30 min Standby		
	>		
	Not Responsible for Damage Behind Curb Line		
	All claims and returned goods MUST be accompanied by this bill.	Tax	
	Rec'd By	Total	

248115 / 4055211

113208

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-25-13

Sold To: Multnomah County Drainage Dist

Address:

City: Portland to Wasco

Driver: Tim

Truck & Trailer: 8506-8706

Qty	Description	Price	Amount
	tons of dredgings		
29.46	# 127741		
	Stand by time 1 hr		
	Load time 1.5 hrs		
	Loaded to 104,000 Fr;		
	105K 2500 Lbs in water		
	over weekend		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax	
	Total	

248115 / 4055211

107545

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-26-13

Sold To C.O.P. 59th Pl.

Address

City Portland TO Wash

Driver Monty H. Truck & Trailer 8503-8703

Qty.	Description	Price	Amount	
29.50	Dirt - 127834			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

113209

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 11-26-13
Sold To Wasco / Multnomah County Drain		
Address		
City		

Driver B Mitchem | Truck & Trailer 8508 / 8908

Qty.	Description	Price	Amount
30.57	Spoils to Wasco		
	landfill		
	# 127852 ticket		
	# 136067 Job #		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 405521

112751

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
35007		11-26-13

Sold To: Mult County Drainage

Address:

City:

Driver: Mike

Truck & Trailer: 8565 - 8911

Qty.	Description	Price	Amount
30.92	Tow Spoils Hauled to Wasco Landfill		
	Tic # 127848		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055213

113086

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136167		11/26/13

Sold To: MULTNOMAH CO. DRAINAGE DIST #1

Address: PORTLAND TO WASCO LANDFILL

City:

Driver	Truck & Trailer
ERIC	8509/8909

Qty.	Description	Price	Amount	
29.59	TONS CONT. DIRT # 127875			
	1/2 HR STAND BY TIME			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

107182

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11-27-13

Sold To: Wasco / Mitchum & County Plan

Address:

City:

Driver: B Mitchum | Truck & Trailer: 8503 / 8908

Qty.	Description	Price	Amount
31.52	Soils to Wasco landfill		
	# 127934 ticket		
	# 136067 Job		
	Re loaded 11-26		
	1/2 hr Standby		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 4055211

109337

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
136067		11/27/13

Sold To: MULTNOMAH COUNTY DRAINAGE DIST # 1

Address: PORTLAND TO WASCO LANDFILL

City: (PRELOAD)

Driver: ERIC

Truck & Trailer: 8509 / 8909

Qty.	Description	Price	Amount
31.13	TONS CONT. DIRT # 127933		
	.75 HR STANDBY TIME		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 4055211

107183

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136057	Phone	Date 12-2-13
Sold To Multnomah 59th FL - portland -		
Address TO wasco		
City		

Driver Monty H.		Truck & Trailer 8503 - 8703		
Qty.	**Description**	**Price**	**Amount**	
3088	D.T - 128094 30min Haul			
2435	Drying Grout -			
	Wetland - 345 Dirt hauling time 415			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.	Tax		
Rec'd By	Total		

248115 / 4055211

113214

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-2-13
Sold To MCDD		
Address		
City		

Driver Mike	Truck & Trailer 8565-8911

Qty.	Description	Price	Amount	
31.46	Tan Spoils Hauled To Wasco Landfill			
	T.C.# 128073			
1ST	1 hour to load			
2ND	preload 1 hour to load			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By	Tax		
	Total		

246115 / 4055211

113092

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date 12-3-13
136061		

Sold To Multnomah Paving - Sylvan

Address

City Portland

Driver Monty H | Truck & Trailer 5503-5903

Qty.	Description	Price	Amount
31.49	Dirt - 128127		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

24811S / 4055211

113215

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
130067		12-3-13

Sold To: McDO

Address:

City:

Driver: Mike | Truck & Trailer: 8565 8911

Qty.	Description	Price	Amount	
32.72	Ton Spoils Hauled to Waste Land Fill			
	Tic # 128134			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

24B115 / 4055211

113093

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13606		12-4-2013

Sold To: MULTNOMAH DRAINAGE

Address:

City:

Driver: BRIAN JONES

Truck & Trailer: 8505 - 8905

Qty.	Description	Price	Amount
29.95	MUD		
	TKT 128186		
	Load time: 45 mins		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax

Total

248115 / 4055211

112240

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 56067	Phone	Date 12-9-13
Sold To MCDR		
Address		
City		

Driver M.Ka	Truck & Trailer 8563 - 8911

Qty.	Description	Price	Amount	
32 4t	Ton Spoils Hauled			
	to Wasco Landfill			
	T.C.# 128212			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

113096

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No. 136067	Phone	Date 12-5-13
Sold To Multnomah County Drain		
Address		
City		

Driver Brittnem | Truck & Trailer 8508 / 89708

Qty	Description	Price	Amount	
31.30	Spoils to Wasco			
	landfill			
	# 128264 ticket			
	# 136067 Job			
	1st load - 1 hour			
	2nd load - 45 min			
	>			
	Not Responsible for Damage Behind Curb Line			
All claims and returned goods MUST be accompanied by this bill.		Tax		
Rec'd By		Total		

248115 / 4055211

109341

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
13-6067		12-5-2013

Sold To: MULTNOMAH DRAINAGE #1

Address:

City:

Driver: BRIAN JONES | Truck & Trailer: 8505 - 8905

Qty.	Description	Price	Amount	
	DREDGE			
31.32	TKT 128290			
	Load Time .75			
	>			
	Not Responsible for Damage Behind Curb Line			

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax		
Total		

248115 / 4055211

112243

Thank You

DIETRICH TRUCKING, LLC

7211-A NE 43rd Ave.
VANCOUVER, WASHINGTON 98661
(360) 892-3881
Fax (360) 883-1898

Customer's Order No.	Phone	Date
LW067		12-5-13
Sold To	MCDQ	
Address		
City		

Driver	Truck & Trailer
Mike	8565 8911

Qty.	Description	Price	Amount
30 62	Tons Spoils Hauled to Waste Landfill		
	Ticket # 128257		
	>		
	Not Responsible for Damage Behind Curb Line		

All claims and returned goods MUST be accompanied by this bill.

Rec'd By

Tax	
Total	

248115 / 4055211

113098

Thank You

MCDD Documentation

Drying Agent Use

Date	Truck #	Light Weight	Heavy Weight	Net Weight	
11/19/13	8503	40200	102980	31.39	
11/25/13	8503	40200	101500	30.65	
12/02/13	8503	40000	88700	24.35	
12/11/13	8503	40060	90540	25.24	111.63
				0	
TOTAL				111.63	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
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				0	
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				0	
				0	

Appendix C

Laboratory Reports, Chain-of-Custody, and Quality Assurance Documentation

Appendix B – Analytical Laboratory Testing Program and Documentation

1.0 Introduction

This appendix documents the results of a quality assurance review of the analytical data for samples collected during the sediment removal at the Portland Willamette Inlet in Portland, Oregon. Laboratory analysis of sediment samples was performed by Apex Labs of Tigard, Oregon. Copies of the analytical laboratory reports are included in this appendix.

2.0 Analytical Methods

Sediment samples were analyzed for copper and lead by EPA Method 6020A.

3.0 Quality Assurance Review

The following criteria were reviewed to evaluate data quality:

- Holding times;
- Method blanks;
- Surrogate recoveries;
- Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries; and
- Matrix spike (MS) recoveries.

The laboratory quality assurance/quality control (QA/QC) indicated the following.

- Required holding times were met.
- No concentrations of copper or lead were detected in the method blanks.
- Surrogate recoveries were within control limits.
- LCS/LCSD results were within control limits.
- MS results were within control limits with the exception of copper associated with sample PWI-5. The surrogate recovery in the MS was above control limits indicating the results may be biased high. Since the LCS/LCSD recoveries were within control limits, the data was not flagged.

