APPENDIX G

DATA REPORT

SEDIMENT CHARACTERIZATION RESULTS FOR TERMINAL 4 PHASE I REMOVAL ACTION PRECONSTRUCTION SAMPLING

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Table of Contents

1 INTRODUCTION 1

2 JULY 2006 PRECONSTRUCTION SAMPLING 3
2.1 Sample Collection, Processing, and Handling Procedures 3
2.2 Chemical, Conventional, and Geotechnical Analyses 4
2.2.1 Laboratory Quality Assurance/Quality Control Summary 4
2.2.2 Chemical Analytical Results 4
2.2.3 Physical and Geotechnical Analytical Results 5
2.2.4 Deviations from the QAPP and SAP 5

3 JANUARY 2007 SHEETPILE WALL SAMPLING 6
3.1 Sample Collection, Processing, and Handling Procedures 6
3.2 Chemical and Conventional Analyses 6
3.2.1 Laboratory Quality Assurance/Quality Control Summary 7
3.2.2 Chemical and Conventional Analytical Results 7
3.2.3 Physical Analytical Results 7
3.2.4 Deviations from the QAPP and SAP 7

4 DECEMBER 2007 BERTH 411 "PLUS" AND BERTH 410 SAMPLING 9
4.1 Sample Collection, Processing, and Handling Procedures 9
4.2 Chemical and Conventional Analyses 10
4.2.1 Laboratory Quality Assurance/Quality Control Summary 10
4.2.2 Chemical and Conventional Analytical Results 10
4.2.3 Physical Analytical Results 10
4.2.4 Toxicity Characteristic Leaching Procedure Results 11
4.2.5 Deviations from the QAPP and SAP 11

5 REFERENCES 12

List of Tables

Table 1 Sampling Station Locations and Related Information
Table 2 Summary of Sediment Chemistry Results Compared to PEC Criteria
Table 3 Summary of Sediment Grain Size Results
Table 4 Summary of Geotechnical Results
Table 5 Toxicity Characteristic Leaching Procedure Results

List of Figures

Figure 1 Site Plan and Vicinity Map
Figure 2 Sampling Locations

List of Attachments

Attachment A	Sediment Core Logs, Surface Sediment Collection Forms, and Compositing Forms
Attachment B	Archaeological Monitoring Reports
Attachment C	Analytical Laboratory Case Narratives, Chain-of-custody Forms, and Validation Reports
Attachment D	Geotechnical Testing Reports

1 INTRODUCTION

In 2000, the U.S. Environmental Protection Agency (USEPA) added the Portland Harbor Superfund Site to the National Priorities List. In fall 2001, the USEPA and 10 of the Superfund Site's potentially responsible parties entered into an Administrative Order on Consent (AOC) for a Remedial Investigation/Feasibility Study (RI/FS) of the Superfund Site. The AOC allows Early Actions to be conducted to address known contamination at specific locations within the Superfund Site. Contaminants found in Terminal 4 (T4) sediment samples during a remedial investigation directed by the Oregon Department of Environmental Quality (DEQ) led to a determination that a Removal Action at T4 is warranted. Accordingly, the Port of Portland (Port) is conducting a Non-Time-Critical Removal Action (NTCRA) under an AOC for Removal Action executed by the Port and USEPA in October 2003.

The Port completed an engineering evaluation and cost analysis (EE/CA; BBL 2005) in which various Removal Action alternatives were identified, compared, and ranked for their relative performance at meeting specific objectives associated with the evaluation criteria of effectiveness, implementability, and cost. Based on the alternatives evaluated in the EE/CA, the USEPA issued an Action Memorandum (Action Memo) on May 11, 2006 (USEPA 2006) that documented the selection of the Removal Action. The selected Removal Action includes dredging of most of Slip 3 and disposing of the dredged material in a confined disposal facility (CDF) in Slip 1. The AOC requires the Port to complete a conceptual remedial design of the selected Removal Action.

The Port is a port district of the State of Oregon, which owns the T4 uplands between River Miles 4.1 and 4.5 on the Lower Willamette River. The Port also owns a portion of the submersible and submerged lands in Slip 1 and Slip 3 located within the Removal Action Area (RAA; as defined in the AOC). The remainder of the submersible or submerged land is owned by the State of Oregon and managed by the State of Oregon Department of State Lands (DSL). Figure 1 is a vicinity map and site plan locating T4 and the RAA.

This data report presents the preconstruction sediment characterization results from additional sediment quality testing on sediments collected in the RAA to support the design of the Removal Action. Three sediment sampling investigations have been performed by the Port since the Action Memo was issued. They include:

- Preconstruction sampling in July 2006
- Sheetpile wall sampling in January 2007
- Berth 411 "Plus" and Berth 410 sampling in December 2007

The results from the sediment chemical, conventional, and geotechnical testing on the sediments collected from these investigations are presented in this report. In addition, the results from the toxicity characteristic leaching procedure (TCLP) tests are provided. These results have been used to support the design of the Phase I Removal Action.

Additional testing was performed on these sediments, including column settling testing, seepage-induced consolidation testing, modified elutriate testing, and sequential batch leaching testing. These tests were performed to inform the design of the CDF, which is not part of the Phase I Removal Action. The results from these tests have already been provided to USEPA in separate memoranda. These results will be summarized in a data report that will be provided as an appendix to the Phase II Removal Action Design Analysis Report.

2 JULY 2006 PRECONSTRUCTION SAMPLING

To inform the design process, additional preconstruction sampling was conducted in July 2006 to further define the depth and extent of contamination. Anchor Environmental, L.L.C. (Anchor) reviewed the available project data for purposes of the dredge and cap design and recommended additional sampling in the vicinity of Berth 414, Slip 3, and Wheeler Bay.

Four additional sediment cores were collected in the vicinity of Berth 414, and an additional eight sediment cores were collected in Slip 3 to further define the depth of contamination. Surface samples from four locations in Wheeler Bay were also collected to further refine the boundary between the capping and monitored natural recovery areas. In addition, eight cores were collected to prepare composite samples for geotechnical testing.

A sampling and analysis plan (SAP) for the sampling effort was approved by USEPA in advance of the investigation, with agency comments incorporated into the sampling plan (Anchor 2006a). The locations of the samples collected during this sampling event are depicted on Figure 2. Sampling station locations and other related information are provided in Table 1. Sediment core logs, surface sediment collection forms, and sample compositing forms are provided in Attachment A.

2.1 Sample Collection, Processing, and Handling Procedures

The field operations, equipment, sample handling, and analysis were performed using the previously approved procedures specified in the *Terminal 4 Early Action Engineering Evaluation/Cost Analysis Work Plan* (BBL 2004), Appendix A, Field Sampling Plan and Quality Assurance Project Plan (QAPP). These procedures were developed in accordance with USEPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA* (USEPA 1988) and USEPA's *Methods for Collection, Storage, and Maintenance of Sediments for Chemical and Toxicological Analyses* (USEPA 2001). This work was also performed in accordance with the T4 Archaeological Monitoring Protocol (Attachment A to Design Analysis Report Appendix A). The Archaeological Monitoring Report for this investigation is provided in Attachment B.

2.2 Chemical, Conventional, and Geotechnical Analyses

The target list of chemical and conventional analytes included:

- Select metals (lead, zinc)
- Semivolatile organic compounds (SVOCs)
- Total petroleum hydrocarbons (TPH; diesel and motor oil range)
- Total organic carbon (TOC)
- Total solids

The target list of geotechnical parameters included:

- Specific gravity
- Atterberg limits

2.2.1 Laboratory Quality Assurance/Quality Control Summary

Laboratory quality assurance and quality control (QA/QC) was performed by Analytical Resources Incorporated (ARI), located in Tukwila, Washington. A third-party validator (Laboratory Data Consultants, Inc., Carlsbad, CA) performed additional QA/QC and prepared validation reports for the analytical data. All of the analytical laboratory test measurements were found acceptable for use.

The geotechnical testing results submitted by ARI were reviewed and were considered to be in general accordance with the standard of care required by the referenced methods. Analytical laboratory case narratives, chain-of-custody forms, and validation reports are provided in Attachment C.

2.2.2 Chemical Analytical Results

The sediment chemistry and conventional analytical results for the sediment quality characterization samples are provided in Table 2. The chemical results were screened against Probable Effects Concentration(s) (PEC[s]) developed by MacDonald et al. (2000).

2.2.3 Physical and Geotechnical Analytical Results

The grain size results for the sediment quality characterization samples are provided in Table 3. The conventional, grain size, and geotechnical results for the two composites are summarized in Table 4.

2.2.4 Deviations from the QAPP and SAP

Analytical methodologies set forth in the referenced QAPP were followed. Based on the data validation, all of the data were determined to be acceptable for use as qualified. Field activities related to sample collection and handling were completed in accordance with the SAP, with the following exceptions:

- Samples were taken within 2 meters of the target locations based on differential global positioning system (DGPS) and confirmed using visual landmarks. As a result, actual coordinates were not taken at the sampling locations.
- Mudline depths were not measured for the four surface samples in Wheeler Bay.
- Wheeler Bay surface samples were not processed and containerized immediately; they were temporarily placed in stainless steel bowls and taken to the facility on shore for processing.
- The analytical sequence specified in the SAP stated: "The top three intervals (top three feet) from each of the Berth 414 cores will be analyzed first. The two to six foot intervals from each of the Slip 3 cores will be analyzed first. The rest of the intervals from these cores will be archived for future analysis based on the initial results." Rather than follow the analytical sequence as specified in the SAP, the intervals chosen for analysis were based on inspection of the core logs prepared during processing. The initial intervals specified for analysis included the intervals containing soft sediment above the interface where sand (potentially native material) was observed. Additional intervals from each core were analyzed when exceedances of screening values were observed in the shallower intervals.

3 JANUARY 2007 SHEETPILE WALL SAMPLING

Additional preconstruction sampling was conducted in January 2007. Anchor proposed additional sampling along the Berth 411 sheetpile wall to determine the chemical concentrations in these near-wall sediments. The objective of the investigation was to determine the depth of contamination along the wall relative to the depths required for wall stability. Five additional sediment cores were collected.

A SAP for the sampling effort was approved by USEPA in advance of the investigation, with agency comments incorporated into the sampling plan (Anchor 2006b). The locations of the samples collected during this sampling event are depicted on Figure 2. Sampling station locations and other related information are provided in Table 1. Sediment core logs, surface sediment collection forms, and sample compositing forms are provided in Attachment A.

3.1 Sample Collection, Processing, and Handling Procedures

The field operations, equipment, sample handling, and analysis were performed using the previously approved procedures specified in the *Terminal 4 Early Action Engineering Evaluation/Cost Analysis Work Plan* (BBL 2004), Appendix A, Field Sampling Plan and Quality Assurance Project Plan. These procedures were developed in accordance with USEPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA* (USEPA 1988) and USEPA's *Methods for Collection, Storage, and Maintenance of Sediments for Chemical and Toxicological Analyses* (USEPA 2001).

3.2 Chemical and Conventional Analyses

The target list of analytes included:

- Select metals (arsenic, cadmium, copper, lead, mercury, nickel, zinc)
- SVOCs
- TPH (diesel and motor oil range)
- Polychlorinated biphenyls (PCBs)
- Dichlorodiphenyltrichloroethanes (DDTs)
- TOC
- Total solids

3.2.1 Laboratory Quality Assurance/Quality Control Summary

Laboratory QA/QC was performed by ARI, located in Tukwila, Washington. A third-party validator (Laboratory Data Consultants, Inc., Carlsbad, CA) performed additional QA/QC and prepared validation reports for the analytical data. All of the analytical laboratory test measurements were found acceptable for use. Analytical laboratory case narratives, chain-of-custody forms, and validation reports are provided in Attachment C.

3.2.2 Chemical and Conventional Analytical Results

The sediment chemistry and conventional analytical results for the sediment quality characterization samples are provided in Table 2. The chemical results were screened against PECs developed by MacDonald et al. (2000).

3.2.3 Physical Analytical Results

The grain size results for the sediment quality characterization samples are provided in Table 3.

3.2.4 Deviations from the QAPP and SAP

Analytical methodologies set forth in the referenced QAPP were followed. Based on the data validation, all of the data were determined to be acceptable for use as qualified. Field activities related to sample collection and handling were generally completed in accordance with the SAP, with the following exceptions:

- Sediment cores were collected using a combination of vibracoring methods and diver coring methods, rather than the proposed Sonic drilling methods. Sonic methods were proposed due to the very compact nature of the sediment at the proposed sampling locations. However, due to the configurations of the available barges, the Sonic drill could not be set up to obtain cores within the specified distance from the sheetpile wall (between 5 and 10 feet). As a result, vibracoring methods were used. At two locations (T4-B411-01 and T4-B411-02), the sediments were indeed too compact to retrieve vibracore samples. As a result, diver coring methods were used.
- Location T4-B411-05 was not sampled due to riprap obstructions located on the slope at the head of Slip 3. The sampling crew performed a riprap survey by

slowly moving down the slope and probing the bottom of the slip to determine the extent of the riprap. The location where soft sediment was detected was more than 10 feet from the target location. The mudline at this location was also much lower in elevation with respect to the target location. As a result, a field decision was made to not sample at this location due to the large deviation between the target location and targeted interval elevations.

- Location T4-B411-06 was relocated due to riprap obstructions. A survey similar to that performed at location T4-B411-05 was conducted. In this instance, the location where soft sediment was detected was also more than 10 feet from the target location. However, the mudline depth at this location was close enough to the elevation at the target location to allow penetration to the targeted interval elevations.
- The intervals that were analyzed from each core were modified from the core interval analysis plan due to changes in the core lengths and locations resulting from field conditions.
- Archived intervals from locations T4-B411-03 and T4-B411-04 were analyzed along with the samples from the December 2007 Berth 411 "Plus" and Berth 410 investigation. PCB and DDT analysis was performed on these intervals in addition to the parameters specified in the SAP.
- An archaeological firm was available on an on-call basis in the event cultural artifacts were uncovered during the field program. Because no evidence of artifacts was observed during the more extensive preconstruction field program 6 months earlier, an archaeologist was not required to be present at the site.

4 DECEMBER 2007 BERTH 411 "PLUS" AND BERTH 410 SAMPLING

Additional preconstruction sampling was conducted in December 2007. One objective of the additional sampling and sediment quality testing was to provide vertical constraints for the dredge prism design of Phase I of the Removal Action. Another objective was to confirm the sediment quality characteristics within the maintenance dredge prism at Berth 410 by providing more recent data specifically for those sediments. Because the planned maintenance dredge area is within Slip 3 in an area designated for dredging by USEPA in the Action Memo (USEPA 2006), USEPA indicated a desire to incorporate the dredging into Phase I of the Removal Action.

A secondary objective of this sampling event was to obtain additional material from within the dredge prisms to perform additional disposal characterization testing once the dredge prisms were designed. An aliquot from each new sample interval was containerized and archived for potential inclusion in separate composites representing the dredge prisms. Once the dredge prisms were designed, archived material from intervals within each dredge prism was composited into two composite samples (one from each dredge prism – Phase I and maintenance dredge area) and submitted for waste designation (TCLP) testing.

One additional sediment core in the vicinity of Berth 414 was collected, and an additional nine sediment cores in Slip 3 were collected to further define the depth of contamination. Two additional sediment cores were collected from within the maintenance dredging area at Berth 410.

A SAP for the sampling effort was approved by USEPA in advance of the investigation, with agency comments incorporated into the sampling plan (Anchor 2007). The locations of the samples collected during this sampling event are depicted on Figure 2. Sampling station locations and other related information are provided in Table 1. Sediment core logs, surface sediment collection forms, and sample compositing forms are provided in Attachment A.

4.1 Sample Collection, Processing, and Handling Procedures

The field operations, equipment, sample handling, and analysis were performed using the previously approved procedures specified in the *Terminal 4 Early Action Engineering Evaluation/Cost Analysis Work Plan* (BBL 2004), Appendix A, Field Sampling Plan and Quality Assurance Project Plan. These procedures were developed in accordance with

USEPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA* (USEPA 1988) and USEPA's *Methods for Collection, Storage, and Maintenance of Sediments for Chemical and Toxicological Analyses* (USEPA 2001). This work was also performed in accordance with the T4 Archaeological Monitoring Protocol (Attachment A to Design Analysis Report Appendix A). The Archaeological Monitoring Report for this investigation is provided in Attachment B.

4.2 Chemical and Conventional Analyses

The target list of analytes included:

- Select metals (cadmium, lead, zinc)
- SVOCs
- TPH (diesel and motor oil range)
- PCBs
- DDTs
- TOC
- Total solids

4.2.1 Laboratory Quality Assurance/Quality Control Summary

Laboratory QA/QC was performed by ARI, located in Tukwila, Washington. Anchor performed additional QA/QC and prepared validation reports for the analytical data. All of the analytical laboratory test measurements were found acceptable for use. Analytical laboratory case narratives, chain-of-custody forms, and validation reports are provided in Attachment C.

4.2.2 Chemical and Conventional Analytical Results

The sediment chemistry and conventional analytical results for the sediment quality characterization samples are provided in Table 2. The chemical results were screened against PECs developed by MacDonald et al. (2000).

4.2.3 Physical Analytical Results

The grain size results for the sediment quality characterization samples are provided in Table 3.

4.2.4 Toxicity Characteristic Leaching Procedure Results

The selected TCLP parameters were based on the results of bulk sediment chemistry data from within the dredge prism. Based on the results, both lead and cadmium were selected for TCLP analysis in the Berth 411 "Plus" (Phase I) area, and lead was selected for TCLP analysis in the Berth 410 (maintenance dredge) area. The results of the analysis of the TCLP leachate are provided in Table 5.

4.2.5 Deviations from the QAPP and SAP

Analytical methodologies set forth in the referenced QAPP were followed. Based on the data validation, all of the data were determined to be acceptable for use as qualified. Field activities related to sample collection and handling were generally completed in accordance with the SAP, with the following exceptions:

- Sampling locations and designations varied slightly from the SAP due to issues with the coordinate conversions detected on the first day of sampling, as well as obstructions at one location.
  - T4-PI-03 was taken at target location T4-PI-06.
  - T4-PI-04 was taken at target location T4-PI-05.
  - T4-PI-03-2 was taken at target location T4-PI-03.
  - T4-PI-04-2 was taken at target location T4-PI-04.
  - T4-PI-09 was offset from the target location. The target location was obstructed by riprap. The sampling crew performed a riprap survey by moving down the slope and probing the bottom of the river to determine the extent of the riprap. The location where soft sediment was detected was 9 feet from the target location.

5 REFERENCES

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USEPA. 2006. Action Memorandum for Removal Action at the Port of Portland Terminal 4 Site within the Portland Harbor Superfund Site, Portland, Multnomah County, Oregon. May 11.

TABLES

Table 1
Sampling Station Locations and Related Information

Sampling Station	Sample Interval	X-Coordinate	Y-Coordinate	Mudline Elevation	Top Interval Elevation	Bottom Interval Elevation
Pre-construction Sampling (July 2006)						
T4-B414-01	A	7,619,646	712,872	-21.0	-21.0	-22.0
	B				-22.0	-23.0
	C				-23.0	-24.0
	D				-24.0	-25.0
	E				-25.0	-26.0
	F				-26.0	-27.0
T4-B414-02	A	7,619,711	712,703	-24.7	-24.7	-25.7
	A-DUP				-24.7	-25.7
	B				-25.7	-26.7
	C				-26.7	-27.7
	D				-27.7	-28.7
	E				-28.7	-29.7
	F				-29.7	-30.7
T4-B414-03	A	7,619,625	712,830	-32.0	-32.0	-33.0
	B				-33.0	-34.0
	C				-34.0	-35.0
T4-B414-04	A	7,619,690	712,626	-36.4	-36.4	-37.4
	B				-37.4	-38.4
	C				-38.4	-39.4
	D				-39.4	-40.4
	E				-40.4	-41.4
	F				-41.4	-42.4
T4-CS-01	FOR COMPOSITE	7,620,335	713,376	-45.5	-45.5	-50.8
T4-CS-03	FOR COMPOSITE	7,620,332	713,267	-34.9	-34.9	-41.9
T4-CS-04	FOR COMPOSITE	7,620,373	713,222	-34.8	-34.8	-42.2
T4-CS-05	FOR COMPOSITE	7,620,356	713,142	-34.9	-34.9	-41.9
T4-CS-06	FOR COMPOSITE	7,620,171	713,252	-37.0	-37.0	-44.4
T4-CS-07	FOR COMPOSITE	7,620,036	713,262	-37.7	-37.7	-44.4
T4-CS-08	FOR COMPOSITE	7,619,956	713,237	-37.5	-37.5	-44.9
T4-CS-09	FOR COMPOSITE	7,619,808	713,245	-38.1	-38.1	-43.4
T4-S3-01	D	7,620,373	713,222	-35.0	-38.0	-39.0
	E				-39.0	-40.0
	F				-40.0	-41.0
	G				-41.0	-42.0
	H				-42.0	-43.0
	J				-43.0	-44.0
	K				-44.0	-44.9
T4-S3-02	C	7,620,282	713,271	-34.9	-36.9	-37.9
	D				-37.9	-38.9
	E				-38.9	-39.9
	F				-39.9	-40.9
	G				-40.9	-41.9
	H				-41.9	-42.9
	J				-42.9	-43.9
	K				-43.9	-44.8
	K-DUP				-43.9	-44.8

Table 1
Sampling Station Locations and Related Information

Sampling Station	Sample Interval	X-Coordinate	Y-Coordinate	Mudline Elevation	Top Interval Elevation	Bottom Interval Elevation
T4-S3-03	B	7,620,171	713,252	-37.1	-38.1	-39.1
	C				-39.1	-40.1
	C-DUP				-39.1	-40.1
	D				-40.1	-41.1
	E				-41.1	-42.1
	F				-42.1	-43.1
	G				-43.1	-44.1
T4-S3-04	A	7,620,195	713,383	-46.1	-46.1	-47.1
	B				-47.1	-48.1
	C				-48.1	-49.1
	D				-49.1	-50.1
	E				-50.1	-51.1
	F				-51.1	-52.1
T4-S3-05	E	7,620,015	713,248	-37.2	-41.2	-42.2
	F				-42.2	-43.2
	G				-43.2	-44.2
	H				-44.2	-45.2
	J				-45.2	-46.2
	K				-46.2	-46.9
T4-S3-06	A	7,619,906	713,341	-44.7	-44.7	-45.7
	B				-45.7	-46.7
T4-S3-07	B	7,619,757	713,234	-37.9	-38.9	-39.9
	C				-39.9	-40.9
	D				-40.9	-41.9
	E				-41.9	-42.9
	F				-42.9	-43.9
T4-S3-08	B	7,620,095	713,406	-46.0	-47.0	-48.0
	C				-48.0	-49.0
	C-DUP				-48.0	-49.0
	D				-49.0	-50.0
T4-WB-01	SURFACE ONLY	7,619,594	713,738	---	---	---
T4-WB-02	SURFACE ONLY	7,619,486	713,891	---	---	---
T4-WB-03	SURFACE ONLY	7,619,448	713,808	---	---	---
T4-WB-04	SURFACE ONLY	7,619,500	713,683	---	---	---
Sheetpile Wall Sampling (January 2007)						
T4-B411-01	A	7,620,075	713,462	-39.8	-39.8	-40.8
	B				-40.8	-41.5
T4-B411-02	A	7,620,179	713,442	-38.8	-38.8	-39.8
	B				-39.8	-41.0
T4-B411-03	AA	7,620,278	713,432	-40.1	-40.1	-40.6
	BB				-40.6	-41.6
	CC				-41.6	-42.6
	A				-42.6	-43.6
	B				-43.6	-44.6
	C				-44.6	-45.6
	C-DUP				-45.6	-46.6
	D				-46.6	-47.6
	E				-47.6	-48.6
T4-B411-04	AA	7,620,364	713,415	-40.3	-40.3	-41.3
	BB				-41.3	-42.3
	A				-42.3	-43.3
	B				-43.3	-44.3
	C				-44.3	-45.3
	D				-45.3	-46.3
	E				-46.3	-47.3

Table 1
Sampling Station Locations and Related Information

Sampling Station	Sample Interval	X-Coordinate	Y-Coordinate	Mudline Elevation	Top Interval Elevation	Bottom Interval Elevation
T4-B411-06	A	7,620,375	713,249	-35.8	-42.8	-43.8
	B				-43.8	-44.8
	C				-44.8	-45.8
Berth 410 Sampling (December 2007)						
T4-MD-01	A	7,619,744	713,501	-37.9	-37.9	-38.9
	B				-38.9	-39.9
	C				-39.9	-40.9
	C-DUP				-39.9	-40.9
	D				-40.9	-41.2
T4-MD-02	A	7,619,498	713,519	-37.2	-37.2	-38.2
	B				-38.2	-39.2
	C				-39.2	-40.2
	D				-40.2	-41.2
	E				-41.2	-42.0
Berth 411 Plus Sampling (December 2007)						
T4-PI-01	A	7,620,427	713,374	-42.5	-42.5	-43.5
	B				-43.5	-44.5
	C				-44.5	-45.5
	D				-45.5	-46.5
	E				-46.5	-47.5
	F				-47.5	-48.5
T4-PI-02	A	7,620,431	713,286	-35.3	-35.3	-36.3
	B				-36.3	-37.3
	C				-37.3	-38.3
	D				-38.3	-39.3
	E				-39.3	-40.3
	F				-40.3	-41.3
	G				-41.3	-42.3
	H				-42.3	-43.3
T4-PI-03	A	7,620,288	713,361	-45.6	-45.6	-46.6
	B				-46.6	-47.6
	C				-47.6	-48.6
	D				-48.6	-49.6
	E				-49.6	-50.6
	F				-50.6	-51.6
	G				-51.6	-52.6
	H				-52.6	-53.6
T4-PI-03-2	A	7,620,379	713,391	-43.9	-43.9	-44.9
	B				-44.9	-45.9
	C				-45.9	-46.4
T4-PI-04	A	7,620,315	713,395	-45.8	-45.8	-46.8
	B				-46.8	-47.8
	C				-47.8	-48.8
	D				-48.8	-49.5
	D-DUP				-48.8	-49.5
T4-PI-04-2	A	7,620,385	713,332	-41.4	-41.4	-42.4
	B				-42.4	-43.4
	C				-43.4	-44.4
	D				-44.4	-45.4
	E				-45.4	-46.4
	E-DUP				-45.4	-46.4
T4-PI-07	A	7,620,195	713,407	-47.0	-47.0	-48.0
	B				-48.0	-49.0
	B-DUP				-48.0	-49.0
	C				-49.0	-49.8

Table 1
Sampling Station Locations and Related Information

Sampling Station	Sample Interval	X-Coordinate	Y-Coordinate	Mudline Elevation	Top Interval Elevation	Bottom Interval Elevation
T4-PI-08	A	7,620,002	713,186	-38.8	-38.8	-39.8
	B				-39.8	-40.8
	C				-40.8	-41.8
	D				-41.8	-42.8
	E				-42.8	-43.8
	F				-43.8	-44.5
T4-PI-09	A	7,619,690	712,894	-10.0	-10.0	-11.0
	B				-11.0	-12.0

Notes:
Coordinates in Oregon State Plane-North (International Feet)
Elevations in NGVD