The data were reviewed by the project manager and found to be acceptable.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, February 20, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0068, which was received by the laboratory on 12/3/2013 at 3:22:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-1	A3L0068-01	Soil	12/03/13 13:45	12/03/13 15:22

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-1 (A3L0068-01)			**Matrix: Soil**					
Batch: 3120094								
Copper	**348**	---	4.08	mg/kg dry	10	12/04/13 13:57	EPA 6020A	
Lead	**197**	---	0.816	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-1 (A3L0068-01)			**Matrix: Soil**		**Batch: 3120058**			
% Solids	**26.8**	---	1.00	% by Weight	1	12/04/13 11:14	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120094 - EPA 3051A							**Soil**					
Blank (3120094-BLK1)					Prepared: 12/04/13 11:21		Analyzed: 12/04/13 13:20					
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120094-BS1)					Prepared: 12/04/13 11:21		Analyzed: 12/04/13 13:23					
EPA 6020A												
Copper	53.6	---	1.00	mg/kg wet	10	50.0	---	107	80-120%	---	---	
Lead	53.1	---	0.200	"	"	"	---	106	"	---	---	

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120058 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120094							
A3L0068-01	Soil	EPA 6020A	12/03/13 13:45	12/04/13 11:21	0.457g/50mL	0.5g/50mL	1.09

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120058							
A3L0068-01	Soil	EPA 8000C	12/03/13 13:45	12/03/13 17:24	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

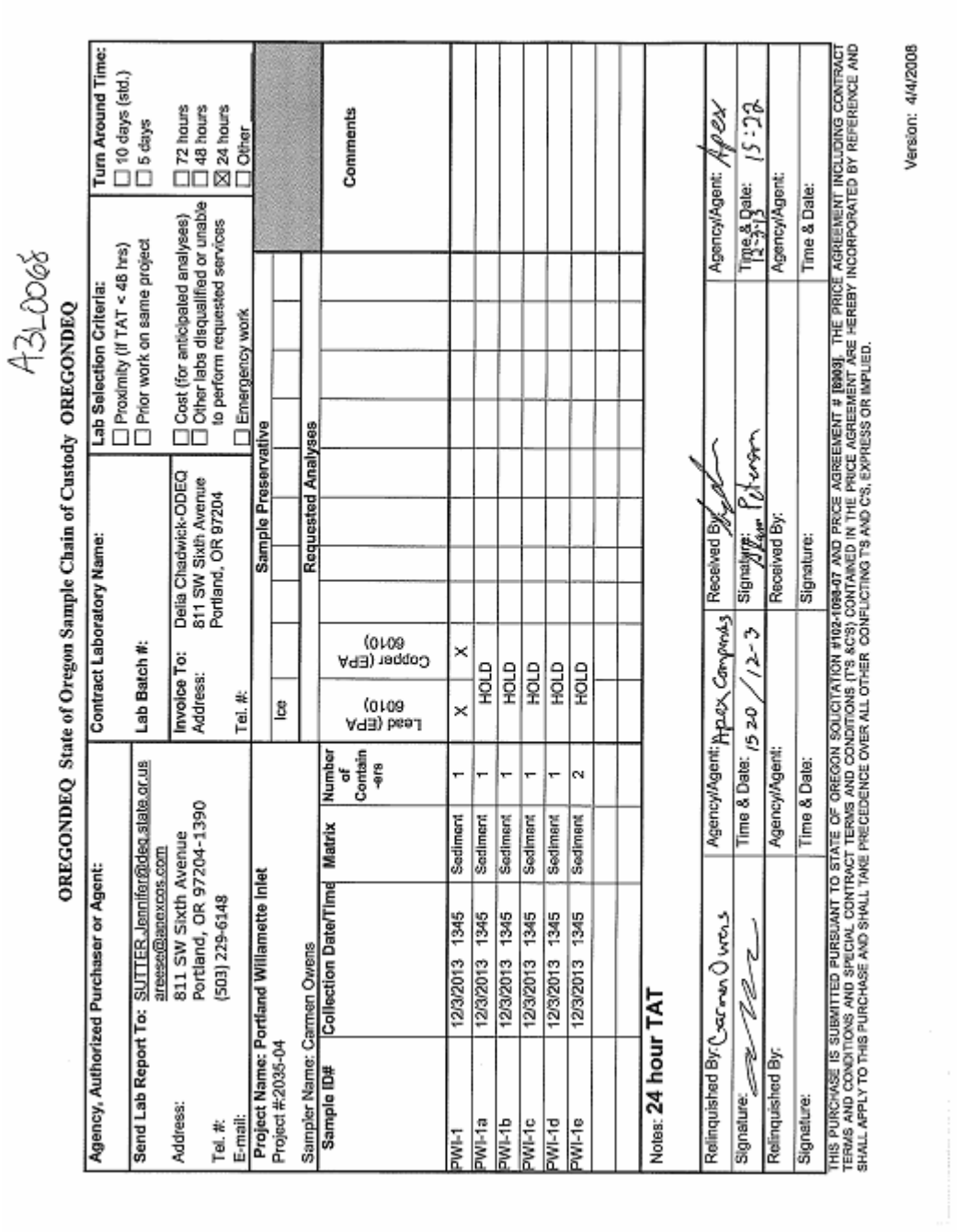
Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 14:52



A3L0068

OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

Agency, Authorized Purchaser or Agent:

Send Lab Report To: SUTTER Jennifer@deq.state.or.us areese@anexcos.com

Address: 811 SW Sixth Avenue Portland, OR 97204-1390

Tel. #: (503) 229-6148

E-mail:

Contract Laboratory Name:

Lab Batch #:

Invoice To: Delia Chadwick-ODEQ
Address: 811 SW Sixth Avenue Portland, OR 97204

Tel. #:

Lab Selection Criteria:
☐ Proximity (if TAT < 48 hrs)
☐ Prior work on same project
☐ Cost (for anticipated analyses)
☐ Other labs disqualified or unable to perform requested services
☐ Emergency work

Turn Around Time:
☐ 10 days (std.)
☐ 5 days
☐ 72 hours
☐ 48 hours
☒ 24 hours
☐ Other

Project Name: Portland Willamette Inlet
Project #:2035-04

Sampler Name: Carmen Owens

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Sample Preservative: Ice	Requested Analyses: Lead (EPA 6010)	Requested Analyses: Copper (EPA 6010)	Comments
PWI-1	12/3/2013 1345	Sediment	1		X	X	
PWI-1a	12/3/2013 1345	Sediment	1		HOLD		
PWI-1b	12/3/2013 1345	Sediment	1		HOLD		
PWI-1c	12/3/2013 1345	Sediment	1		HOLD		
PWI-1d	12/3/2013 1345	Sediment	1		HOLD		
PWI-1e	12/3/2013 1345	Sediment	2		HOLD		

Notes: **24 hour TAT**

Relinquished By: Carmen Owens	Agency/Agent: Apex Companies	Received By:	Agency/Agent: Apex
Signature:	Time & Date: 15 20 / 12-3	Signature:	Time & Date: 12/3/13 15:22
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # [0003]. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (TS &CS) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING TS AND CS, EXPRESS OR IMPLIED.

Version: 4/4/2006

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, February 20, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0132, which was received by the laboratory on 12/5/2013 at 3:38:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-4	A3L0132-01	Soil	12/05/13 15:00	12/05/13 15:38

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-4 (A3L0132-01RE1)			**Matrix: Soil**					
Batch: 3120184								
Copper	**23.9**	---	1.46	mg/kg dry	10	12/09/13 12:37	EPA 6020A	
Lead	**71.8**	---	0.293	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-4 (A3L0132-01)			**Matrix: Soil**		**Batch: 3120148**			
% Solids	**65.8**	---	1.00	% by Weight	1	12/06/13 11:55	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120184 - EPA 3051A							**Soil**					
Blank (3120184-BLK1)					Prepared: 12/06/13 13:42 Analyzed: 12/08/13 15:38							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
Blank (3120184-BLK2)					Prepared: 12/06/13 13:42 Analyzed: 12/09/13 11:11							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	Q-16
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	Q-16
LCS (3120184-BS1)					Prepared: 12/06/13 13:42 Analyzed: 12/08/13 15:30							
EPA 6020A												
Copper	50.9	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Lead	53.9	---	0.200	"	"	"	---	108	"	---	---	
LCS (3120184-BS2)					Prepared: 12/06/13 13:42 Analyzed: 12/09/13 11:13							
EPA 6020A												
Copper	51.0	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	Q-16
Lead	50.9	---	0.200	"	"	"	---	102	"	---	---	Q-16
Duplicate (3120184-DUP1)					Prepared: 12/06/13 13:42 Analyzed: 12/09/13 11:32							
QC Source Sample: Other (A3K0706-03)												
EPA 6020A												
Copper	**207**	---	1.31	mg/kg dry	10	---	236	---	---	13	40%	
Lead	**3.15**	---	0.262	"	"	---	3.97	---	---	23	40%	
Matrix Spike (3120184-MS1)					Prepared: 12/06/13 13:42 Analyzed: 12/09/13 11:35							
QC Source Sample: Other (A3K0706-03)												
EPA 6020A												
Copper	298	---	1.39	mg/kg dry	10	69.5	236	89	75-125%	---	---	
Lead	65.8	---	0.278	"	"	"	3.97	89	"	---	---	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
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503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120148 - Total Solids (Dry Weight)							**Soil**					
Duplicate (3120148-DUP1)					Prepared: 12/05/13 13:46		Analyzed: 12/06/13 11:55					
QC Source Sample: Other (A3L0062-10)												
EPA 8000C												
% Solids	**79.4**	---	1.00	% by Weight	1	---	79.3	---	---	0.1	20%	
Duplicate (3120148-DUP2)					Prepared: 12/05/13 13:46		Analyzed: 12/06/13 11:55					
QC Source Sample: Other (A3L0062-21)												
EPA 8000C												
% Solids	**77.8**	---	1.00	% by Weight	1	---	77.9	---	---	0.1	20%	
Duplicate (3120148-DUP3)					Prepared: 12/05/13 13:46		Analyzed: 12/06/13 11:55					
QC Source Sample: Other (A3L0107-03)												
EPA 8000C												
% Solids	**80.7**	---	1.00	% by Weight	1	---	80.2	---	---	0.6	20%	
Duplicate (3120148-DUP4)					Prepared: 12/05/13 13:50		Analyzed: 12/06/13 11:55					
QC Source Sample: Other (A3L0112-09)												
EPA 8000C												
% Solids	**86.9**	---	1.00	% by Weight	1	---	85.1	---	---	2	20%	
Duplicate (3120148-DUP5)					Prepared: 12/05/13 17:27		Analyzed: 12/06/13 11:55					
QC Source Sample: PWI-4 (A3L0132-01)												
EPA 8000C												
% Solids	**66.1**	---	1.00	% by Weight	1	---	65.8	---	---	0.5	20%	
Duplicate (3120148-DUP6)					Prepared: 12/05/13 18:42		Analyzed: 12/06/13 11:55					
QC Source Sample: Other (A3L0137-03)												
EPA 8000C												
% Solids	**82.6**	---	1.00	% by Weight	1	---	85.2	---	---	3	20%	