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B411-01	T4-B411-01	T4-B411-02	T4-B411-02	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03
Top of Interval Elevation		-39.8	-40.8	-38.8	-39.8	-40.1	-40.6	-41.6	-42.6	-43.6	-44.6	-45.6	-46.6	-47.6
Bottom of Interval Elevation		-40.8	-41.5	-39.8	-41	-40.6	-41.6	-42.6	-43.6	-44.6	-45.6	-46.6	-47.6	-48.6
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		1/8/2007	1/8/2007	1/8/2007	1/8/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007
Sample Name	PEC	T4-B411-01-A	T4-B411-01-B	T4-B411-02-A	T4-B411-02-B	T4-B411-03-AA	T4-B411-03-BB	T4-B411-03-CC	T4-B411-03-A	T4-B411-03-B	T4-B411-03-C	T4-B411-03-C-DUP	T4-B411-03-D	T4-B411-03-E
Conventionals (%)														
Moisture		**37.88**	**36.27**	**42.44**	**28.55**	--	--	--	**49.95**	**44.09**	**46.49**	**44.15**	**41.50**	**43.68**
Total organic carbon		**0.819**	**0.497**	**1.25**	**0.247**	**0.238 J**	**0.241 J**	**0.324 J**	**0.276**	**0.249**	**0.189**	**0.223**	**0.162**	**0.368**
Total solids		**74.20**	**74.80**	**71.70**	**88.80**	**73.50 J**	**69.30 J**	**67.90 J**	**68.30**	**69.30**	**70.20**	**69.80**	**69.30**	**68.70**
Metals (mg/kg)														
Arsenic	33	**7**	6 U	**7**	5 U	--	--	--	20 U	7 U	7 U	7 U	7 U	6 U
Cadmium	5	**1.6**	**1.2**	**2.9**	**1.6**	0.6 U	0.7 U	0.3 U	0.7 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Copper	149	**29.7 J**	**23.3 J**	**34.9 J**	**23.7 J**	--	--	--	**35.5**	**32.6**	**33.9**	**34.7**	**31.5**	**32.5**
Lead	128	**551 J**	**440 J**	**320 J**	**173 J**	**102**	**23**	**7**	7 UJ	**3 J**	**4 J**	**4 J**	**3 J**	**5**
Mercury	1.06	0.06 U	0.05 U	0.05 U	0.05 U	--	--	--	0.07 U	0.05 U	0.06 U	**0.06**	0.05 U	0.06 U
Nickel	48.6	**19**	**20**	**21**	**17**	--	--	--	**27**	**46**	**29**	**28**	**31**	**29**
Zinc	459	**300**	**225**	**505**	**313**	**151 J**	**73 J**	**61 J**	**70**	**62.2**	**61.4**	**60.7**	**65.3**	**61.5**
PCBs (µg/kg)														
Aroclor 1016		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1221		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1232		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1242		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1248		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1254		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1260		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1262		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Aroclor 1268		19 U	19 U	19 U	20 U	3.9 UJ	4.0 UJ	3.9 UJ	19 U	20 U	20 U	20 U	19 U	20 U
Pesticides (µg/kg)														
2,4'-DDD		2.0 U	1.9 U	1.9 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
2,4'-DDE		2.0 U	1.9 U	1.9 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
2,4'-DDT		2.0 U	1.9 U	1.9 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
4,4'-DDD	28	2.0 U	1.9 U	1.9 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
4,4'-DDE	31	2.0 U	1.9 U	1.9 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U
4,4'-DDT	63	2.0 U	4.1 U	1.9 U	6.5 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 UJ	2.0 U	2.0 U	1.9 U	2.0 U
Hexachlorobenzene		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		59 UJ	59 UJ	59 UJ	20 UJ	--	--	--	20 U	20 U	20 U	20 U	20 U	20 UJ
SVOC (µg/kg)														
1,1'-Biphenyl		59 U	59 U	**61**	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
1,2,4-Trichlorobenzene		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
1,2-Dichlorobenzene		59 UJ	59 UJ	59 UJ	20 UJ	--	--	--	20 U	20 U	20 U	20 U	20 U	20 UJ
1,3-Dichlorobenzene		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
1,4-Dichlorobenzene		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
1-Methylnaphthalene		59 U	**96**	**270**	20 U	4.9 UJ	5.0 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
1-Methylphenanthrene		**130**	**370**	**1300**	**58**	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
2,3,5-Trimethylnaphthalene		59 U	59 U	**60**	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dimethylphenol		59 U	59 U	**34 J**	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
2,6-Dimethylnaphthalene		59 U	59 U	**120**	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
2-Methylnaphthalene		59 UJ	**230 J**	**500 J**	20 UJ	4.9 UJ	5.0 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 UJ
2-Methylphenol		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
4-Methylphenol		59 U	**33 J**	**96**	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B411-01	T4-B411-01	T4-B411-02	T4-B411-02	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03
Top of Interval Elevation		-39.8	-40.8	-38.8	-39.8	-40.1	-40.6	-41.6	-42.6	-43.6	-44.6	-45.6	-46.6	-47.6
Bottom of Interval Elevation		-40.8	-41.5	-39.8	-41	-40.6	-41.6	-42.6	-43.6	-44.6	-45.6	-46.6	-47.6	-48.6
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		1/8/2007	1/8/2007	1/8/2007	1/8/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007
Sample Name	PEC	T4-B411-01-A	T4-B411-01-B	T4-B411-02-A	T4-B411-02-B	T4-B411-03-AA	T4-B411-03-BB	T4-B411-03-CC	T4-B411-03-A	T4-B411-03-B	T4-B411-03-C	T4-B411-03-C-DUP	T4-B411-03-D	T4-B411-03-E
Acenaphthene		**580**	**2700**	**4200 J**	**240**	**34 J**	**6.9 J**	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Acenaphthylene		59 U	59 U	59 U	20 U	4.9 UJ	5.0 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Anthracene	845	**480**	**1300**	**3600**	**200**	**28 J**	**5.4 J**	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(a)anthracene	1050	**2900**	**8700**	**34000**	**1400**	**170 J**	**30 J**	**7.4 J**	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(a)pyrene	1450	**3400**	**11000**	**38000**	**1500**	**190 J**	**36 J**	**9.9 J**	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(b)fluoranthene		**3600**	**11000**	**43000**	**1800**	**250 J**	**50 J**	**13 J**	**12 J**	20 U	20 U	20 U	20 U	20 U
Benzo(e)pyrene		**2200**	**6700**	**24000**	**1000**	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(g,h,i)perylene		**2200**	**7400**	**24000**	**640**	**150 J**	**28 J**	**7.9 J**	20 U	20 U	20 U	20 U	20 U	20 U
Benzo(k)fluoranthene		**2700**	**3800**	**24000**	**1100**	**100 J**	**17 J**	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Benzoic acid		590 U	590 U	590 U	200 U	--	--	--	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl alcohol		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
bis(2-Ethylhexyl)phthalate		59 UJ	59 UJ	59 UJ	20 UJ	12 UJ	19 UJ	20 UJ	20 U	20 U	20 U	20 U	20 U	20 UJ
Butylbenzylphthalate		59 U	59 U	59 U	20 U	12 UJ	12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Chrysene	1290	**2800**	**8000**	**33000**	**1300**	**180 J**	**34 J**	**8.9 J**	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzo(a,h)anthracene		**1100**	**2700**	**9300**	**330**	**41 J**	**6.9 J**	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Dibenzofuran		**70**	**260**	**620**	**28**	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
Diethylphthalate		59 U	59 U	59 U	20 U	64 UJ	12 UJ	85 UJ	20 U	20 U	**18 J**	20 U	20 U	20 U
Dimethylphthalate		59 U	59 U	59 U	20 U	12 UJ	12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-butylphthalate		59 U	59 U	59 U	20 U	12 UJ	12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-octylphthalate		59 U	59 U	59 U	20 U	12 UJ	12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Fluoranthene	2230	**3700**	**10000**	**43000**	**1800**	**220 J**	**46 J**	**15 J**	**10 J**	20 U	20 U	20 U	20 U	20 U
Fluorene	536	**180**	**650**	**1600**	**77**	**10 J**	5.0 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobenzene		59 U	59 U	59 U	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
Hexachlorobutadiene		59 UJ	59 UJ	59 UJ	20 UJ	--	--	--	20 U	20 U	20 U	20 U	20 U	20 UJ
Hexachloroethane		59 UJ	59 UJ	59 UJ	20 UJ	--	--	--	20 U	20 U	20 U	20 U	20 U	20 UJ
Indeno(1,2,3-cd)pyrene		**2200**	**7100**	**22000**	**740**	**120 J**	**24 J**	**6.4 J**	20 U	20 U	20 U	20 U	20 U	20 U
Naphthalene	561	**58 J**	**470 J**	**830 J**	**28 J**	4.9 UJ	5.0 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	20 UJ
n-Nitrosodiphenylamine		59 UJ	59 UJ	59 UJ	20 UJ	--	--	--	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ
Pentachlorophenol		300 U	300 U	300 U	99 U	--	--	--	99 U	99 U	99 U	99 U	99 U	99 U
Perylene		**1000**	**3100**	**11000**	**430**	--	--	--	**370**	**220**	**280**	**390**	**180**	**640**
Phenanthrene	1170	**1800**	**4500**	**18000**	**730**	**100 J**	**23 J**	**5.4 J**	20 U	20 U	20 U	20 U	20 U	20 U
Phenol		59 U	**45**	**100**	20 U	--	--	--	20 U	20 U	20 U	20 U	20 U	20 U
Pyrene	1520	**3400**	**9800**	**40000**	**1500**	**220 J**	**44 J**	**12 J**	20 U	20 U	20 U	20 U	20 U	20 U
TPH (mg/kg)														
Motor Oil		**51**	**19**	**390**	12 U	14 UJ	14 UJ	15 UJ	15 U	14 U	14 U	14 U	14 U	14 U
TPH - Diesel Range		**27**	**7.2**	**110**	5.8 U	6.8 UJ	7.2 UJ	7.4 UJ	7.4 U	7.1 U	7.2 U	7.2 U	7.0 U	7.2 U
TPH - Motor Oil Range		--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-06	T4-B411-06	T4-B411-06	T4-B414-01	T4-B414-01	T4-B414-01
Top of Interval Elevation		-40.3	-41.3	-42.3	-43.3	-44.3	-45.3	-46.3	-42.8	-43.8	-44.8	-21	-22	-23
Bottom of Interval Elevation		-41.3	-42.3	-43.3	-44.3	-45.3	-46.3	-47.3	-43.8	-44.8	-45.8	-22	-23	-24
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/3/2007	1/3/2007	1/3/2007	7/20/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-B411-04-AA	T4-B411-04-BB	T4-B411-04-A	T4-B411-04-B	T4-B411-04-C	T4-B411-04-D	T4-B411-04-E	T4-B411-06-A	T4-B411-06-B	T4-B411-06-C	T4-B414-01-A	T4-B414-01-B	T4-B414-01-C
Conventionals (%)														
Moisture		--	--	47.99	47.33	48.51	45.33	45.39	77.66	50.23	66.49	--	--	--
Total organic carbon		0.493 J	0.426 J	0.209	0.253	0.252	0.272	0.202	1.84	0.808	1.96	1.21	2.13	1.70
Total solids		66.80 J	65.80 J	67.70	68.10	68.90	69.30	67.00	55.60	62.20	60.20	54.60	52.10	53.10
Metals (mg/kg)														
Arsenic	33	--	--	7 U	20 U	7 U	20 U	7 U	14	14	11	--	--	--
Cadmium	5	0.3 U	0.3 U	0.3 U	0.7 U	0.3 U	0.7 U	0.3 U	3.9	4.2	3.3	--	--	--
Copper	149	--	--	30.4	39.8	36.0	40.3	31.3	116	82.8	78.3	--	--	--
Lead	128	24	6	4 J	7 UJ	4 J	7 UJ	4	645 J	730	522	26	26	35
Mercury	1.06	--	--	0.06 U	0.06 U	0.05 U	0.05 U	0.06 U	0.12	0.14	0.13	--	--	--
Nickel	48.6	--	--	22	31	29	33	27	32	30	29	--	--	--
Zinc	459	70 J	70 J	54.2	72	63.2	73	60.0	712	724	605	126	128	148
PCBs (µg/kg)														
Aroclor 1016		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	19 U	20 U	--	--	--
Aroclor 1221		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	58 U	79 U	--	--	--
Aroclor 1232		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	19 U	39 U	--	--	--
Aroclor 1242		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	19 U	20 U	--	--	--
Aroclor 1248		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	39 U	39 U	--	--	--
Aroclor 1254		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	48	52	48	--	--	--
Aroclor 1260		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	54	130	74	--	--	--
Aroclor 1262		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	92 U	51 U	--	--	--
Aroclor 1268		4.0 UJ	3.9 UJ	20 U	20 U	19 U	19 U	20 U	20 U	19 U	20 U	--	--	--
Pesticides (µg/kg)														
2,4'-DDD		2.0 UJ	2.0 UJ	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	9.9 U	3.9 U	3.9 U	--	--	--
2,4'-DDE		2.0 UJ	2.0 UJ	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	9.9 U	3.9 U	3.9 U	--	--	--
2,4'-DDT		2.0 UJ	2.0 UJ	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	9.9 U	8.8 U	3.9 U	--	--	--
4,4'-DDD	28	2.0 UJ	2.0 UJ	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	17 U	25 U	3.9 U	--	--	--
4,4'-DDE	31	2.0 UJ	2.0 UJ	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	9.9 U	16 U	9.9 U	--	--	--
4,4'-DDT	63	2.0 UJ	2.0 UJ	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	9.9 U	50 U	13 U	--	--	--
Hexachlorobenzene		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
Hexachlorobutadiene		--	--	20 U	20 U	20 U	20 U	20 UJ	120 U	60 UJ	60 UJ	--	--	--
SVOC (µg/kg)														
1,1'-Biphenyl		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	72	770	150	150
1,2,4-Trichlorobenzene		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
1,2-Dichlorobenzene		--	--	20 U	20 U	20 U	20 U	20 UJ	120 U	60 UJ	60 UJ	--	--	--
1,3-Dichlorobenzene		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
1,4-Dichlorobenzene		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
1-Methylnaphthalene		4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	280	60 U	190	1300	50	49 U
1-Methylphenanthrene		--	--	20 U	20 U	20 U	20 U	20 U	1500	88	730	2300	110	64
2,3,5-Trimethylnaphthalene		--	--	20 U	20 U	20 U	20 U	20 U	120 U	290	220	210	50	49 U
2,4-Dimethylphenol		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
2,6-Dimethylnaphthalene		--	--	20 U	20 U	20 U	20 U	20 U	180	60 U	120	830	50 U	49 U
2-Methylnaphthalene		4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 UJ	570	56 J	350 J	3200	89	34 J
2-Methylphenol		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
4-Methylphenol		--	--	20 U	20 U	20 U	20 U	20 U	60 J	60 U	61	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-04	T4-B411-06	T4-B411-06	T4-B411-06	T4-B414-01	T4-B414-01	T4-B414-01
Top of Interval Elevation		-40.3	-41.3	-42.3	-43.3	-44.3	-45.3	-46.3	-42.8	-43.8	-44.8	-21	-22	-23
Bottom of Interval Elevation		-41.3	-42.3	-43.3	-44.3	-45.3	-46.3	-47.3	-43.8	-44.8	-45.8	-22	-23	-24
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/3/2007	1/3/2007	1/3/2007	7/20/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-B411-04-AA	T4-B411-04-BB	T4-B411-04-A	T4-B411-04-B	T4-B411-04-C	T4-B411-04-D	T4-B411-04-E	T4-B411-06-A	T4-B411-06-B	T4-B411-06-C	T4-B414-01-A	T4-B414-01-B	T4-B414-01-C
Acenaphthene		4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**5500**	**190**	**3000**	**12000**	**410**	**130**
Acenaphthylene		4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**66 J**	60 U	60 U	98 U	50 U	49 U
Anthracene	845	4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**4900**	**130**	**2400**	**11000**	**350**	**130**
Benzo(a)anthracene	1050	**9.8 J**	5.0 UJ	20 U	20 U	20 U	20 U	**12 J**	**34000**	**700**	**17000**	**46000**	**2100**	**720**
Benzo(a)pyrene	1450	**11 J**	5.0 UJ	20 U	20 U	20 U	20 U	**15 J**	**38000**	**830**	**20000**	**54000**	**2600**	**890**
Benzo(b)fluoranthene		**17 J**	5.0 UJ	20 U	20 U	20 U	20 U	**18 J**	**36000**	**720**	**22000**	**63000**	**3000**	**1100**
Benzo(e)pyrene		--	--	20 U	20 U	20 U	20 U	20 U	**23000**	**520**	**13000**	**37000**	**1800**	**640**
Benzo(g,h,i)perylene		**8.8 J**	5.0 UJ	20 U	20 U	20 U	20 U	**11 J**	**24000**	**540**	**13000**	**38000**	**1900**	**660**
Benzo(k)fluoranthene		**6.4 J**	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**30000**	**580**	**13000**	**52000**	**2300**	**850**
Benzoic acid		--	--	200 U	200 U	200 U	200 U	200 U	1200 U	600 U	600 U	--	--	--
Benzyl alcohol		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
bis(2-Ethylhexyl)phthalate		17 UJ	12 UJ	20 U	20 U	20 U	20 U	20 UJ	**240**	60 UJ	**97 J**	100 U	56 U	130 UJ
Butylbenzylphthalate		12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	100 U	20 U	20 U
Chrysene	1290	**12 J**	5.0 UJ	20 U	20 U	20 U	20 U	**13 J**	**34000**	**760**	**17000**	**60000**	**2800**	**1000**
Dibenzo(a,h)anthracene		4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**6300**	**190**	**4300**	**15000**	**540**	**220**
Dibenzofuran		--	--	20 U	20 U	20 U	20 U	20 U	**990**	60 U	**660**	--	--	--
Diethylphthalate		67 UJ	42 UJ	20 U	**3500**	20 U	20 U	20 U	120 U	60 U	60 U	100 U	20 U	20 U
Dimethylphthalate		12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	100 U	20 U	20 U
Di-n-butylphthalate		12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	100 U	38 U	31 UJ
Di-n-octylphthalate		12 UJ	12 UJ	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	100 U	20 U	20 U
Fluoranthene	2230	**17 J**	5.0 UJ	20 U	20 U	20 U	20 U	**17 J**	**47000**	**1200**	**23000**	**97000**	**3900**	**1400**
Fluorene	536	4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**2400**	**65**	**1500**	**9800**	**260**	**100**
Hexachlorobenzene		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	60 U	--	--	--
Hexachlorobutadiene		--	--	20 U	20 U	20 U	20 U	20 UJ	120 U	60 UJ	60 UJ	--	--	--
Hexachloroethane		--	--	20 U	20 U	20 U	20 U	20 UJ	120 U	60 UJ	60 UJ	--	--	--
Indeno(1,2,3-cd)pyrene		**7.8 J**	5.0 UJ	20 U	20 U	20 U	20 U	**9.9 J**	**24000**	**500**	**12000**	**35000**	**1700**	**570**
Naphthalene	561	4.9 UJ	5.0 UJ	20 U	20 U	20 U	20 U	20 UJ	**960**	**75 J**	**540 J**	**1100**	**74**	**39 J**
n-Nitrosodiphenylamine		--	--	20 UJ	20 UJ	20 UJ	20 UJ	20 UJ	120 UJ	60 UJ	60 UJ	--	--	--
Pentachlorophenol		--	--	99 U	99 U	99 U	99 U	99 U	590 U	300 U	300 U	--	--	--
Perylene		--	--	**180**	**260**	**280**	**170**	**180**	**11000**	**330**	**5900**	**16000**	**890**	**510**
Phenanthrene	1170	**9.3 J**	5.0 UJ	20 U	20 U	20 U	20 U	20 U	**24000**	**690**	**12000**	**60000**	**2000**	**720**
Phenol		--	--	20 U	20 U	20 U	20 U	20 U	120 U	60 U	**68**	--	--	--
Pyrene	1520	**15 J**	5.0 UJ	20 U	20 U	20 U	20 U	**16 J**	**35000**	**1200**	**20000**	**67000**	**3000**	**1200**
TPH (mg/kg)														
Motor Oil		15 UJ	15 UJ	15 U	15 U	14 U	14 U	14 U	**4200**	**340**	**1100**	--	--	--
TPH - Diesel Range		7.6 UJ	7.7 UJ	7.3 U	7.3 U	7.2 U	7.2 U	7.2 U	**1200**	**180**	**360**	**980**	**51**	**120**
TPH - Motor Oil Range		--	--	--	--	--	--	--	--	--	--	**3300**	**160**	**320**

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B414-01	T4-B414-01	T4-B414-01	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-03	T4-B414-03	T4-B414-03
Top of Interval Elevation		-24	-25	-26	-24.7	-24.7	-25.7	-26.7	-27.7	-28.7	-29.7	-32	-33	-34
Bottom of Interval Elevation		-25	-26	-27	-25.7	-25.7	-26.7	-27.7	-28.7	-29.7	-30.7	-33	-34	-35
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-B414-01-D	T4-B414-01-E	T4-B414-01-F	T4-B414-02-A	T4-B414-02-A-DUP	T4-B414-02-B	T4-B414-02-C	T4-B414-02-D	T4-B414-02-E	T4-B414-02-F	T4-B414-03-A	T4-B414-03-B	T4-B414-03-C
Conventionals (%)														
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		--	--	--	1.83	1.74	1.80	2.60	--	--	--	1.29	1.52	2.23
Total solids		--	--	--	50.90	50.10	51.40	52.40	--	--	--	52.80	51.90	51.30
Metals (mg/kg)														
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	41	165	171	18	149	14	25	35	32	57	16	19	14
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	175	579	488	104	180	94	134	152	184	342	98	107	92
PCBs (µg/kg)														
Aroclor 1016		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268		--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg)														
2,4'-DDD		--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE		--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT		--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD	28	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	31	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	63	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)														
1,1'-Biphenyl		42 U	79	77	150	48 U	6.4	150	12	10	36	50 U	48 U	5.0 U
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		29 J	180	890	50	48 U	9.4	50 U	17	17	120	30 J	48 U	6.4
1-Methylphenanthrene		42 U	260	920	110	48 U	17	54	30	33	150	65	67	11
2,3,5-Trimethylnaphthalene		42 U	170	620	54	48 U	10	50 U	17	29	110	50 U	48 U	5.4
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		42 U	190	1300	50 U	48 U	13	50 U	32	33	160	50 U	48 U	9.4
2-Methylnaphthalene		75	430	810	89	48 U	15	50 U	46	48	230	60	48	8.9
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B414-01	T4-B414-01	T4-B414-01	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-03	T4-B414-03	T4-B414-03
Top of Interval Elevation		-24	-25	-26	-24.7	-24.7	-25.7	-26.7	-27.7	-28.7	-29.7	-32	-33	-34
Bottom of Interval Elevation		-25	-26	-27	-25.7	-25.7	-26.7	-27.7	-28.7	-29.7	-30.7	-33	-34	-35
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-B414-01-D	T4-B414-01-E	T4-B414-01-F	T4-B414-02-A	T4-B414-02-A-DUP	T4-B414-02-B	T4-B414-02-C	T4-B414-02-D	T4-B414-02-E	T4-B414-02-F	T4-B414-03-A	T4-B414-03-B	T4-B414-03-C
Acenaphthene		**150**	**1100**	**3300**	**540**	**120**	**40**	**99**	**61**	**74**	**580**	**210**	**210**	**43**
Acenaphthylene		**29 J**	**160**	**170**	50 U	48 U	**8.9**	50 U	**19**	**22**	**49**	50 U	48 U	**6.4**
Anthracene	845	**100**	**510**	**1900**	**310**	**81**	**27**	**79**	**77**	**62**	**240**	**230**	**190**	**26**
Benzo(a)anthracene	1050	**240**	**1700**	**1800**	**1800**	**660**	**85**	**470**	**190**	**140**	**500**	**1300**	**1100**	**110**
Benzo(a)pyrene	1450	**280**	**2300**	**1600**	**2400**	**1000**	**100**	**630**	**200**	**190**	**430**	**1600**	**1400**	**140**
Benzo(b)fluoranthene		**280**	**1300**	**980**	**2800**	**1100**	**110**	**710**	**220**	**180**	**460**	**2100**	**1600**	**140**
Benzo(e)pyrene		**240**	**1400**	**990**	**1600**	**630**	**74**	**440**	**150**	**130**	**310**	**1200**	**1000**	**93**
Benzo(g,h,i)perylene		**280**	**1500**	**1200**	**1700**	**770**	**76**	**350**	**120**	**120**	**230**	**950**	**810**	**74**
Benzo(k)fluoranthene		**250**	**1800**	**1200**	**2200**	**840**	**96**	**590**	**170**	**140**	**390**	**1500**	**1300**	**140**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		**95**	**47**	47 U	68 U	59 U	33 U	97 U	**100**	**61**	**56**	79 U	36 U	46 U
Butylbenzylphthalate		53 U	20 U	47 U	20 U	59 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Chrysene	1290	**370**	**2200**	**2400**	**2600**	**840**	**120**	**630**	**270**	**230**	**710**	**1800**	**1600**	**150**
Dibenzo(a,h)anthracene		**46**	**330**	**220**	**510**	**240**	**23**	**110**	**33**	**29**	**48**	**380**	**290**	**23**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		53 U	20 U	47 U	20 U	59 U	20 U	**14 J**	20 U	20 U	20 U	20 U	20 U	20 U
Dimethylphthalate		53 U	20 U	47 U	20 U	59 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Di-n-butylphthalate		53 U	**21**	47 U	20 U	59 U	60 U	49 U	20 U	20 U	20 U	20 U	27 U	20 U
Di-n-octylphthalate		53 U	20 U	47 U	20 U	59 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Fluoranthene	2230	**730**	**4400**	**7200**	**3900**	**980**	**220**	**940**	**470**	**370**	**1500**	**2700**	**2300**	**230**
Fluorene	536	**120**	**790**	**2800**	**220**	**48**	**25**	**64**	**59**	**63**	**430**	**150**	**130**	**28**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**200**	**1300**	**870**	**1500**	**660**	**62**	**330**	**110**	**95**	**200**	**910**	**780**	**65**
Naphthalene	561	**130**	**590**	**750**	**180**	48 U	**34**	**40 J**	**96**	**70**	**400**	**65**	**82**	**17**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		**370**	**750**	**520**	**870**	**300**	**220**	**410**	**300**	**240**	**270**	**620**	**630**	**200**
Phenanthrene	1170	**330**	**3000**	**11000**	**1900**	**420**	**150**	**440**	**280**	**260**	**1400**	**1300**	**1200**	**130**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**710**	**4300**	**6400**	**3000**	**920**	**200**	**760**	**480**	**400**	**1400**	**2000**	**1800**	**210**
TPH (mg/kg)														
Motor Oil		--	--	--	--	--	--	--	--	--	--	--	--	--
TPH - Diesel Range		--	--	--	**26**	**21**	**60**	**92**	--	--	--	**47**	**64**	**58**
TPH - Motor Oil Range		--	--	--	**97**	**52**	**210**	**280**	--	--	--	**200**	**220**	**220**

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B414-04	T4-B414-04	T4-B414-04	T4-B414-04	T4-B414-04	T4-B414-04	T4-MD-01	T4-MD-01	T4-MD-01	T4-MD-01	T4-MD-01	T4-MD-02	T4-MD-02
Top of Interval Elevation		-36.4	-37.4	-38.4	-39.4	-40.4	-41.4	-37.9	-38.9	-39.9	-39.9	-40.9	-37.2	-38.2
Bottom of Interval Elevation		-37.4	-38.4	-39.4	-40.4	-41.4	-42.4	-38.9	-39.9	-40.9	-40.9	-41.2	-38.2	-39.2
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007
Sample Name	PEC	T4-B414-04-A	T4-B414-04-B	T4-B414-04-C	T4-B414-04-D	T4-B414-04-E	T4-B414-04-F	T4-MD-01-A	T4-MD-01-B	T4-MD-01-C	T4-MD-01-C-DUP	T4-MD-01-D	T4-MD-02-A	T4-MD-02-B
Conventionals (%)														
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		**1.81**	**1.47**	**1.46**	--	--	--	**2.17**	**1.46**	**2.40**	**2.27**	**1.88**	**2.28**	**1.69**
Total solids		**49.50**	**55.70**	**53.10**	--	--	--	**54.80**	**56.20**	**60.80**	**60.60**	**61.20**	**56.60**	**63.30**
Metals (mg/kg)														
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	--	--	--	--	--	--	**0.4**	**0.4**	**0.5**	**0.6**	**0.5**	0.3 U	0.3 U
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	**17**	**15**	**17**	--	--	--	**62**	**49**	**77**	**63**	**52**	**15**	**19**
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	**104**	**94**	**105**	--	--	--	**162**	**150**	**188**	**190**	**174**	**95**	**97**
PCBs (µg/kg)														
Aroclor 1016		--	--	--	--	--	--	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Aroclor 1221		--	--	--	--	--	--	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Aroclor 1232		--	--	--	--	--	--	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Aroclor 1242		--	--	--	--	--	--	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Aroclor 1248		--	--	--	--	--	--	**5.1**	**8.1**	**13**	12 U	**8.8**	3.9 U	4.7 U
Aroclor 1254		--	--	--	--	--	--	**15 J**	**22 J**	**38**	**32**	**21**	**6.5**	7.0 U
Aroclor 1260		--	--	--	--	--	--	**11**	**14**	**17**	**120**	**14**	**4.3**	**4.6**
Aroclor 1262		--	--	--	--	--	--	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Aroclor 1268		--	--	--	--	--	--	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
Pesticides (µg/kg)														
2,4'-DDD		--	--	--	--	--	--	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDE		--	--	--	--	--	--	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDT		--	--	--	--	--	--	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U
4,4'-DDD	28	--	--	--	--	--	--	**4.4**	**3.9**	**3.6**	**5.4**	**2.7 J**	2.0 U	**2.7**
4,4'-DDE	31	--	--	--	--	--	--	**3.9**	**3.4**	**3.4**	**3.7**	**2.9**	2.0 U	**3.2**
4,4'-DDT	63	--	--	--	--	--	--	**7.3**	2.0 U	1.9 U	2.1 U	2.0 U	**2.7**	2.0 U
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)														
1,1'-Biphenyl		**5.0**	5.0 U	50 U	**5.4**	**9.4**	**6.4**	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		**8.0**	**4.5 J**	50 U	**12**	**15**	**10**	**17**	**21**	**25**	**24**	**21**	**9.8**	4.9 U
1-Methylphenanthrene		5.0 U	**12**	50 U	**17**	**59**	**28 M**	--	--	--	--	--	--	--
2,3,5-Trimethylnaphthalene		**7.0**	**5.4**	50 U	**6.4**	**13**	**15**	--	--	--	--	--	--	--
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		**12**	**7.4**	50 U	**12**	**21**	**16**	--	--	--	--	--	--	--
2-Methylnaphthalene		**14**	**8.9**	**30 J**	**15**	**33**	**22**	**27**	**38**	**52**	**48**	**38**	**20**	**7.8**
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-B414-04	T4-B414-04	T4-B414-04	T4-B414-04	T4-B414-04	T4-B414-04	T4-MD-01	T4-MD-01	T4-MD-01	T4-MD-01	T4-MD-01	T4-MD-02	T4-MD-02
Top of Interval Elevation		-36.4	-37.4	-38.4	-39.4	-40.4	-41.4	-37.9	-38.9	-39.9	-39.9	-40.9	-37.2	-38.2
Bottom of Interval Elevation		-37.4	-38.4	-39.4	-40.4	-41.4	-42.4	-38.9	-39.9	-40.9	-40.9	-41.2	-38.2	-39.2
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007
Sample Name	PEC	T4-B414-04-A	T4-B414-04-B	T4-B414-04-C	T4-B414-04-D	T4-B414-04-E	T4-B414-04-F	T4-MD-01-A	T4-MD-01-B	T4-MD-01-C	T4-MD-01-C-DUP	T4-MD-01-D	T4-MD-02-A	T4-MD-02-B
Acenaphthene		**32**	**25**	**89**	**51**	**160**	**62**	**250**	**360**	**600**	**480**	**450**	**39**	**39**
Acenaphthylene		**12**	**5.9**	50 U	**6.4**	**20**	**12**	**41**	**31**	**22**	**20**	**20**	**9.8**	**5.9**
Anthracene	845	**40**	**30**	**79**	**39**	**170**	**60**	**300**	**420**	**530**	**420**	**400**	**39**	**30**
Benzo(a)anthracene	1050	**170**	**140**	**350**	**130**	**770**	**240**	**2300**	**5000**	**3600**	**3000**	**3100**	**140**	**180**
Benzo(a)pyrene	1450	**190**	**180**	**430**	**180**	**1000**	**310**	**3100**	**6500**	**4800**	**3900**	**4000**	**190**	**240**
Benzo(b)fluoranthene		**220**	**200**	**520**	**190**	**1100**	**320**	**2000**	**6200**	**4300**	**3200**	**3800**	**190**	**200**
Benzo(e)pyrene		**130**	**120**	**310**	**120**	**670**	**220**	--	--	--	--	--	--	--
Benzo(g,h,i)perylene		**86**	**80**	**210**	**100**	**800**	**150**	**2400**	**4700**	**3500**	**2800**	**3000**	**160**	**190**
Benzo(k)fluoranthene		**170**	**180**	**380**	**150**	**810**	**280**	**3100**	**5200**	**3800**	**3200**	**3400**	**140**	**260**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		83 U	36 U	47 U	**45**	**120**	**76**	**74**	**99**	**150**	**98**	**140**	**75**	**36**
Butylbenzylphthalate		20 U	20 U	20 U	20 U	20 U	20 U	**19**	**2700 J**	12 U	12 U	**20**	12 U	12 U
Chrysene	1290	**230**	**200**	**480**	**180**	**1000**	**340**	**2700**	**6300**	**4100**	**3600**	**3500**	**190**	**220**
Dibenzo(a,h)anthracene		**28**	**29**	**89**	**33**	**180**	**56**	**770**	**1700**	**1400**	**1100**	**1100**	**38**	**55**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		20 U	20 U	20 U	20 U	20 U	20 U	12 U	12 U	12 U	12 U	**120**	**84**	12 U
Dimethylphthalate		20 U	20 U	20 U	20 U	20 U	20 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Di-n-butylphthalate		39 U	36 U	20 U	20 U	20 U	20 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Di-n-octylphthalate		20 U	20 U	20 U	20 U	20 U	20 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Fluoranthene	2230	**350**	**300**	**720**	**310**	**1400**	**590**	**3300**	**5700**	**4500**	**3900**	**4100**	**320**	**360**
Fluorene	536	**27**	**19**	**59**	**30**	**81**	**48**	**150**	**210**	**230**	**220**	**220**	**28**	**21**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**80**	**75**	**200**	**97**	**490**	**140**	**2000**	**4000**	**3100**	**2500**	**2600**	**120**	**170**
Naphthalene	561	**28**	**15**	**69**	**28**	**84**	**40**	**55**	**66**	**100**	**88**	**74**	**37**	**15**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		**220**	**200**	**330**	**250**	**590**	**370**	--	--	--	--	--	--	--
Phenanthrene	1170	**160**	**140**	**420**	**190**	**650**	**300**	**1600**	**2400**	**2400**	**2100**	**2100**	**180**	**160**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**320**	**240**	**590**	**280**	**1200**	**480**	**3200**	**5200**	**4100**	**3700**	**3600**	**290**	**290**
TPH (mg/kg)														
Motor Oil		--	--	--	--	--	--	**290**	**310**	**270**	**290**	**310**	**200**	**120**
TPH - Diesel Range		**46**	**48**	**60**	--	--	--	**96**	**100**	**96**	**110**	**110**	**37**	**32**
TPH - Motor Oil Range		**220**	**180**	**210**	--	--	--	--	--	--	--	--	--	--