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Darwin Thomas, Business Development Director

Apex Labs

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120184							
A3L0132-01RE1	Soil	EPA 6020A	12/05/13 15:00	12/06/13 16:31	0.519g/50mL	0.5g/50mL	0.96

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120148							
A3L0132-01	Soil	EPA 8000C	12/05/13 15:00	12/05/13 17:27	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05

Notes and Definitions

Qualifiers:

Q-16	Reanalysis of an original Batch QC sample.

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Darwin Thomas, Business Development Director

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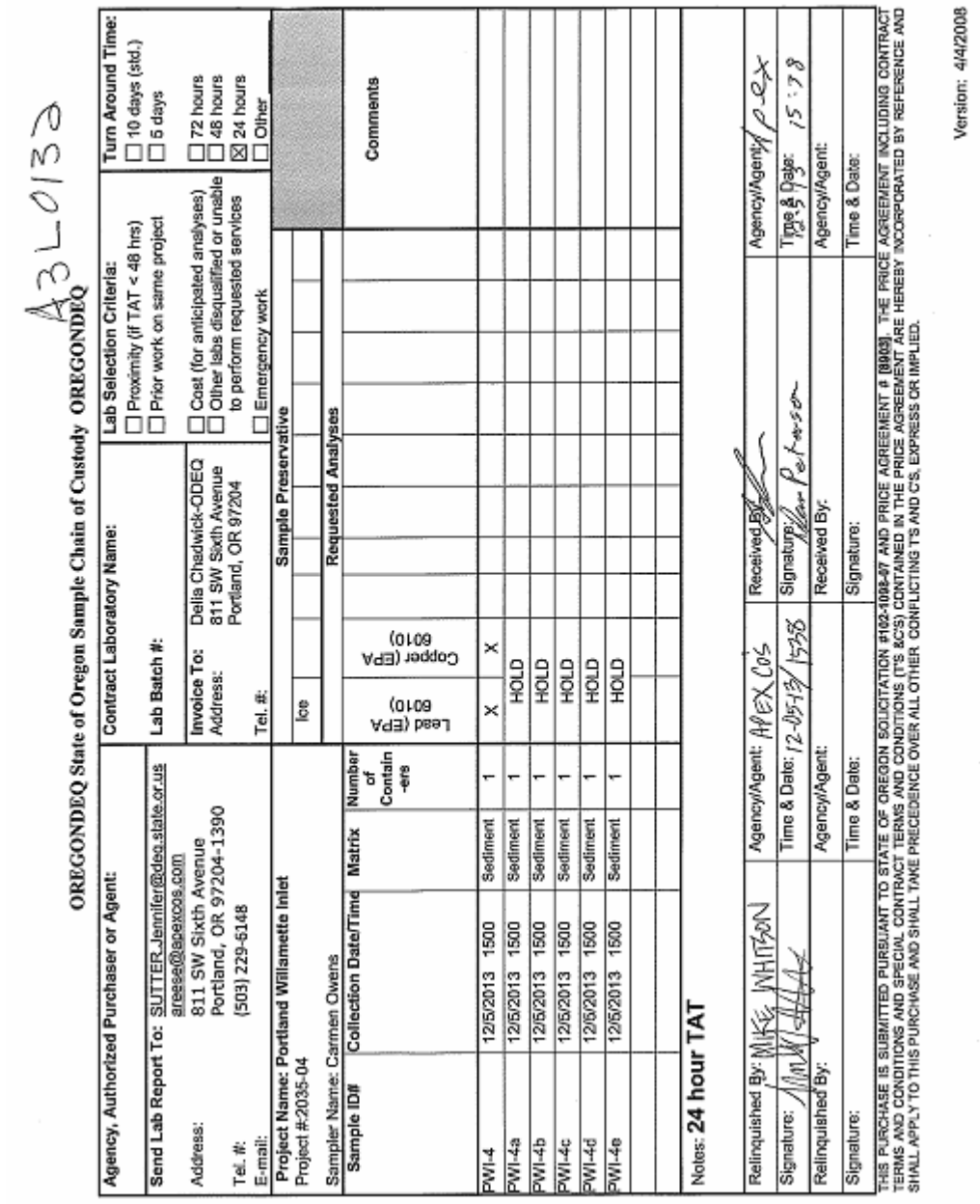
Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:05



OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

A3L0133

Agency, Authorized Purchaser or Agent:

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us; areese@apexcos.com
Address: 811 SW Sixth Avenue, Portland, OR 97204-1390
Tel. #: (503) 229-6148
E-mail:

Project Name: Portland Willamette Inlet
Project #:2035-04
Sampler Name: Carmen Owens

Contract Laboratory Name:
Lab Batch #:
Invoice To: Delia Chadwick-ODEQ
Address: 811 SW Sixth Avenue, Portland, OR 97204
Tel. #:

Lab Selection Criteria:
☐ Proximity (if TAT < 48 hrs)
☐ Prior work on same project
☐ Cost (for anticipated analyses)
☐ Other labs disqualified or unable to perform requested services
☐ Emergency work

Turn Around Time:
☐ 10 days (std.)
☐ 5 days
☐ 72 hours
☐ 48 hours
☒ 24 hours
☐ Other

Sample ID/#	Collection Date/Time	Matrix	Number of Containers	Sample Preservative: Ice	Requested Analyses: Lead (EPA 6010)	Requested Analyses: Copper (EPA 6010)	Comments
PWI-4	12/5/2013 1500	Sediment	1		X	X	
PWI-4a	12/5/2013 1500	Sediment	1		HOLD		
PWI-4b	12/5/2013 1500	Sediment	1		HOLD		
PWI-4c	12/5/2013 1500	Sediment	1		HOLD		
PWI-4d	12/6/2013 1500	Sediment	1		HOLD		
PWI-4e	12/5/2013 1500	Sediment	1		HOLD		

Notes: **24 hour TAT**

Relinquished By: MIKE WHITSON	Agency/Agent: APEX COS	Received By:	Agency/Agent: Apex
Signature:	Time & Date: 12-05-13 1535	Signature:	Time & Date: 15:18
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # [illegible]. THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING TS AND CS, EXPRESS OR IMPLIED.

Version: 4/4/2008

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, February 20, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0182, which was received by the laboratory on 12/9/2013 at 2:45:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-3	A3L0182-01	Soil	12/09/13 14:00	12/09/13 14:45

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-3 (A3L0182-01)			**Matrix: Soil**					
Batch: 3120220								
Copper	**405**	---	2.24	mg/kg dry	10	12/09/13 18:42	EPA 6020A	
Lead	**137**	---	0.448	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-3 (A3L0182-01)			**Matrix: Soil**		**Batch: 3120221**			
% Solids	**45.0**	---	1.00	% by Weight	1	12/10/13 10:10	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120220 - EPA 3051A							**Soil**					
Blank (3120220-BLK1)					Prepared: 12/09/13 14:47 Analyzed: 12/09/13 18:22							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120220-BS1)					Prepared: 12/09/13 14:47 Analyzed: 12/09/13 18:25							
EPA 6020A												
Copper	51.3	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Lead	54.2	---	0.200	"	"	"	---	108	"	---	---	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120221 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120220							
A3L0182-01	Soil	EPA 6020A	12/09/13 14:00	12/09/13 14:47	0.496g/50mL	0.5g/50mL	1.01

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120221							
A3L0182-01	Soil	EPA 8000C	12/09/13 14:00	12/09/13 17:35	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