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-MD-02	T4-MD-02	T4-MD-02	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02
Top of Interval Elevation		-39.2	-40.2	-41.2	-42.5	-43.5	-44.5	-45.5	-46.5	-47.5	-35.3	-36.3	-37.3	-38.3	-39.3	-40.3
Bottom of Interval Elevation		-40.2	-41.2	-42	-43.5	-44.5	-45.5	-46.5	-47.5	-48.5	-36.3	-37.3	-38.3	-39.3	-40.3	-41.3
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/14/2007	12/14/2007	12/14/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007
Sample Name	PEC	T4-MD-02-C	T4-MD-02-D	T4-MD-02-E	T4-PI-01-A	T4-PI-01-B	T4-PI-01-C	T4-PI-01-D	T4-PI-01-E	T4-PI-01-F	T4-PI-02-A	T4-PI-02-B	T4-PI-02-C	T4-PI-02-D	T4-PI-02-E	T4-PI-02-F
Conventionals (%)																
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		1.52	1.31	1.52	2.10 J	2.36 J	2.85 J	2.25 J	2.15 J	1.83 J	2.50	2.15	2.07	1.72	1.65	1.69
Total solids		64.50	66.10	75.50	60.30	60.00	59.80	54.40	53.50	52.40	57.70	63.10	58.70	56.40	54.00	56.70
Metals (mg/kg)																
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	0.3 U	0.3 U	0.3 U	3.4 J	3.0 J	2.7 J	2.3 J	2.3 J	8.3 J	2.6 J	1.8 J	2.7 J	2.0 J	1.5 J	1.4 J
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	29	15	20	494 J	374 J	364 J	430 J	433 J	1610 J	318 J	227 J	468 J	321 J	231 J	193 J
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	82	91	112	601 J	511 J	535 J	445 J	499 J	1530 J	476 J	377 J	539 J	404 J	324 J	313 J
PCBs (µg/kg)																
Aroclor 1016		3.9 U	3.9 U	3.9 U	3.9 UJ	3.9 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	3.9 U	4.0 U	4.0 U	4.0 U	3.9 U	3.9 U
Aroclor 1221		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.0 U	4.0 U	4.0 U	4.0 U	3.9 U	4.0 U	4.0 U	4.0 U	3.9 U	3.9 U
Aroclor 1232		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.0 U	4.0 U	4.0 U	4.0 U	3.9 U	4.0 U	4.0 U	4.0 U	3.9 U	3.9 U
Aroclor 1242		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.0 U	4.0 U	4.0 U	4.0 U	3.9 UJ	4.0 UJ	4.0 UJ	4.0 UJ	3.9 UJ	3.9 UJ
Aroclor 1248		3.9 U	5.6	8.4	9.7 U	6.0	13	7.6	5.4	16 U	4.7 U	10	20 U	5.8	20 U	20 U
Aroclor 1254		3.9 U	20 U	18 J	14 U	15	20 U	20	20	50	12	16	24 U	15 J	20 U	20 U
Aroclor 1260		4.1	39	13	24	16	18	26	21	68	19	30	17	22	28	26 J
Aroclor 1262		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.0 U	4.0 U	4.0 U	4.0 U	3.9 U	4.0 U	4.0 U	4.0 U	3.9 U	3.9 U
Aroclor 1268		3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	4.0 U	4.0 U	4.0 U	4.0 U	3.9 U	4.0 U	4.0 U	4.0 U	3.9 U	3.9 U
Pesticides (µg/kg)																
2,4'-DDD		1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDE		1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDT		1.9 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,4'-DDD	28	2.0	3.3	3.4	2.0 UJ	2.0 UJ	3.1 J	2.0 UJ	4.6 J	4.9 J	2.0 UJ	2.5 J	4.5 J	6.6 J	6.9 J	6.7 J
4,4'-DDE	31	3.0	4.0	3.0	2.0 UJ	2.0 UJ	2.0 UJ	2.4 J	4.7 J	3.2 J	2.0 UJ	2.3 J	3.0 J	4.1 J	5.0 J	6.4 J
4,4'-DDT	63	1.9 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.8 J	4.1 J	2.0 UJ	2.0 UJ	2.0 UJ	4.2 J	3.9 J	2.4 J
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)																
1,1'-Biphenyl		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		4.9 U	10	7.5	1300	410	1700 U	430 U	2400	380 U	410	230	2000	130	99 U	160
1-Methylphenanthrene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,5-Trimethylnaphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene		6.4	15	21	2400	870	1700 U	430 U	6500	650	910	540	2800	250	160	400
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-MD-02	T4-MD-02	T4-MD-02	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02
Top of Interval Elevation		-39.2	-40.2	-41.2	-42.5	-43.5	-44.5	-45.5	-46.5	-47.5	-35.3	-36.3	-37.3	-38.3	-39.3	-40.3
Bottom of Interval Elevation		-40.2	-41.2	-42	-43.5	-44.5	-45.5	-46.5	-47.5	-48.5	-36.3	-37.3	-38.3	-39.3	-40.3	-41.3
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/14/2007	12/14/2007	12/14/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007
Sample Name	PEC	T4-MD-02-C	T4-MD-02-D	T4-MD-02-E	T4-PI-01-A	T4-PI-01-B	T4-PI-01-C	T4-PI-01-D	T4-PI-01-E	T4-PI-01-F	T4-PI-02-A	T4-PI-02-B	T4-PI-02-C	T4-PI-02-D	T4-PI-02-E	T4-PI-02-F
Acenaphthene		**35**	**99**	**130**	**14000**	**14000**	**3400**	**2500**	**100000**	**4900**	**9100**	**6600**	**7600**	**2000**	**2000**	**8000**
Acenaphthylene		**6.9**	**8.6**	**9.0**	310 U	410 U	1700 U	430 U	470 U	380 U	97 U	99 U	98 U	**100**	**99**	97 U
Anthracene	845	**28**	**36**	**30**	**11000**	**15000**	**3300**	**2200**	**68000**	**4800**	**8200 J**	**6000 J**	**5200 J**	**1600 J**	**1900 J**	**7400 J**
Benzo(a)anthracene	1050	**170**	**180**	**110 J**	**69000**	**87000**	**20000**	**14000**	**690000**	**30000**	**39000**	**29000**	**42000**	**10000**	**12000**	**48000**
Benzo(a)pyrene	1450	**210**	**240**	**98 J**	**87000**	**110000**	**28000**	**19000**	**990000**	**46000**	**46000 J**	**37000 J**	**60000 J**	**12000 J**	**16000 J**	**58000 J**
Benzo(b)fluoranthene		**230**	**230**	**82 J**	**110000**	**81000 J**	**25000**	**13000 J**	**740000 J**	**53000**	**31000 J**	**27000 J**	**56000 J**	**10000 J**	**12000 J**	**44000 J**
Benzo(e)pyrene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene		**170**	**180**	**66**	**24000**	**80000**	**10000**	**14000**	**810000**	**13000**	**32000**	**24000**	**41000**	**10000**	**9300**	**41000**
Benzo(k)fluoranthene		**180**	**210**	**110 J**	**54000**	**81000**	**23000**	**17000**	**740000**	**24000**	**45000**	**27000**	**49000**	**10000**	**12000**	**48000**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		**32**	**34**	**120 J**	310 UJ	1000 U	1700 UJ	1100 U	1200 U	380 UJ	240 U	250 U	240 U	130 U	250 U	240 U
Butylbenzylphthalate		12 U	12 U	12 U	310 UJ	1000 U	1700 UJ	1100 U	1200 U	380 UJ	240 UJ	250 UJ	240 UJ	130 UJ	250 UJ	240 UJ
Chrysene	1290	**210**	**220**	**160 J**	**74000**	**90000**	**20000**	**15000**	**770000**	**37000**	**41000**	**30000**	**52000**	**12000**	**14000**	**49000**
Dibenzo(a,h)anthracene		**36**	**69**	**12**	**12000**	**34000**	**5200**	**5900**	**310000**	**6800**	**14000**	**7300**	**17000**	**3500**	**4200**	**17000**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		12 U	12 U	12 U	310 UJ	1000 U	1700 UJ	1100 U	1200 U	380 UJ	240 U	250 U	240 U	130 U	250 U	240 U
Dimethylphthalate		12 U	12 U	12 U	310 UJ	1000 U	1700 UJ	1100 U	1200 U	380 UJ	240 UJ	250 UJ	240 UJ	130 UJ	250 UJ	240 UJ
Di-n-butylphthalate		12 U	12 U	12 U	310 U	1000 U	1700 U	1100 U	1200 U	380 U	240 U	250 U	240 U	130 U	250 U	240 U
Di-n-octylphthalate		12 U	12 U	12 U	310 UJ	1000 U	1700 UJ	1100 U	1200 U	380 UJ	240 UJ	250 UJ	240 UJ	130 UJ	250 UJ	240 UJ
Fluoranthene	2230	**320**	**370**	**300 J**	**120000**	**120000**	**31000**	**20000**	**750000**	**58000**	**58000 J**	**41000 J**	**56000 J**	**19000 J**	**17000 J**	**59000 J**
Fluorene	536	**19**	**30**	**16**	**7200**	**4800**	1700 U	**780**	**23000**	**3700**	**4300 J**	**1800 J**	**2600 J**	**1900 J**	**670 J**	**2100 J**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**150**	**160**	**56**	**34000**	**70000**	**12000**	**13000**	**690000**	**15000**	**29000**	**22000**	**38000**	**8600**	**9200**	**38000**
Naphthalene	561	**13**	**28**	**34**	**3400**	**1400**	1700 U	430 U	**13000**	**1000**	**2200**	**1300**	**4100**	**300**	**330**	**580**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	1170	**160**	**250**	**330 J**	**52000 J**	**56000**	**12000 J**	**8600**	**280000**	**20000 J**	**33000**	**20000**	**22000**	**10000**	**7700**	**26000**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**250**	**310**	**260 J**	**90000**	**120000**	**28000**	**19000**	**830000**	**46000**	**51000**	**41000**	**52000**	**19000**	**19000**	**62000**
TPH (mg/kg)																
Motor Oil		**120**	**200**	**420**	**1500**	**660**	**3700**	**2400**	**230**	**1400**	**620**	**680**	**1500**	**400**	**580**	**820**
TPH - Diesel Range		**31**	**64**	**97**	**700 J**	**280 J**	**1700 J**	**1200 J**	**130 J**	**640 J**	**270**	**280**	**780**	**200**	**330**	**340**
TPH - Motor Oil Range		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-PI-02	T4-PI-02	T4-PI-03-2	T4-PI-03-2	T4-PI-03-2	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-04-2	T4-PI-04-2
Top of Interval Elevation		-41.3	-42.3	-43.9	-44.9	-45.9	-45.6	-46.6	-47.6	-48.6	-49.6	-50.6	-51.6	-52.6	-41.4	-42.4
Bottom of Interval Elevation		-42.3	-43.3	-44.9	-45.9	-46.4	-46.6	-47.6	-48.6	-49.6	-50.6	-51.6	-52.6	-53.6	-42.4	-43.4
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/12/2007	12/12/2007
Sample Name	PEC	T4-PI-02-G	T4-PI-02-H	T4-PI-03-2-A	T4-PI-03-2-B	T4-PI-03-2-C	T4-PI-03-A	T4-PI-03-B	T4-PI-03-C	T4-PI-03-D	T4-PI-03-E	T4-PI-03-F	T4-PI-03-G	T4-PI-03-H	T4-PI-04-2-A	T4-PI-04-2-B
Conventionals (%)																
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		**3.84**	**2.52**	**2.26 J**	**1.59 J**	**1.45 J**	**0.294**	**0.239**	**0.208**	**0.201**	**0.144**	**0.142**	**0.226**	**0.270**	**1.80 J**	**2.25 J**
Total solids		**58.60**	**59.30**	**54.90**	**66.30**	**62.30**	**78.90**	**72.90**	**71.90**	**71.60**	**70.60**	**71.40**	**70.40**	**72.40**	**55.10**	**59.40**
Metals (mg/kg)																
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	**2.0 J**	**2.9 J**	**5.0 J**	**5.5 J**	**3.8 J**	**1.0**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**1.4 J**	**2.6 J**
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	**253 J**	**458 J**	**641 J**	**790 J**	**516 J**	**163**	**28**	**6**	**5**	**6**	**5**	**5**	**5**	**223 J**	**383 J**
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	**423 J**	**550 J**	**887 J**	**893 J**	**643 J**	**213 J**	**90 J**	**57 J**	**55 J**	**57 J**	**62 J**	**58 J**	**58 J**	**316 J**	**511 J**
PCBs (µg/kg)																
Aroclor 1016		3.9 U	3.9 U	4.0 UJ	3.9 UJ	3.9 UJ	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	3.9 UJ	4.0 UJ
Aroclor 1221		3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	3.9 U	4.0 U
Aroclor 1232		3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	7.8 U	4.0 U
Aroclor 1242		3.9 UJ	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	3.9 U	4.0 U
Aroclor 1248		16 U	20 U	**6.4**	5.9 U	**4.6**	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	3.9 U	**11**
Aroclor 1254		31 U	**42**	22 U	**12**	14 U	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	14 U	**32**
Aroclor 1260		**52**	**38**	**22**	**20**	**15**	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	**11**	**39**
Aroclor 1262		3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	3.9 U	4.0 U
Aroclor 1268		3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.8 U	3.9 U	4.0 U	3.9 U	3.9 U	4.0 U
Pesticides (µg/kg)																
2,4'-DDD		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDE		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDT		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
4,4'-DDD	28	**7.2 J**	**6.5 J**	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.7 J**	**3.8 J**
4,4'-DDE	31	**5.6 J**	**5.4 J**	2.0 UJ	2.0 UJ	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2.8 J**	**3.5 J**
4,4'-DDT	63	**8.0 J**	3.6 UJ	2.0 UJ	2.0 UJ	**11 J**	2.0 U	**21**	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 UJ
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)																
1,1'-Biphenyl		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		**590**	**790**	**84**	**140**	200 U	4.8 U	5.0 U	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	870 U	430 U
1-Methylphenanthrene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,5-Trimethylnaphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene		**1200**	**1800**	**140**	**280**	200 U	4.8 U	5.0 U	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	870 U	430 U
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-PI-02	T4-PI-02	T4-PI-03-2	T4-PI-03-2	T4-PI-03-2	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-04-2	T4-PI-04-2
Top of Interval Elevation		-41.3	-42.3	-43.9	-44.9	-45.9	-45.6	-46.6	-47.6	-48.6	-49.6	-50.6	-51.6	-52.6	-41.4	-42.4
Bottom of Interval Elevation		-42.3	-43.3	-44.9	-45.9	-46.4	-46.6	-47.6	-48.6	-49.6	-50.6	-51.6	-52.6	-53.6	-42.4	-43.4
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/12/2007	12/12/2007
Sample Name	PEC	T4-PI-02-G	T4-PI-02-H	T4-PI-03-2-A	T4-PI-03-2-B	T4-PI-03-2-C	T4-PI-03-A	T4-PI-03-B	T4-PI-03-C	T4-PI-03-D	T4-PI-03-E	T4-PI-03-F	T4-PI-03-G	T4-PI-03-H	T4-PI-04-2-A	T4-PI-04-2-B
Acenaphthene		**10000**	**26000**	**720**	**2100**	**770**	**32**	**20**	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	**1700**	**2400**
Acenaphthylene		99 U	98 U	84 U	73 U	200 U	4.8 U	5.0 U	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	870 U	430 U
Anthracene	845	**8900 J**	**22000 J**	**670**	**1700**	**850**	**27**	**22**	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	**1600**	**2300**
Benzo(a)anthracene	1050	**50000**	**120000**	**3900**	**11000**	**5700**	**160 J**	**180**	**6.4**	**4.9**	**9.3**	5.0 U	4.8 U	4.8 U	**9400**	**15000**
Benzo(a)pyrene	1450	**61000 J**	**150000 J**	**5000**	**16000**	**6800**	**210 J**	**230**	**8.3**	4.9 U	**12**	5.0 U	4.8 U	4.8 U	**12000**	**20000**
Benzo(b)fluoranthene		**57000 J**	**98000 J**	**4200 J**	**13000 J**	**5200 J**	**170 J**	**190**	**6.9**	**4.9**	**11**	5.0 U	4.8 U	4.8 U	**13000**	**16000 J**
Benzo(e)pyrene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene		**45000**	**100000**	**3900**	**13000**	**5100**	**150 J**	**160**	**5.4**	4.9 U	**8.3**	5.0 U	4.8 U	4.8 U	**8400**	**15000**
Benzo(k)fluoranthene		**45000**	**140000**	**4200**	**13000**	**5200**	**170 J**	**190**	**6.9**	**4.9**	**9.8**	5.0 U	4.8 U	4.8 U	**8800**	**16000**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		250 U	240 U	210 U	180 U	500 U	52 U	27 U	12 U	24 U	12 U	14 U	14 U	24 U	870 UJ	1100 U
Butylbenzylphthalate		250 UJ	240 UJ	210 U	180 U	500 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	870 UJ	1100 U
Chrysene	1290	**54000**	**130000**	**5000**	**14000**	**6600**	**180 J**	**210**	**7.4**	**4.9**	**11**	5.0 U	4.8 U	4.8 U	**11000**	**17000**
Dibenzo(a,h)anthracene		**17000**	**46000**	**1600**	**5700**	**2200**	**48 J**	**51**	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	**3400**	**6000**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		250 U	240 U	**240 J**	180 U	500 U	18 U	17 U	12 U	13 U	12 U	26 U	47 U	25 U	870 UJ	1100 U
Dimethylphthalate		250 UJ	240 UJ	210 U	180 U	500 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	870 UJ	1100 U
Di-n-butylphthalate		250 U	240 U	210 U	180 U	500 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	870 U	1100 U
Di-n-octylphthalate		250 UJ	240 UJ	210 U	180 U	500 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	870 UJ	1100 U
Fluoranthene	2230	**66000 J**	**170000 J**	**7700**	**16000**	**8800**	**260 J**	**290**	**10**	**7.4**	**18**	5.0 U	4.8 U	4.8 U	**16000**	**22000**
Fluorene	536	**5800 J**	**8500 J**	**390**	**880**	**340**	**15**	**9.4**	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	**1200**	**1000**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**42000**	**96000**	**3500**	**11000**	**4400**	**130 J**	**140**	**4.9**	4.9 U	**6.9**	5.0 U	4.8 U	4.8 U	**8000**	**14000**
Naphthalene	561	**1700**	**2600**	**240**	**640**	200 U	**6.8**	5.0 U	4.9 U	4.9 U	4.9 U	5.0 U	4.8 U	4.8 U	870 U	**470**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	1170	**39000**	**87000**	**3400**	**7200**	**3400**	**120 J**	**110**	4.9 U	4.9 U	**8.8**	5.0 U	4.8 U	4.8 U	**7500 J**	**9600**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**67000**	**160000**	**6400**	**16000**	**8400**	**230 J**	**240**	**8.8**	**5.9**	**15**	5.0 U	4.8 U	4.8 U	**12000**	**20000**
TPH (mg/kg)																
Motor Oil		**1200**	**1700**	**2400**	**2700**	**310**	**29**	14 U	14 U	14 U	14 U	14 U	15 U	14 U	**1100**	**1300**
TPH - Diesel Range		**480**	**790 J**	**930 J**	**950 J**	**110 J**	**10**	7.0 U	7.1 U	7.1 U	6.8 U	7.2 U	7.6 U	6.8 U	**510 J**	**510 J**
TPH - Motor Oil Range		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-07	T4-PI-07	T4-PI-07	T4-PI-07	T4-PI-08
Top of Interval Elevation		-43.4	-44.4	-45.4	-45.4	-45.8	-46.8	-47.8	-48.8	-48.8	-47	-48	-48	-49	-38.8
Bottom of Interval Elevation		-44.4	-45.4	-46.4	-46.4	-46.8	-47.8	-48.8	-49.5	-49.5	-48	-49	-49	-49.8	-39.8
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/14/2007
Sample Name	PEC	T4-PI-04-2-C	T4-PI-04-2-D	T4-PI-04-2-E	T4-PI-04-2-E-DUP	T4-PI-04-A	T4-PI-04-B	T4-PI-04-C	T4-PI-04-D	T4-PI-04-D-DUP	T4-PI-07-A	T4-PI-07-B	T4-PI-07-B-DUP	T4-PI-07-C	T4-PI-08-A
Conventionals (%)															
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		**2.36 J**	**0.978 J**	**0.488 J**	**0.398 J**	**2.11 J**	**0.859 J**	**0.565 J**	**0.566 J**	**0.592 J**	**1.78**	**1.92**	**1.77**	**2.07**	**2.88**
Total solids		**59.20**	**68.50**	**68.80**	**70.60**	**57.80**	**73.30**	**75.70**	**68.60**	**68.60**	**74.10**	**67.70**	**66.80**	**62.70**	**47.80**
Metals (mg/kg)															
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	**4.8 J**	**2.8 J**	0.7 UJ	**0.3 J**	**0.4 J**	**1.1 J**	**0.8 J**	0.3 UJ	0.3 UJ	**1.1 J**	**1.4 J**	**1.2 J**	**2.0 J**	**2.0 J**
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	**1010 J**	**493 J**	**62 J**	**68 J**	**102 J**	**266 J**	**241 J**	**13 J**	**7 J**	**194 J**	**294 J**	**282 J**	**440 J**	**190 J**
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	**838 J**	**489 J**	**118 J**	**121 J**	**106 J**	**247 J**	**177 J**	**62 J**	**67 J**	**226 J**	**284 J**	**276 J**	**415 J**	**373 J**
PCBs (µg/kg)															
Aroclor 1016		4.0 UJ	4.0 UJ	4.0 UJ	3.9 UJ	3.9 UJ	4.0 UJ	3.9 UJ	3.9 UJ	3.9 UJ	3.9 U	3.9 U	3.9 UJ	4.0 U	4.0 U
Aroclor 1221		4.0 U	4.0 U	4.0 U	3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 UJ	4.0 U	4.0 U
Aroclor 1232		4.0 U	4.0 U	4.0 U	3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 UJ	4.0 U	4.0 U
Aroclor 1242		4.0 U	4.0 U	4.0 U	3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 UJ	3.9 UJ	3.9 UJ	4.0 U	4.0 U
Aroclor 1248		**22**	**8.1**	4.0 U	3.9 U	**4.9**	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	**8.0**	12 UJ	16 U	20 U
Aroclor 1254		**64**	**20**	4.0 U	3.9 U	**9.8**	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	**12**	**14 J**	**22**	59 U
Aroclor 1260		**59**	**25**	**5.0**	**6.0**	**9.9**	**4.0**	3.9 U	3.9 U	3.9 U	**8.9**	**16**	**16 J**	**30 J**	**190**
Aroclor 1262		4.0 U	4.0 U	4.0 U	3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 UJ	4.0 U	4.0 U
Aroclor 1268		4.0 U	4.0 U	4.0 U	3.9 U	3.9 U	4.0 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 UJ	4.0 U	4.0 U
Pesticides (µg/kg)															
2,4'-DDD		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	**6.9**
2,4'-DDE		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4'-DDT		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U
4,4'-DDD	28	5.6 UJ	**6.5 J**	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	1.9 UJ	**7.2 J**	**2.6 J**	**3.9 J**	**16 J**
4,4'-DDE	31	**5.0 J**	**2.7 J**	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	1.9 UJ	**3.8 J**	**2.2 J**	**3.6 J**	**5.8 J**
4,4'-DDT	63	4.5 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	2.0 UJ	1.9 UJ	**10 J**	2.0 UJ	2.0 UJ	**7.7 J**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)															
1,1'-Biphenyl		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		**470**	36 U	7.0 U	7.0 U	610 U	42 U	32 UJ	7.2 UJ	7.2 U	24 U	50 U	**54**	50 U	**140**
1-Methylphenanthrene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,5-Trimethylnaphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene		**820**	**46**	**7.0**	**9.2**	610 U	42 U	32 UJ	7.2 UJ	7.2 U	24 U	**64**	**88**	**75**	**200**
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-07	T4-PI-07	T4-PI-07	T4-PI-07	T4-PI-08
Top of Interval Elevation		-43.4	-44.4	-45.4	-45.4	-45.8	-46.8	-47.8	-48.8	-48.8	-47	-48	-48	-49	-38.8
Bottom of Interval Elevation		-44.4	-45.4	-46.4	-46.4	-46.8	-47.8	-48.8	-49.5	-49.5	-48	-49	-49	-49.8	-39.8
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/13/2007	12/13/2007	12/13/2007	12/13/2007	12/14/2007
Sample Name	PEC	T4-PI-04-2-C	T4-PI-04-2-D	T4-PI-04-2-E	T4-PI-04-2-E-DUP	T4-PI-04-A	T4-PI-04-B	T4-PI-04-C	T4-PI-04-D	T4-PI-04-D-DUP	T4-PI-07-A	T4-PI-07-B	T4-PI-07-B-DUP	T4-PI-07-C	T4-PI-08-A
Acenaphthene		**5800 J**	**340**	**42**	**42**	**6400**	**130**	**51 J**	7.2 UJ	7.2 U	**180**	**550**	**640**	**740**	**670**
Acenaphthylene		340 U	36 U	7.0 U	7.0 U	610 U	42 U	32 U	7.2 UJ	7.2 U	24 U	50 U	**59**	50 U	**680**
Anthracene	845	**4900 J**	**330**	**36**	**39**	**4600**	**140**	**54 J**	7.2 U	7.2 U	**170 J**	**610 J**	**670 J**	**600 J**	**2600 J**
Benzo(a)anthracene	1050	**37000**	**1800**	**240**	**250**	**25000**	**920**	**330 J**	**28**	**18**	**960**	**4100**	**4300**	**4100**	**6800**
Benzo(a)pyrene	1450	**47000**	**2400**	**280**	**310**	**32000**	**1100**	**370**	**30**	**17**	**1200 J**	**5500 J**	**6000 J**	**5300 J**	**8600 J**
Benzo(b)fluoranthene		**50000**	**1800 J**	**230 J**	**260 J**	**36000**	**1100 J**	**340 J**	**28 J**	**22 J**	**1100 J**	**5200 J**	**4500 J**	**4400 J**	**6400 J**
Benzo(e)pyrene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene		**17000**	**1800**	**230**	**270**	**21000**	**860**	**290 J**	**22**	**15**	**840**	**3900**	**4200**	**4100**	**6500**
Benzo(k)fluoranthene		**37000**	**1800**	**230**	**260**	**17000**	**840**	**340**	**29**	**14**	**820**	**3600**	**4500**	**4400**	**5200**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		340 UJ	89 U	**57**	18 U	610 UJ	110 U	**270 J**	18 U	**18**	64 U	120 U	120 U	120 U	120 U
Butylbenzylphthalate		340 UJ	89 U	18 U	18 U	610 UJ	110 U	79 U	18 U	18 U	61 UJ	120 UJ	120 UJ	120 UJ	120 UJ
Chrysene	1290	**40000**	**2100**	**270**	**310**	**25000**	**1000**	**420**	**30**	**17**	**1000**	**4600**	**5000**	**4700**	**8000**
Dibenzo(a,h)anthracene		**7600 J**	**710**	**87**	**100**	**8300**	**350**	**110 J**	**10**	7.2 U	**300**	**1500**	**1700**	**1800**	**1400**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		340 UJ	89 U	**79 J**	18 U	610 UJ	110 U	79 U	38 U	**84 J**	61 U	120 U	120 U	120 U	120 U
Dimethylphthalate		340 UJ	89 U	18 U	18 U	610 UJ	110 U	79 U	18 U	18 U	61 UJ	120 UJ	120 UJ	120 UJ	120 UJ
Di-n-butylphthalate		340 U	89 U	18 U	18 U	610 U	110 U	79 U	18 U	18 U	61 U	120 U	120 U	120 U	120 U
Di-n-octylphthalate		340 UJ	89 U	18 U	18 U	610 UJ	110 U	79 U	18 U	18 U	61 UJ	120 UJ	120 UJ	120 UJ	120 UJ
Fluoranthene	2230	**68000**	**2800**	**400**	**410**	**38000**	**1400**	**570 J**	**42**	**28**	**1400 J**	**6200 J**	**6600 J**	**5400 J**	**16000 J**
Fluorene	536	**2500**	**150**	**20**	**22**	**1900**	**55**	32 UJ	7.2 U	7.2 U	**66 J**	**270 J**	**300 J**	**320 J**	**820 J**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**18000**	**1600**	**200**	**220**	**20000**	**690**	**240 J**	**18**	**14**	**740**	**3400**	**3900**	**3800**	**4800**
Naphthalene	561	**1300 J**	**82**	**11**	**13**	**860**	42 U	32 UJ	7.2 UJ	7.2 U	**29**	**140**	**220**	**140**	**780**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	1170	**19000 J**	**1400**	**180**	**210**	**17000 J**	**540**	**220 J**	**18**	**11**	**670**	**2700**	**3100**	**2900**	**9000**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**54000**	**2800**	**380**	**400**	**32000**	**1400**	**550 J**	**39**	**25**	**1300**	**6000**	**7100**	**4600**	**20000**
TPH (mg/kg)															
Motor Oil		**9800**	**180**	**49**	**39**	**6300**	**280**	**100**	**400**	14 U	**110**	**300**	**260**	**390**	**520**
TPH - Diesel Range		**4500 J**	**98 J**	**26 J**	**20 J**	**2900 J**	**47 J**	**44 J**	**230 J**	7.2 U	**45**	**130**	**130**	**170**	**250**
TPH - Motor Oil Range		--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-09	T4-PI-09	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-02
Top of Interval Elevation		-39.8	-40.8	-41.8	-42.8	-43.8	-10	-11	-38	-39	-40	-41	-42	-43	-44	-36.9
Bottom of Interval Elevation		-40.8	-41.8	-42.8	-43.8	-44.5	-11	-12	-39	-40	-41	-42	-43	-44	-44.9	-37.9
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/13/2007	12/13/2007	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006
Sample Name	PEC	T4-PI-08-B	T4-PI-08-C	T4-PI-08-D	T4-PI-08-E	T4-PI-08-F	T4-PI-09-A	T4-PI-09-B	T4-S3-01-D	T4-S3-01-E	T4-S3-01-F	T4-S3-01-G	T4-S3-01-H	T4-S3-01-J	T4-S3-01-K	T4-S3-02-C
Conventionals (%)																
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		2.25	3.14	2.34	2.58	2.01	1.92	0.974	1.97	2.01	2.35	2.57	2.25	1.04	0.312	2.04 J
Total solids		59.30	62.60	57.50	60.90	71.70	74.80	82.40	52.90	55.90	58.80	55.90	57.50	64.9	67.7	53.50
Metals (mg/kg)																
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	2.0 J	2.0 J	1.1 J	1.8 J	1.9 J	0.7 J	0.5 J	--	--	--	--	--	--	--	--
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	122 J	118 J	87 J	200 J	188 J	101 J	89 J	258	432	559	455	527	238 J	42 J	212
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	341 J	333 J	234 J	349 J	358 J	207 J	130 J	381	546	827	656	609	333 J	68.6 J	328 J
PCBs (µg/kg)																
Aroclor 1016		3.9 U	3.9 U	4.0 U	4.0 U	3.9 U	3.9 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1221		3.9 U	3.9 U	4.0 U	4.0 U	3.9 U	3.9 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1232		3.9 U	3.9 U	4.0 U	4.0 U	3.9 U	3.9 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1242		3.9 U	3.9 UJ	4.0 UJ	4.0 UJ	3.9 UJ	3.9 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1248		8.6	20 U	24 U	20 U	16 U	4.9 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1254		12 U	20 U	130 U	150	28	8.2	12 U	--	--	--	--	--	--	--	--
Aroclor 1260		9.9	15	320	310	30	6.2	9.1 U	--	--	--	--	--	--	--	--
Aroclor 1262		3.9 U	3.9 U	4.0 U	4.0 U	3.9 U	3.9 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1268		3.9 U	3.9 U	4.0 U	4.0 U	3.9 U	3.9 U	3.9 U	--	--	--	--	--	--	--	--
Pesticides (µg/kg)																
2,4'-DDD		2.0 U	3.0	2.0 U	3.6	20 U	14	70	--	--	--	--	--	--	--	--
2,4'-DDE		2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	7.8	--	--	--	--	--	--	--	--
2,4'-DDT		2.0 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	10	--	--	--	--	--	--	--	--
4,4'-DDD	28	5.7 J	9.7 J	6.4 J	11 J	35 J	18 J	110 J	--	--	--	--	--	--	--	--
4,4'-DDE	31	3.0 J	4.4 J	5.4 J	5.4 J	12 J	7.5 J	31 J	--	--	--	--	--	--	--	--
4,4'-DDT	63	2.0 UJ	4.7 J	2.0 UJ	2.9 J	22 J	29 J	200 J	--	--	--	--	--	--	--	--
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)																
1,1'-Biphenyl		--	--	--	--	--	--	--	59	78	990 U	450 U	910 U	35	4.9 U	99 U
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		49 U	130	50 U	120	68	24 U	24 U	130	190	990 U	450 U	460 J	70	4.8 U	99 U
1-Methylphenanthrene		--	--	--	--	--	--	--	480	950	1600	890	2000	520	4.8	260
2,3,5-Trimethylnaphthalene		--	--	--	--	--	--	--	130	150	990 U	450 U	910 U	52	4.8 U	99 U
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		--	--	--	--	--	--	--	110	150	990 U	450 U	910 U	58	4.8 U	99 U
2-Methylnaphthalene		54	240	69	160	130	24 U	24 U	240	420	590 J	360 J	1000	160	4.8 U	99 U
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-09	T4-PI-09	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-02
Top of Interval Elevation		-39.8	-40.8	-41.8	-42.8	-43.8	-10	-11	-38	-39	-40	-41	-42	-43	-44	-36.9
Bottom of Interval Elevation		-40.8	-41.8	-42.8	-43.8	-44.5	-11	-12	-39	-40	-41	-42	-43	-44	-44.9	-37.9
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/13/2007	12/13/2007	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006
Sample Name	PEC	T4-PI-08-B	T4-PI-08-C	T4-PI-08-D	T4-PI-08-E	T4-PI-08-F	T4-PI-09-A	T4-PI-09-B	T4-S3-01-D	T4-S3-01-E	T4-S3-01-F	T4-S3-01-G	T4-S3-01-H	T4-S3-01-J	T4-S3-01-K	T4-S3-02-C
Acenaphthene		**270**	**500**	**210**	**1100**	**960**	**88**	**440**	**2100**	**4700**	**6200**	**4200**	**8700**	**2100**	**13**	**890**
Acenaphthylene		**140**	**660**	**320**	**180**	**58**	24 U	24 U	**74**	**73**	990 U	450 U	910 U	**25**	4.8 U	99 U
Anthracene	845	**420 J**	**1600 J**	**520 J**	**1100 J**	**770 J**	24 UJ	**78 J**	**2000**	**4300**	**5700**	**3500**	**6900**	**1900**	**9.2**	**880**
Benzo(a)anthracene	1050	**2100**	**8100**	**2800**	**5000**	**4700**	**120**	**400 J**	**11000**	**25000**	**34000**	**19000**	**42000**	**9400**	**51**	**5500**
Benzo(a)pyrene	1450	**2700 J**	**10000 J**	**3500 J**	**6500 J**	**6000 J**	**150 J**	**450 J**	**16000**	**34000**	**45000**	**26000**	**57000**	**12000**	**61**	**7600**
Benzo(b)fluoranthene		**1700 J**	**7100 J**	**2300 J**	**5000 J**	**4800 J**	**120 J**	**420 J**	**15000**	**34000**	**44000**	**26000**	**51000**	**11000**	**62**	**7100**
Benzo(e)pyrene		--	--	--	--	--	--	--	**9500**	**19000**	**26000**	**15000**	**32000**	**6800**	**38**	**4500**
Benzo(g,h,i)perylene		**2000**	**9800**	**2600**	**4500**	**4200**	**110**	**340 J**	**7300**	**16000**	**20000**	**12000**	**29000**	**8000**	**43**	**5600**
Benzo(k)fluoranthene		**2200**	**6800**	**2300**	**5000**	**4800**	**120**	**420**	**14000**	**27000**	**38000**	**22000**	**50000**	**10000**	**53**	**6400**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		120 U	120 U	120 U	120 U	120 U	61 U	61 U	99 U	180 UJ	300 U	370 U	360 U	99 U	20 U	60 U
Butylbenzylphthalate		120 UJ	120 UJ	120 UJ	120 UJ	120 UJ	61 UJ	61 UJ	99 U	99 U	300 U	250 U	260 U	99 U	20 U	60 U
Chrysene	1290	**2400**	**9800**	**3200**	**6100**	**5500**	**140**	**590**	**14000**	**28000**	**39000**	**22000**	**49000**	**11000**	**63**	**6700**
Dibenzo(a,h)anthracene		**470**	**1900**	**620**	**1700**	**1800**	**27**	**87 J**	**2800**	**4300**	**8100**	**4300**	**9900**	**1400**	**13**	**1700**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		120 U	120 U	120 U	120 U	120 U	61 U	**66 J**	99 U	99 U	300 U	250 U	260 U	99 U	20 U	60 U
Dimethylphthalate		120 UJ	120 UJ	120 UJ	120 UJ	120 UJ	61 UJ	61 UJ	99 U	99 U	300 U	250 U	260 U	99 U	20 U	60 U
Di-n-butylphthalate		120 U	120 U	120 U	120 U	120 U	61 U	61 UJ	99 U	99 U	300 U	250 U	260 U	99 U	20 U	60 U
Di-n-octylphthalate		120 UJ	120 UJ	120 UJ	120 UJ	120 UJ	61 UJ	61 UJ	99 U	99 U	300 U	250 UJ	260 U	99 U	20 U	60 U
Fluoranthene	2230	**4400 J**	**18000 J**	**6800 J**	**9800 J**	**7300 J**	**190 J**	**1600 J**	**19000**	**38000**	**53000**	**31000**	**64000**	**15000**	**76**	**8900**
Fluorene	536	**190 J**	**650 J**	**220 J**	**680 J**	**330 J**	24 UJ	**41 J**	**1100**	**2000**	**2800**	**2000**	**3400**	**810**	**6.8**	**480**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**1600**	**7400**	**2100**	**4100**	**3800**	**83**	**300 J**	**6900**	**15000**	**19000**	**11000**	**28000**	**6800**	**36**	**4600**
Naphthalene	561	**200**	**940**	**340**	**480**	**280**	24 U	**34 J**	**440**	**720**	**990**	**620**	**1700**	**280**	4.8 U	**160**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		--	--	--	--	--	--	--	**4500**	**9400**	**12000**	**7100**	**15000**	**3600**	**370**	**2300**
Phenanthrene	1170	**1500**	**5600**	**2600**	**5800**	**3600**	**98**	**1100**	**8700**	**16000**	**24000**	**15000**	**29000**	**7700**	**49**	**4000**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**4000**	**27000**	**5800 J**	**10000**	**7500**	**170**	**1100**	**16000**	**33000**	**47000**	**27000**	**56000**	**14000**	**77**	**8200**
TPH (mg/kg)																
Motor Oil		**210**	**360**	**260**	**550**	**1700**	**110**	**140**	--	--	--	--	--	--	--	--
TPH - Diesel Range		**94**	**220**	**110**	**270**	**1800**	**30**	**36**	**270**	**530**	**1100**	**910**	**710**	**250**	**12**	**150**
TPH - Motor Oil Range		--	--	--	--	--	--	--	**780**	**1500**	**2900**	**2300**	**2100**	**800**	**30**	**400**