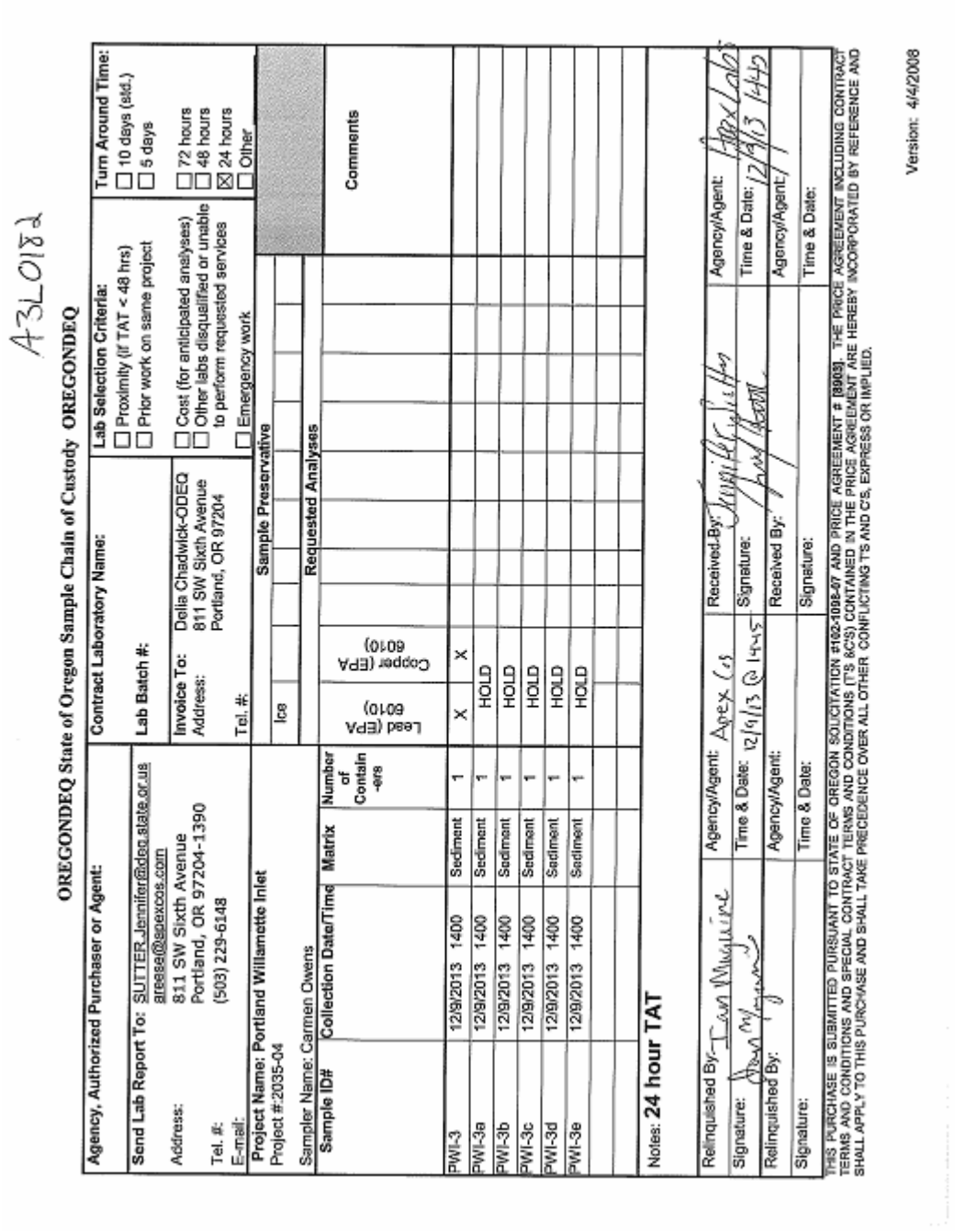
Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/20/14 15:47



OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

A3L0182

Agency, Authorized Purchaser or Agent:

Contract Laboratory Name:

Lab Batch #:

Lab Selection Criteria:
☐ Proximity (if TAT < 48 hrs)
☐ Prior work on same project
☐ Cost (for anticipated analyses)
☐ Other labs disqualified or unable to perform requested services
☐ Emergency work

Turn Around Time:
☐ 10 days (std.)
☐ 5 days
☐ 72 hours
☐ 48 hours
☒ 24 hours
☐ Other

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us; areese@apexcos.com
Address: 811 SW Sixth Avenue, Portland, OR 97204-1390
Tel. #: (503) 229-6148
E-mail:

Invoice To: Della Chadwick-ODEQ
Address: 811 SW Sixth Avenue, Portland, OR 97204
Tel. #:

Project Name: Portland Willamette Inlet
Project #: 2035-04
Sampler Name: Carmen Owens

Sample Preservative: Ice

Requested Analyses: Lead (EPA 6010); Copper (EPA 6010)

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Lead (EPA 6010)	Copper (EPA 6010)	Comments
PWI-3	12/9/2013 1400	Sediment	1	X	X	
PWI-3a	12/9/2013 1400	Sediment	1	HOLD		
PWI-3b	12/9/2013 1400	Sediment	1	HOLD		
PWI-3c	12/9/2013 1400	Sediment	1	HOLD		
PWI-3d	12/9/2013 1400	Sediment	1	HOLD		
PWI-3e	12/9/2013 1400	Sediment	1	HOLD		

Notes: **24 hour TAT**

Relinquished By: Tom Wigington	Agency/Agent: Apex Labs	Received By: Jennifer Sutter	Agency/Agent: Apex Labs
Signature:	Time & Date: 12/9/13 @ 1445	Signature:	Time & Date: 12/9/13 1445
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # 89093. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Version: 4/4/2008

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, February 13, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0183, which was received by the laboratory on 12/9/2013 at 2:45:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-2	A3L0183-01	Soil	12/09/13 13:00	12/09/13 14:45

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-2 (A3L0183-01)			**Matrix: Soil**					
Batch: 3120220								
Copper	**78.0**	---	1.65	mg/kg dry	10	12/09/13 18:45	EPA 6020A	
Lead	**53.3**	---	0.331	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-2 (A3L0183-01)			**Matrix: Soil**		**Batch: 3120221**			
% Solids	**60.2**	---	1.00	% by Weight	1	12/10/13 10:10	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120220 - EPA 3051A							**Soil**					
Blank (3120220-BLK1)					Prepared: 12/09/13 14:47 Analyzed: 12/09/13 18:22							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120220-BS1)					Prepared: 12/09/13 14:47 Analyzed: 12/09/13 18:25							
EPA 6020A												
Copper	51.3	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Lead	54.2	---	0.200	"	"	"	---	108	"	---	---	

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120221 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120220							
A3L0183-01	Soil	EPA 6020A	12/09/13 13:00	12/09/13 14:47	0.502g/50mL	0.5g/50mL	1.00

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120221							
A3L0183-01	Soil	EPA 8000C	12/09/13 13:00	12/09/13 19:49	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Darwin Thomas, Business Development Director

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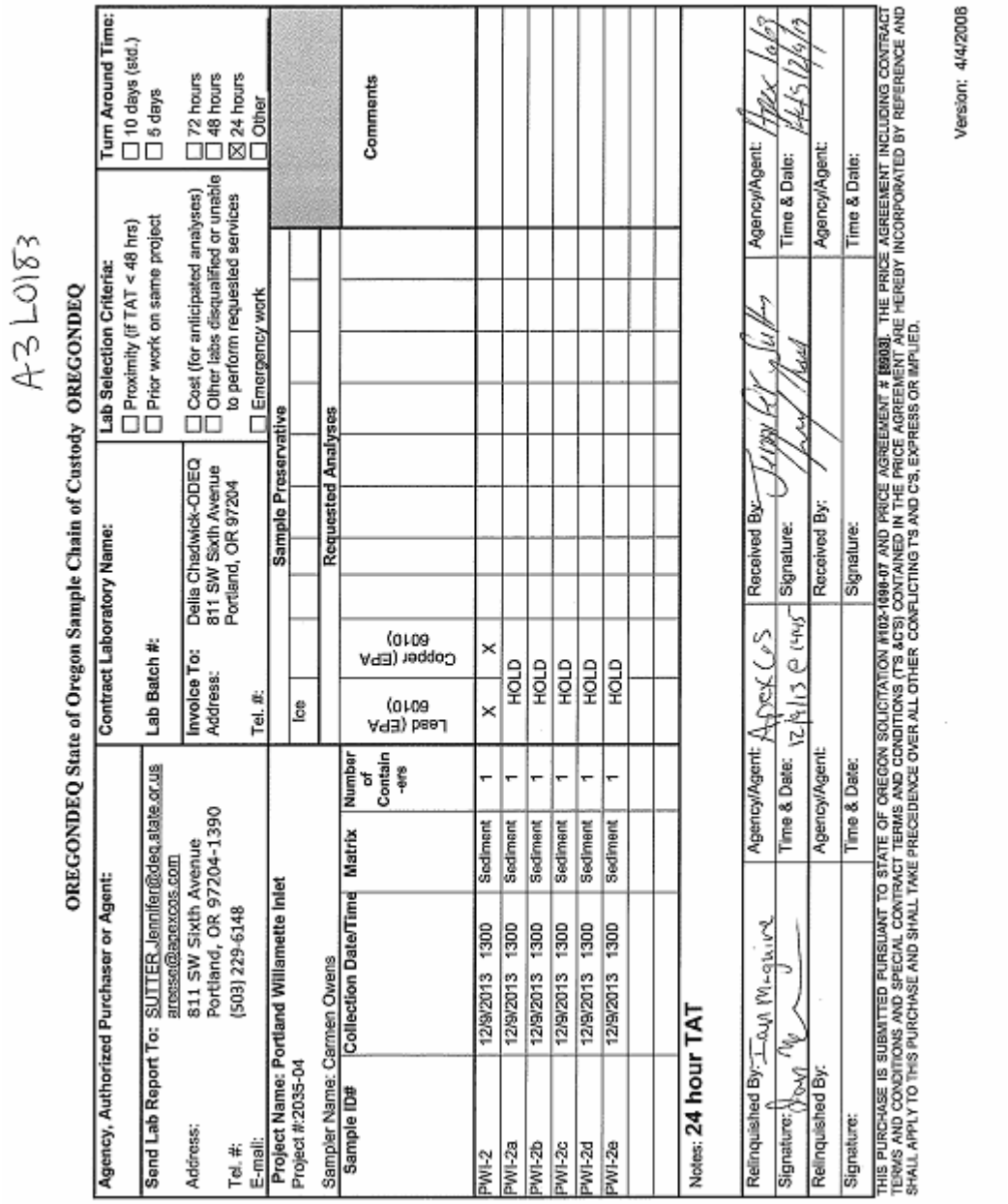
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/13/14 09:54