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03
Top of Interval Elevation		-37.9	-38.9	-39.9	-39.9	-40.9	-41.9	-42.9	-43.9	-43.9	-38.1	-39.1	-39.1	-40.1	-41.1
Bottom of Interval Elevation		-38.9	-39.9	-40.9	-40.9	-41.9	-42.9	-43.9	-44.8	-44.8	-39.1	-40.1	-40.1	-41.1	-42.1
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006
Sample Name	PEC	T4-S3-02-D	T4-S3-02-E	T4-S3-02-F	T4-S3-02-F-DUP	T4-S3-02-G	T4-S3-02-H	T4-S3-02-J	T4-S3-02-K	T4-S3-02-K-DUP	T4-S3-03-B	T4-S3-03-C	T4-S3-03-C-DUP	T4-S3-03-D	T4-S3-03-E
Conventionals (%)															
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		1.94 J	2.10 J	1.98 J	1.62	1.09	1.46	0.775	0.980	0.495	1.88 J	1.86 J	1.82	1.56 J	--
Total solids		56.20	58.60	54.50	53.60	61.6	69.1	74.3	73.20	80.7	56.20	59.90	60.90	66.80	--
Metals (mg/kg)															
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	496	452	721	713	901 J	723 J	127 J	19	16 J	266	417	432	580	217 J
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	633 J	573 J	705 J	708 J	878 J	701 J	164 J	65.8	67.4 J	418 J	546 J	524	583 J	280 J
PCBs (µg/kg)															
Aroclor 1016		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg)															
2,4'-DDD		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT		--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	31	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)															
1,1'-Biphenyl		220 U	200 U	260 U	50 U	9.9 U	37 U	5.0 U	5.0 U	4.9 U	200 U	50 U	49 U	50 U	12
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		220 U	200 U	260 U	80	15	37 U	6.9	4.5 J	4.9 U	200 U	50 U	24 J	50 U	29
1-Methylphenanthrene		580	510	330	480	50 U	81 U	33 U	20 M	4.9 U	320	50 U	110 U	50 U	31 U
2,3,5-Trimethylnaphthalene		220 U	200 U	260 U	120	140	92	54	18	8.8	200 U	54	64	110	180
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		220 U	200 U	260 U	95	52	48	21	10	4.9 U	200 U	50 U	49 U	64	71
2-Methylnaphthalene		220	220	260 U	160	25	37	9.9	6.0	4.9 U	200 U	50 U	49	50 U	51
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03
Top of Interval Elevation		-37.9	-38.9	-39.9	-39.9	-40.9	-41.9	-42.9	-43.9	-43.9	-38.1	-39.1	-39.1	-40.1	-41.1
Bottom of Interval Elevation		-38.9	-39.9	-40.9	-40.9	-41.9	-42.9	-43.9	-44.8	-44.8	-39.1	-40.1	-40.1	-41.1	-42.1
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006
Sample Name	PEC	T4-S3-02-D	T4-S3-02-E	T4-S3-02-F	T4-S3-02-F-DUP	T4-S3-02-G	T4-S3-02-H	T4-S3-02-J	T4-S3-02-K	T4-S3-02-K-DUP	T4-S3-03-B	T4-S3-03-C	T4-S3-03-C-DUP	T4-S3-03-D	T4-S3-03-E
Acenaphthene		**2400**	**2400**	**720**	**1400**	**150**	**96**	**45**	**16**	**9.3**	**870**	**170**	**210**	**140**	**94**
Acenaphthylene		220 U	200 U	260 U	**45 J**	**36**	37 U	**17**	**3.5 J**	4.9 U	200 U	50 U	**44 J**	50 U	**27**
Anthracene	845	**1900**	**1900**	**620**	**1200**	**120**	**110**	**40**	**11**	**4.9**	**630**	**110**	**150**	**94**	**100**
Benzo(a)anthracene	1050	**13000**	**12000**	**3700**	**6400**	**500**	**460**	**110**	**38**	**19**	**4600**	**570**	**710**	**420**	**340**
Benzo(a)pyrene	1450	**17000**	**15000**	**5100**	**8200**	**590**	**550**	**140**	**44**	**29**	**5900**	**790**	**910**	**520**	**440**
Benzo(b)fluoranthene		**16000**	**15000**	**4900**	**8000**	**560**	**590**	**120**	**37**	**26**	**6300**	**730**	**880**	**480**	**310**
Benzo(e)pyrene		**9800**	**9000**	**3000**	**4900**	**390**	**380**	**88**	**30**	**19**	**3800**	**510**	**560**	**320**	**280**
Benzo(g,h,i)perylene		**12000**	**11000**	**3700**	**5800**	**410**	**210**	**46**	**24**	**13**	**4300**	**640**	**690**	**390**	**210**
Benzo(k)fluoranthene		**13000**	**12000**	**4200**	**6700**	**520**	**610**	**130**	**38 J**	**29**	**5100**	**690**	**740**	**420**	**380**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		120 U	110 U	210 U	140 U	110 U	32 U	20 U	20 U	20 U	140 U	160 U	140 U	59 U	**22**
Butylbenzylphthalate		120 U	110 U	150 U	60 U	20 U	29 U	20 U	20 U	20 U	110 U	59 U	60 U	59 U	20 U
Chrysene	1290	**15000**	**14000**	**4700**	**7800**	**680**	**650**	**160**	**56**	**30**	**6300**	**830**	**960**	**600**	**460**
Dibenzo(a,h)anthracene		**3800**	**3100**	**1200**	**1900**	**98**	**77**	**11**	**6.0**	4.9 U	**1300**	**150**	**170**	**99**	**53**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		120 U	110 U	150 U	60 U	20 U	29 U	20 U	20 U	20 U	110 U	59 U	60 U	59 U	20 U
Dimethylphthalate		120 U	110 U	150 U	60 U	20 U	29 U	20 U	20 U	20 U	110 U	59 U	60 U	59 U	20 U
Di-n-butylphthalate		120 U	110 U	150 U	60 U	20 U	29 U	20 U	20 U	20 U	110 U	59 U	60 U	59 U	20 U
Di-n-octylphthalate		120 U	110 U	150 U	60 U	20 U	29 U	20 U	20 U	20 U	110 U	59 U	60 U	59 U	20 U
Fluoranthene	2230	**20000**	**19000**	**6600**	**10000**	**1100**	**930**	**270**	**92**	**39**	**9000**	**1300**	**1600**	**1000**	**810**
Fluorene	536	**1100**	**1000**	**410**	**640**	**76**	**59**	**19**	**6.5**	4.9 U	**670**	**120**	**130**	**99**	**50**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**10000**	**9300**	**3200**	**5000**	**340**	**180**	**42**	**22**	**9.3**	**3600**	**490**	**550**	**310**	**180**
Naphthalene	561	**410**	**530**	260 U	**260**	**48**	**55**	**24**	**10**	**4.9**	**240**	**69**	**98**	**50**	**90**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		**4700**	**4200**	**1600**	**3000**	**340**	**260**	**97**	**90**	**46**	**1900**	**400**	**440**	**280**	**210**
Phenanthrene	1170	**9000**	**8300**	**3000**	**4700**	**660**	**560**	**210**	**66**	**30**	**4100**	**610**	**760**	**620**	**520**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**18000**	**16000**	**6200**	**8900**	**1400**	**1200**	**410**	**110**	**65**	**7600**	**1300**	**1600**	**1200**	**940**
TPH (mg/kg)															
Motor Oil		--	--	--	--	--	--	--	--	--	--	--	--	--	--
TPH - Diesel Range		**580**	**290**	**610**	**590**	**260**	**150**	**80**	**7.8**	--	**270**	**400**	**360**	**270**	--
TPH - Motor Oil Range		**1500**	**640**	**680**	**710**	**450**	**260**	**130**	**14**	--	**500**	**540**	**520**	**320**	--