A3L0183

OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

Agency, Authorized Purchaser or Agent:

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us; areese@apexcos.com

Address: 811 SW Sixth Avenue, Portland, OR 97204-1390

Tel. #: (503) 229-6148

E-mail:

Contract Laboratory Name:

Lab Batch #:

Invoice To: Della Chadwick-ODEQ

Address: 811 SW Sixth Avenue, Portland, OR 97204

Tel. #:

Lab Selection Criteria:
☐ Proximity (if TAT < 48 hrs)
☐ Prior work on same project
☐ Cost (for anticipated analyses)
☐ Other labs disqualified or unable to perform requested services
☐ Emergency work

Turn Around Time:
☐ 10 days (std.)
☐ 5 days
☐ 72 hours
☐ 48 hours
☒ 24 hours
☐ Other

Project Name: Portland Willamette Inlet
Project #:2035-04

Sampler Name: Carmen Owens

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Sample Preservative: Ice	Requested Analyses: Lead (EPA 6010)	Requested Analyses: Copper (EPA 6010)	Comments
PWI-2	12/9/2013 1300	Sediment	1		X	X	
PWI-2a	12/9/2013 1300	Sediment	1		HOLD		
PWI-2b	12/9/2013 1300	Sediment	1		HOLD		
PWI-2c	12/9/2013 1300	Sediment	1		HOLD		
PWI-2d	12/9/2013 1300	Sediment	1		HOLD		
PWI-2e	12/9/2013 1300	Sediment	1		HOLD		

Notes: **24 hour TAT**

Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1696-07 AND PRICE AGREEMENT # [illegible]. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (TS &CS) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING TS AND CS, EXPRESS OR IMPLIED.

Version: 4/4/2006

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Saturday, February 22, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0232, which was received by the laboratory on 12/11/2013 at 10:50:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-5	A3L0232-01	Soil	12/11/13 09:00	12/11/13 10:50

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-5 (A3L0232-01)			**Matrix: Soil**					
Batch: 3120333								
Copper	**226**	---	2.33	mg/kg dry	10	12/13/13 10:48	EPA 6020A	Q-42
Lead	**149**	---	0.466	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-5 (A3L0232-01)			**Matrix: Soil**		**Batch: 3120278**			
% Solids	**47.3**	---	1.00	% by Weight	1	12/12/13 10:30	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120333 - EPA 3051A							**Soil**					
Blank (3120333-BLK1)					Prepared: 12/12/13 15:31 Analyzed: 12/13/13 10:43							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120333-BS1)					Prepared: 12/12/13 15:31 Analyzed: 12/13/13 10:45							
EPA 6020A												
Copper	51.6	---	1.00	mg/kg wet	10	50.0	---	103	80-120%	---	---	
Lead	50.0	---	0.200	"	"	"	---	100	"	---	---	
Duplicate (3120333-DUP1)					Prepared: 12/12/13 15:31 Analyzed: 12/13/13 10:51							
QC Source Sample: PWI-5 (A3L0232-01)												
EPA 6020A												
Copper	**231**	---	2.13	mg/kg dry	10	---	226	---	---	2	40%	
Lead	**153**	---	0.425	"	"	---	149	---	---	2	40%	
Matrix Spike (3120333-MS1)					Prepared: 12/12/13 15:31 Analyzed: 12/13/13 10:54							
QC Source Sample: PWI-5 (A3L0232-01)												
EPA 6020A												
Copper	363	---	2.06	mg/kg dry	10	103	226	133	75-125%	---	---	Q-01
Lead	273	---	0.412	"	"	"	149	120	"	---	---	
Post Spike (3120333-PS1)					Prepared: 12/17/13 18:36 Analyzed: 12/17/13 21:39							
QC Source Sample: PWI-5 (A3L0232-01)												
EPA 6020A												
Copper	1960	---		ug/L	10	909	883	118	80-120%		---	

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120278 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Laboratories

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120333							
A3L0232-01	Soil	EPA 6020A	12/11/13 09:00	12/12/13 15:31	0.454g/50mL	0.5g/50mL	1.10

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120278							
A3L0232-01	Soil	EPA 8000C	12/11/13 09:00	12/11/13 12:26	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21

Notes and Definitions

Qualifiers:

Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Darwin Thomas, Business Development Director

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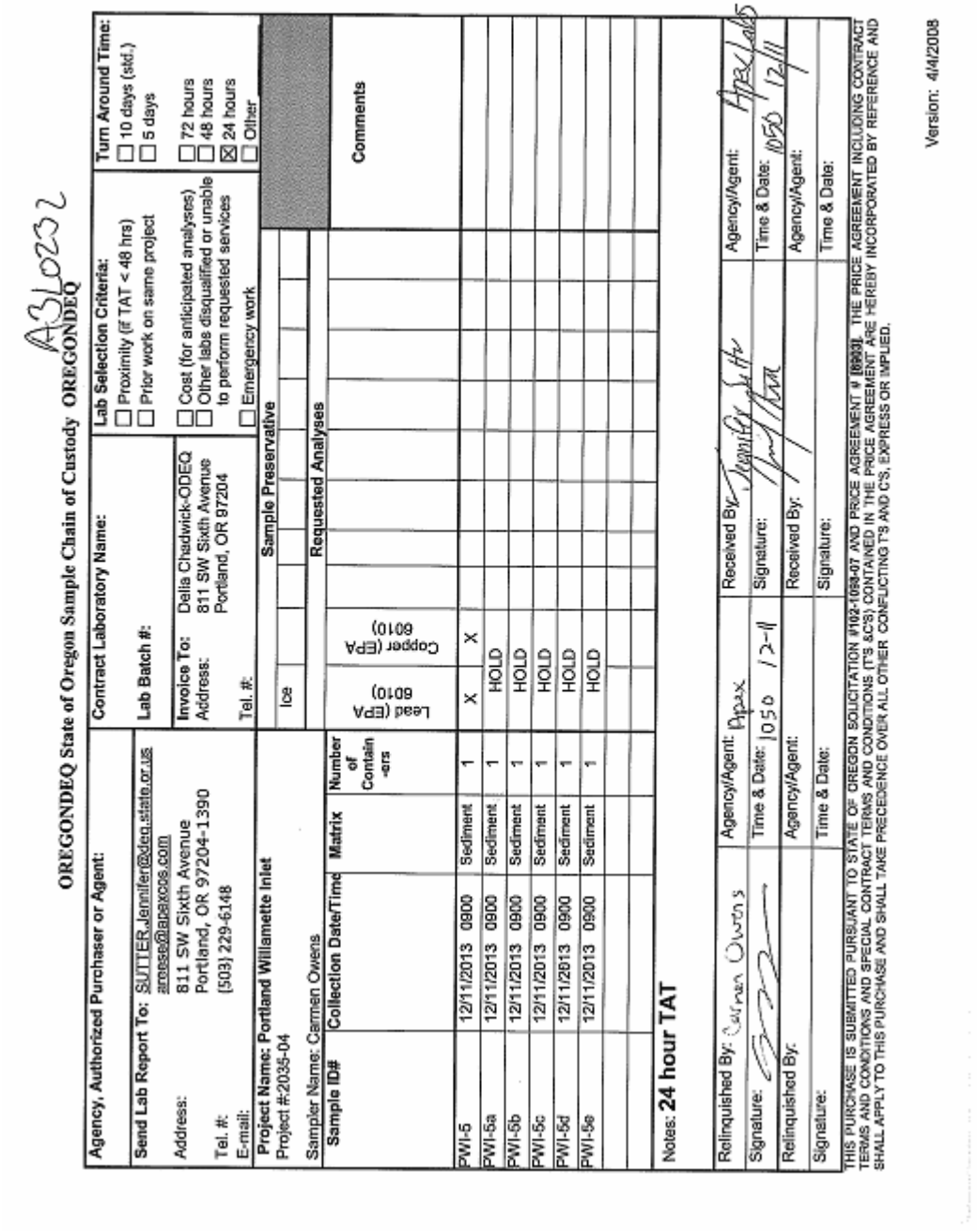
Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:21



OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

A31023 2

Agency, Authorized Purchaser or Agent:

Contract Laboratory Name:

Lab Selection Criteria:
☐ Proximity (if TAT < 48 hrs)
☐ Prior work on same project
☐ Cost (for anticipated analyses)
☐ Other labs disqualified or unable to perform requested services
☐ Emergency work

Turn Around Time:
☐ 10 days (std.)
☐ 5 days
☐ 72 hours
☐ 48 hours
☒ 24 hours
☐ Other

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us areese@apexcos.com

Address: 811 SW Sixth Avenue Portland, OR 97204-1390

Tel. #: (503) 229-6148

E-mail:

Lab Batch #:

Invoice To: Delia Chadwick-ODEQ
Address: 811 SW Sixth Avenue Portland, OR 97204

Tel. #:

Project Name: Portland Willamette Inlet
Project #:2035-04

Sampler Name: Carmen Owens

Sample Preservative: Ice

Requested Analyses

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Lead (EPA 6010)	Copper (EPA 6010)	Comments
PWI-5	12/11/2013 0900	Sediment	1	X	X	
PWI-5a	12/11/2013 0900	Sediment	1	HOLD		
PWI-5b	12/11/2013 0900	Sediment	1	HOLD		
PWI-5c	12/11/2013 0900	Sediment	1	HOLD		
PWI-5d	12/11/2013 0900	Sediment	1	HOLD		
PWI-5e	12/11/2013 0900	Sediment	1	HOLD		

Notes: **24 hour TAT**

Relinquished By: Carmen Owens	Agency/Agent: Apex	Received By:	Agency/Agent: Apex Labs
Signature:	Time & Date: 1050 12-11	Signature:	Time & Date: 1050 12/11
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #103-1058-07 AND PRICE AGREEMENT # [illegible]. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Version: 4/4/2008

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Saturday, February 22, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0348, which was received by the laboratory on 12/16/2013 at 11:15:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-6	A3L0348-01	Soil	12/16/13 10:00	12/16/13 11:15

Apex Laboratories

Darwin Thomas, Business Development Director

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503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-6 (A3L0348-01)			**Matrix: Soil**					
Batch: 3120403								
Copper	**99.9**	---	2.05	mg/kg dry	10	12/17/13 16:16	EPA 6020A	
Lead	**66.3**	---	0.411	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-6 (A3L0348-01)			**Matrix: Soil**		**Batch: 3120395**			
% Solids	**46.8**	---	1.00	% by Weight	1	12/17/13 10:00	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

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503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120403 - EPA 3051A							**Soil**					
Blank (3120403-BLK1)					Prepared: 12/16/13 17:14 Analyzed: 12/17/13 16:10							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120403-BS1)					Prepared: 12/16/13 17:14 Analyzed: 12/17/13 16:13							
EPA 6020A												
Copper	52.3	---	1.00	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Lead	52.5	---	0.200	"	"	"	---	105	"	---	---	

Apex Laboratories

Darwin Thomas, Business Development Director

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503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120395 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120403							
A3L0348-01	Soil	EPA 6020A	12/16/13 10:00	12/16/13 17:14	0.52g/50mL	0.5g/50mL	0.96

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120395							
A3L0348-01	Soil	EPA 8000C	12/16/13 10:00	12/16/13 15:16	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

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503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
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---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Darwin Thomas, Business Development Director

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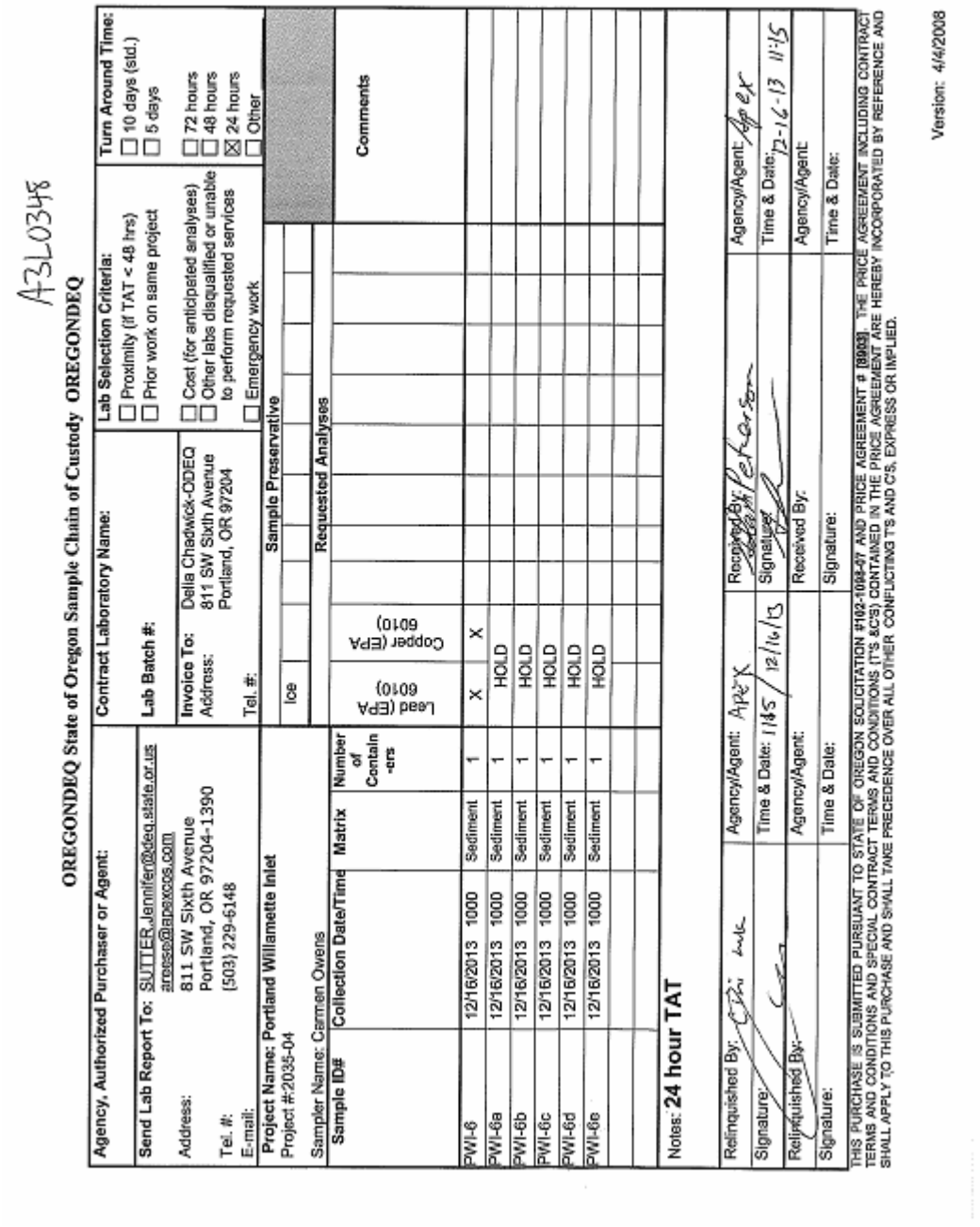
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:20



A3L0348

OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

Agency, Authorized Purchaser or Agent:

Contract Laboratory Name:

Lab Batch #:

Lab Selection Criteria:
☐ Proximity (if TAT < 48 hrs)
☐ Prior work on same project
☐ Cost (for anticipated analyses)
☐ Other labs disqualified or unable to perform requested services
☐ Emergency work

Turn Around Time:
☐ 10 days (std.)
☐ 5 days
☐ 72 hours
☐ 48 hours
☒ 24 hours
☐ Other

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us
areese@apexcos.com

Address: 811 SW Sixth Avenue
Portland, OR 97204-1390

Tel. #: (503) 229-6148

E-mail:

Invoice To: Della Chadwick-ODEQ
Address: 811 SW Sixth Avenue
Portland, OR 97204

Tel. #:

Project Name: Portland Willamette Inlet
Project #:2035-04

Sampler Name: Carmen Owens

Sample Preservative

Ice

Requested Analyses

Sample ID#	Collection Date/Time	Matrix	Number of Containers	Lead (EPA 6010)	Copper (EPA 6010)	Comments
PWI-6	12/16/2013 1000	Sediment	1	X	X	
PWI-6a	12/16/2013 1000	Sediment	1	HOLD		
PWI-6b	12/16/2013 1000	Sediment	1	HOLD		
PWI-6c	12/16/2013 1000	Sediment	1	HOLD		
PWI-6d	12/16/2013 1000	Sediment	1	HOLD		
PWI-6e	12/16/2013 1000	Sediment	1	HOLD		

Notes: **24 hour TAT**

Relinquished By:	Agency/Agent: Apex	Received By:	Agency/Agent: Apex
Signature:	Time & Date: 1145 / 12/16/13	Signature:	Time & Date: 12-16-13 11:15
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-97 AND PRICE AGREEMENT # [9909]. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (T'S &C'S) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING T'S AND C'S, EXPRESS OR IMPLIED.

Version: 4/4/2008

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Saturday, February 22, 2014

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0349, which was received by the laboratory on 12/16/2013 at 11:15:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-1	A3L0349-01	Soil	12/16/13 09:00	12/16/13 11:15

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-1 (A3L0349-01)			**Matrix: Soil**					
Batch: 3120403								
Copper	**30.8**	---	1.50	mg/kg dry	10	12/17/13 16:19	EPA 6020A	
Lead	**21.0**	---	0.300	"	"	"	"	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-1 (A3L0349-01)			**Matrix: Soil**		**Batch: 3120395**			
% Solids	**69.7**	---	1.00	% by Weight	1	12/17/13 10:00	EPA 8000C	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120403 - EPA 3051A							**Soil**					
Blank (3120403-BLK1)					Prepared: 12/16/13 17:14 Analyzed: 12/17/13 16:10							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120403-BS1)					Prepared: 12/16/13 17:14 Analyzed: 12/17/13 16:13							
EPA 6020A												
Copper	52.3	---	1.00	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Lead	52.5	---	0.200	"	"	"	---	105	"	---	---	
Duplicate (3120403-DUP1)					Prepared: 12/16/13 17:14 Analyzed: 12/17/13 16:22							
QC Source Sample: PWI-1 (A3L0349-01)												
EPA 6020A												
Copper	**30.4**	---	1.49	mg/kg dry	10	---	30.8	---	---	1	40%	
Lead	**20.5**	---	0.297	"	"	---	21.0	---	---	2	40%	
Matrix Spike (3120403-MS1)					Prepared: 12/16/13 17:14 Analyzed: 12/17/13 16:25							
QC Source Sample: PWI-1 (A3L0349-01)												
EPA 6020A												
Copper	113	---	1.56	mg/kg dry	10	78.0	30.8	106	75-125%	---	---	
Lead	104	---	0.312	"	"	"	21.0	106	"	---	---	

Apex Laboratories

Darwin Thomas, Business Development Director

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

QUALITY CONTROL (QC) SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120395 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120403							
A3L0349-01	Soil	EPA 6020A	12/16/13 09:00	12/16/13 17:14	0.478g/50mL	0.5g/50mL	1.05

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120395							
A3L0349-01	Soil	EPA 8000C	12/16/13 09:00	12/16/13 15:16	1N/A/1N/A	1N/A/1N/A	NA

Apex Laboratories

Darwin Thomas, Business Development Director

Apex Labs

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Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
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MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
***	Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

Darwin Thomas, Business Development Director

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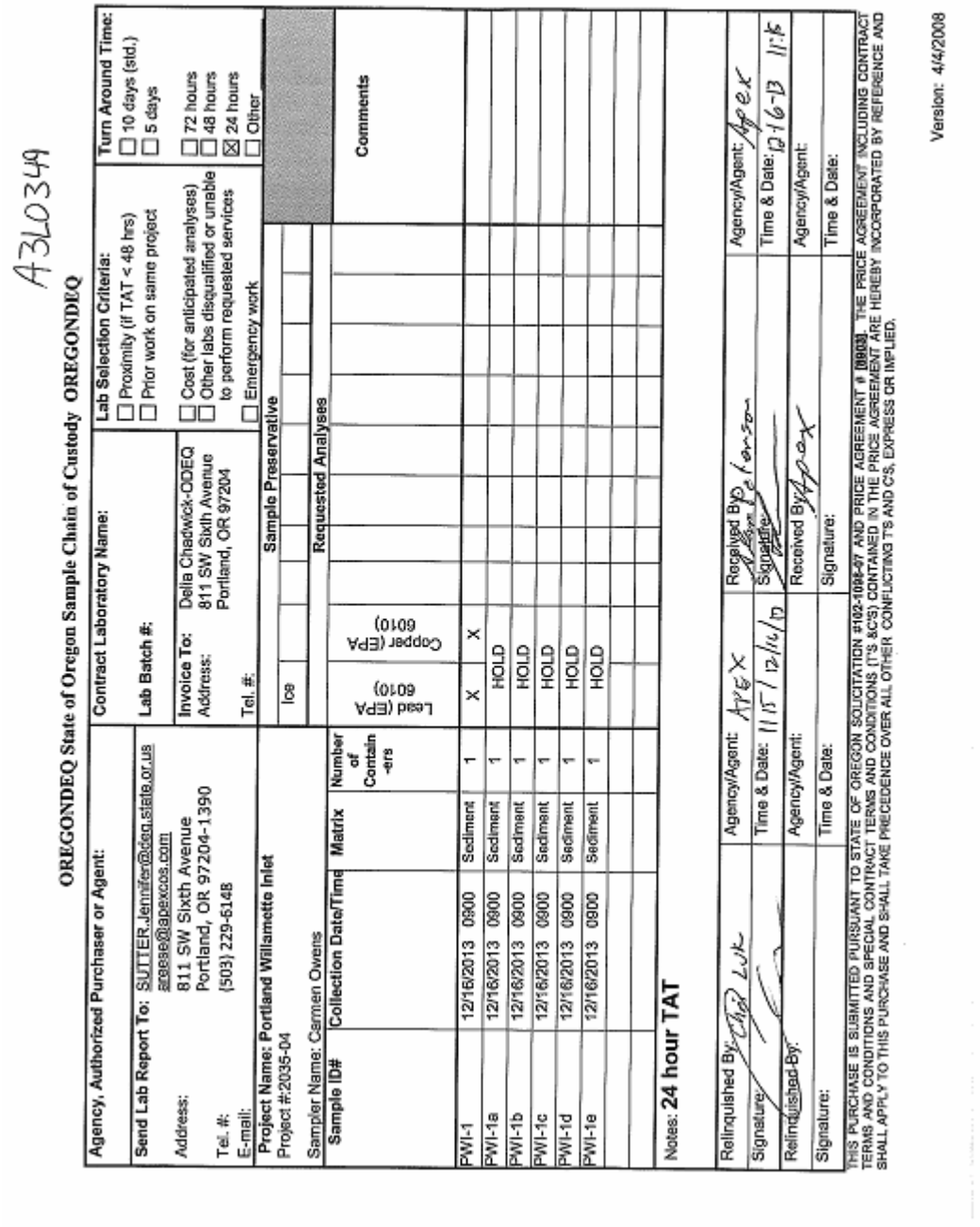
Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	02/22/14 10:18



A3L0349

OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

Agency, Authorized Purchaser or Agent:

Contract Laboratory Name:

Lab Selection Criteria: ☐ Proximity (if TAT < 48 hrs) ☐ Prior work on same project

Turn Around Time: ☐ 10 days (std.) ☐ 5 days ☐ 72 hours ☐ 48 hours ☒ 24 hours ☐ Other

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us areese@apexcos.com

Address: 811 SW Sixth Avenue Portland, OR 97204-1390

Tel. #: (503) 229-6148

E-mail:

Lab Batch #:

Invoice To: Della Chadwick-ODEQ

Address: 811 SW Sixth Avenue Portland, OR 97204

Tel. #:

☐ Cost (for anticipated analyses) ☐ Other labs disqualified or unable to perform requested services ☐ Emergency work

Project Name: Portland Willamette Inlet

Project #:2035-04

Sampler Name: Carmen Owens

Sample ID#	Collection Date/Time	Matrix	Number of Contain-ers	Sample Preservative: Ice	Requested Analyses: Lead (EPA 6010)	Copper (EPA 6010)	Comments
PWI-1	12/16/2013 0900	Sediment	1		X	X	
PWI-1a	12/16/2013 0900	Sediment	1		HOLD		
PWI-1b	12/16/2013 0900	Sediment	1		HOLD		
PWI-1c	12/16/2013 0900	Sediment	1		HOLD		
PWI-1d	12/16/2013 0900	Sediment	1		HOLD		
PWI-1e	12/16/2013 0900	Sediment	1		HOLD		

Notes: **24 hour TAT**

Relinquished By:	Agency/Agent: APEX	Received By:	Agency/Agent: Apex
Signature:	Time & Date: 12/17/13 11:15	Signature:	Time & Date: 12-16-13 11:15
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-97 AND PRICE AGREEMENT # 0903. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (TS &CS) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING TS AND CS, EXPRESS OR IMPLIED.

Version: 4/4/2008

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, December 19, 2013

Adam Reese
Apex Companies, LLC
3015 SW First Avenue
Portland, OR 97201

RE: Portland Willamette Inlet / 2035-04

Enclosed are the results of analyses for work order A3L0419, which was received by the laboratory on 12/18/2013 at 2:50:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Labs

12232 S.W. Garden Place
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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PWI-5	A3L0419-01	Soil	12/18/13 12:00	12/18/13 14:50

DRAFT REPORT

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-5 (A3L0419-01)			**Matrix: Soil**					
Batch: 3120474								
Copper	**59.4**	---	1.51	mg/kg dry	10	12/19/13 12:43	EPA 6020A	
Lead	**34.0**	---	0.302	"	"	"	"	

DRAFT REPORT

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
PWI-5 (A3L0419-01)			**Matrix: Soil**		**Batch: 3120462**			
% Solids	**66.6**	---	1.00	% by Weight	1	12/19/13 10:42	EPA 8000C	

DRAFT REPORT

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120474 - EPA 3051A							**Soil**					
Blank (3120474-BLK1)					Prepared: 12/18/13 16:48 Analyzed: 12/19/13 12:37							
EPA 6020A												
Copper	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	"	"	---	---	---	---	---	---	
LCS (3120474-BS1)					Prepared: 12/18/13 16:48 Analyzed: 12/19/13 12:40							
EPA 6020A												
Copper	53.5	---	1.00	mg/kg wet	10	50.0	---	107	80-120%	---	---	
Lead	55.7	---	0.200	"	"	"	---	111	"	---	---	
Duplicate (3120474-DUP1)					Prepared: 12/18/13 16:48 Analyzed: 12/19/13 12:46							
QC Source Sample: PWI-5 (A3L0419-01)												
EPA 6020A												
Copper	**54.3**	---	1.47	mg/kg dry	10	---	59.4	---	---	9	40%	
Lead	**31.6**	---	0.294	"	"	---	34.0	---	---	7	40%	
Matrix Spike (3120474-MS1)					Prepared: 12/18/13 16:48 Analyzed: 12/19/13 12:49							
QC Source Sample: PWI-5 (A3L0419-01)												
EPA 6020A												
Copper	130	---	1.52	mg/kg dry	10	76.2	59.4	93	75-125%	---	---	
Lead	112	---	0.305	"	"	"	34.0	103	"	---	---	

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Percent Dry Weight

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120462 - Total Solids (Dry Weight)												**Soil**

No Client related Batch QC samples analyzed for this batch. See notes page for more information.

DRAFT REPORT

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120474							
A3L0419-01	Soil	EPA 6020A	12/18/13 12:00	12/18/13 16:48	0.498g/50mL	0.5g/50mL	1.00

Percent Dry Weight

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 3120462							
A3L0419-01	Soil	EPA 8000C	12/18/13 12:00	12/18/13 17:06	1N/A/1N/A	1N/A/1N/A	NA

DRAFT REPORT

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Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.
RPD	Relative Percent Difference
MDL	If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC	Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC	Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy	Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses. For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor. Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.
---	QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
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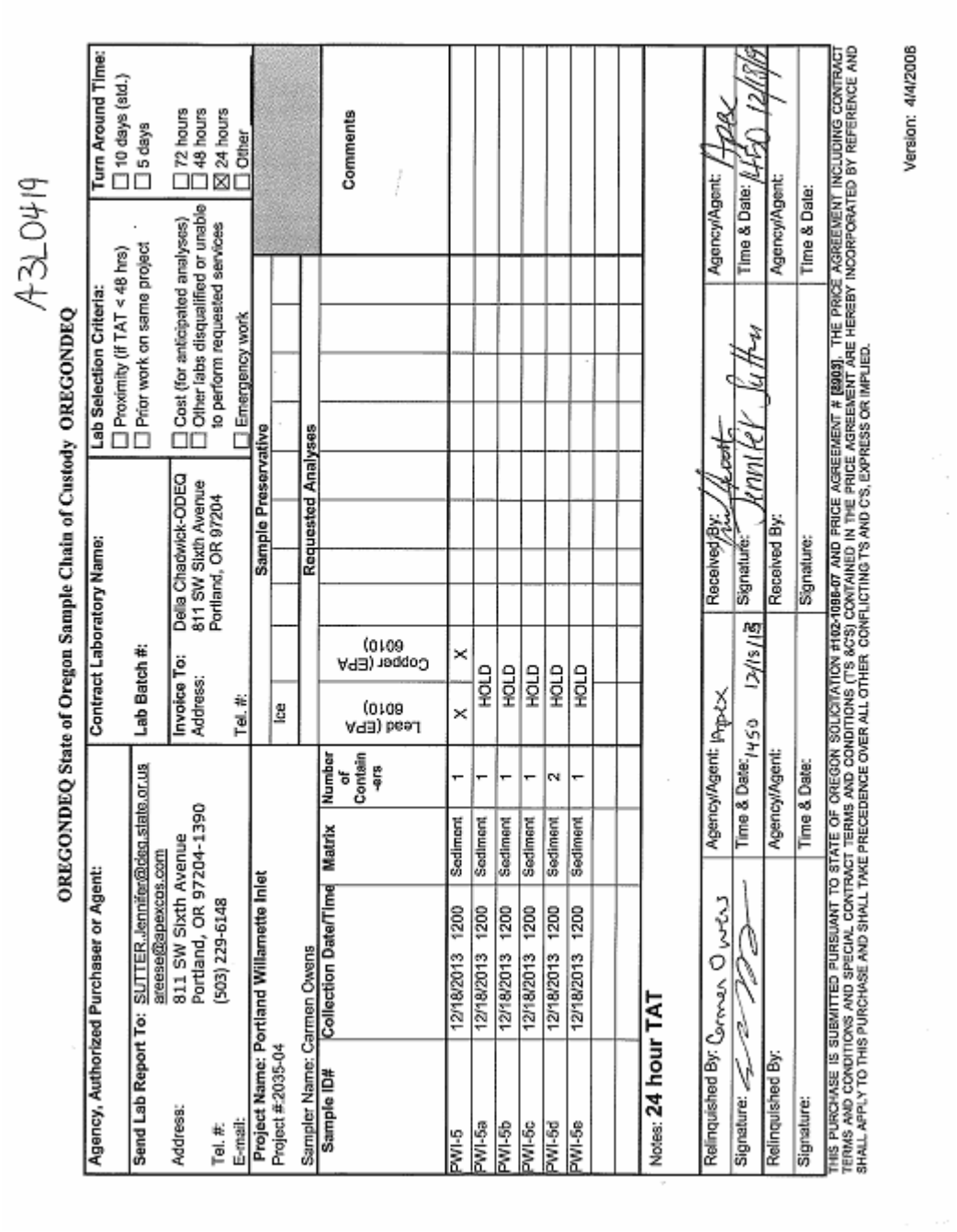
Apex Companies, LLC	Project: **Portland Willamette Inlet**	
3015 SW First Avenue	Project Number: 2035-04	**Reported:**
Portland, OR 97201	Project Manager: Adam Reese	12/19/13 15:46



A3L0419

OREGONDEQ State of Oregon Sample Chain of Custody OREGONDEQ

Agency, Authorized Purchaser or Agent:

Send Lab Report To: SUTTER.Jennifer@deq.state.or.us; areese@apexcos.com

Address: 811 SW Sixth Avenue, Portland, OR 97204-1390

Tel. #: (503) 229-6148

E-mail:

Contract Laboratory Name:

Lab Batch #:

Invoice To: Della Chadwick-ODEQ

Address: 811 SW Sixth Avenue, Portland, OR 97204

Tel. #:

Lab Selection Criteria:
- ☐ Proximity (if TAT < 48 hrs)
- ☐ Prior work on same project
- ☐ Cost (for anticipated analyses)
- ☐ Other labs disqualified or unable to perform requested services
- ☐ Emergency work

Turn Around Time:
- ☐ 10 days (std.)
- ☐ 5 days
- ☐ 72 hours
- ☐ 48 hours
- ☒ 24 hours
- ☐ Other

Project Name: Portland Willamette Inlet
Project #:2035-04
Sampler Name: Carmen Owens

Sample ID#	Collection Date/Time	Matrix	Number of Contain-ers	Sample Preservative: Ice	Requested Analyses: Lead (EPA 6010)	Requested Analyses: Copper (EPA 6010)	Comments
PWI-5	12/18/2013 1200	Sediment	1		X	X	
PWI-5a	12/18/2013 1200	Sediment	1		HOLD		
PWI-5b	12/18/2013 1200	Sediment	1		HOLD		
PWI-5c	12/18/2013 1200	Sediment	1		HOLD		
PWI-5d	12/18/2013 1200	Sediment	2		HOLD		
PWI-5e	12/18/2013 1200	Sediment	1		HOLD		

Notes: **24 hour TAT**

Relinquished By: Carmen Owens	Agency/Agent: Apex	Received By:	Agency/Agent: Apex
Signature:	Time & Date: 1450 12/18/13	Signature:	Time & Date: 12/19/13
Relinquished By:	Agency/Agent:	Received By:	Agency/Agent:
Signature:	Time & Date:	Signature:	Time & Date:

THIS PURCHASE IS SUBMITTED PURSUANT TO STATE OF OREGON SOLICITATION #102-1098-07 AND PRICE AGREEMENT # [8909]. THE PRICE AGREEMENT INCLUDING CONTRACT TERMS AND CONDITIONS AND SPECIAL CONTRACT TERMS AND CONDITIONS (TS &CS) CONTAINED IN THE PRICE AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE AND SHALL APPLY TO THIS PURCHASE AND SHALL TAKE PRECEDENCE OVER ALL OTHER CONFLICTING TS AND CS, EXPRESS OR IMPLIED.

Version: 4/4/2006

DRAFT REPORT

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