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-S3-03	T4-S3-03	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-06	T4-S3-06
Top of Interval Elevation		-42.1	-43.1	-46.1	-47.1	-48.1	-49.1	-50.1	-51.1	-41.2	-42.2	-43.2	-44.2	-45.2	-46.2	-44.7	-45.7
Bottom of Interval Elevation		-43.1	-44.1	-47.1	-48.1	-49.1	-50.1	-51.1	-52.1	-42.2	-43.2	-44.2	-45.2	-46.2	-46.9	-44.8	-46.7
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-S3-03-F	T4-S3-03-G	T4-S3-04-A	T4-S3-04-B	T4-S3-04-C	T4-S3-04-D	T4-S3-04-E	T4-S3-04-F	T4-S3-05-E	T4-S3-05-F	T4-S3-05-G	T4-S3-05-H	T4-S3-05-J	T4-S3-05-K	T4-S3-06-A	T4-S3-06-B
Conventionals (%)																	
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		--	--	2.42	0.402	1.27	0.232	--	--	1.95 J	2.26 J	2.00 J	2.48 J	0.503	--	1.83 J	0.154 J
Total solids		--	--	58.90	72.30	77.50	82.90	--	--	52.80	56.40	56.80	56.20	80.80	--	42.40	78.10
Metals (mg/kg)																	
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	66 J	131 J	435	206	276	111	17	3	142	267	264	311	6	4	104	10
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	111 J	178 J	460	252	343	141	60.1	53.2	303 J	479 J	454 J	465 J	53.6 J	64.9	188 J	53.5 J
PCBs (µg/kg)																	
Aroclor 1016		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg)																	
2,4'-DDD		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD	28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)																	
1,1'-Biphenyl		5.0 U	4.9 U	380 U	5.0 U	28 U	4.9 U	4.9 U	4.9 U	98 U	180 U	430 U	190 U	9.6 U	5.0 U	49 U	4.8 U
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		6.9	12	230 J	3.0 J	20 J	4.9 U	4.8 U	4.9 U	98 U	88 J	430 U	190 U	9.6 U	5.0 U	49 U	4.8 U
1-Methylphenanthrene		28 U	52 U	1100	5.4 U	100	7.8	4.8 U	4.9 U	220	420	1200	420	19	5.0 U	49 U	4.8 U
2,3,5-Trimethylnaphthalene		31	45	380 U	5.0 U	28 U	4.9 U	4.8 U	4.9 U	98 U	180 U	430 U	190 U	9.6 U	5.0 U	49 U	4.8 U
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		16	30	380 U	5.0 U	28 U	4.9 U	4.8 U	4.9 U	98 U	180 U	430 U	190 U	9.6 U	5.0 U	49 U	4.8 U
2-Methylnaphthalene		15	23	460	5.9	42	3.9 J	4.8 U	4.9 U	98 U	210	430 U	190 U	9.6 U	5.0 U	49 U	4.8 U
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-S3-03	T4-S3-03	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-06	T4-S3-06
Top of Interval Elevation		-42.1	-43.1	-46.1	-47.1	-48.1	-49.1	-50.1	-51.1	-41.2	-42.2	-43.2	-44.2	-45.2	-46.2	-44.7	-45.7
Bottom of Interval Elevation		-43.1	-44.1	-47.1	-48.1	-49.1	-50.1	-51.1	-52.1	-42.2	-43.2	-44.2	-45.2	-46.2	-46.9	-44.8	-46.7
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-S3-03-F	T4-S3-03-G	T4-S3-04-A	T4-S3-04-B	T4-S3-04-C	T4-S3-04-D	T4-S3-04-E	T4-S3-04-F	T4-S3-05-E	T4-S3-05-F	T4-S3-05-G	T4-S3-05-H	T4-S3-05-J	T4-S3-05-K	T4-S3-06-A	T4-S3-06-B
Acenaphthene		**31**	**44**	**4600**	**48**	**370**	**29**	4.8 U	4.9 U	**710**	**1900**	**3900**	**1700**	**62**	**11**	**350**	4.8 U
Acenaphthylene		**9.4**	**12**	380 U	**3.0 J**	28 U	4.9 U	4.8 U	4.9 U	98 U	180 U	430 U	190 U	9.6 U	5.0 U	49 U	4.8 U
Anthracene	845	**34**	**46**	**4000**	**44**	**320**	**25**	4.8 U	4.9 U	**650**	**1700**	**3300**	**1500**	**57**	5.0 U	**350**	4.8 U
Benzo(a)anthracene	1050	**100**	**120**	**25000**	**300**	**2200**	**160**	**8.7**	**8.3**	**3800**	**11000**	**21000**	**9500**	**330**	**4.0 J**	**2000**	**22**
Benzo(a)pyrene	1450	**120**	**120**	**33000**	**400**	**2800**	**200**	**10**	**11**	**5200**	**15000**	**28000**	**13000**	**430**	**5.0**	**2700**	**27**
Benzo(b)fluoranthene		**100**	**90**	**31000**	**380**	**2500**	**180**	**13**	**11**	**5000**	**14000**	**24000**	**11000**	**400**	**4.0 J**	**2600**	**31**
Benzo(e)pyrene		**78**	**78**	**19000**	**240**	**1700**	**130**	**7.8**	**6.9**	**3000**	**9200**	**17000**	**7500**	**250**	5.0 U	**1600**	**18**
Benzo(g,h,i)perylene		**58**	**58**	**23000**	**230**	**1600**	**140**	**4.8**	**5.4**	**3800**	**6600**	**20000**	**6700**	**310**	5.0 U	**1400**	**16**
Benzo(k)fluoranthene		**100**	**110**	**27000**	**340**	**2400**	**190**	**7.8**	**8.8**	**3900**	**14000**	**26000**	**12000**	**350**	**4.0 J**	**2400**	**26**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		20 U	20 U	110 U	**16 J**	**34**	20 U	20 U	20 U	60 U	120 U	160 U	150 U	20 U	20 U	46 U	20 U
Butylbenzylphthalate		20 U	20 U	110 U	20 U	28 U	20 U	20 U	20 U	60 U	110 U	120 U	110 U	20 U	20 U	20 U	20 U
Chrysene	1290	**140**	**170**	**31000**	**380**	**2600**	**200**	**11**	**11**	**4500**	**13000**	**25000**	**11000**	**390**	**4.5 J**	**2600**	**29**
Dibenzo(a,h)anthracene		**18**	**11**	**6700**	**75**	**560**	**48**	4.8 U	4.9 U	**1100**	**2600**	**6500**	**2600**	**100**	5.0 U	**520**	**5.8**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		20 U	20 U	110 U	20 U	28 U	20 U	20 U	20 U	60 U	110 U	120 U	110 U	20 U	20 U	20 U	20 U
Dimethylphthalate		20 U	20 U	110 U	20 U	28 U	20 U	20 U	20 U	60 U	110 U	120 U	110 U	20 U	20 U	20 U	20 U
Di-n-butylphthalate		20 U	20 U	110 U	30 U	38 U	26 U	20 U	20 U	60 U	110 U	120 U	110 U	20 U	20 U	20 U	20 U
Di-n-octylphthalate		20 U	20 U	110 U	20 U	28 U	20 U	20 U	20 U	60 U	110 U	120 U	110 U	20 U	20 U	20 U	20 U
Fluoranthene	2230	**260**	**380**	**42000**	**500**	**3400**	**250**	**14**	**14**	**6400**	**18000**	**33000**	**15000**	**510**	**5.9**	**3800**	**40**
Fluorene	536	**19**	**25**	**1900**	**21**	**160**	**18**	4.8 U	4.9 U	**340**	**810**	**1700**	**730**	**26**	5.0 U	**200**	4.8 U
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**57**	**50**	**20000**	**210**	**1500**	**120**	**5.3**	**4.4 J**	**3200**	**6600**	**17000**	**6400**	**270**	**2.5 J**	**1300**	**16**
Naphthalene	561	**24**	**26**	**720**	**13**	**76**	**6.4**	4.8 U	4.9 U	**150**	**390**	**650**	**310**	**14**	5.0 U	**83**	4.8 U
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		**67**	**90**	**8900**	**120**	**840**	**61**	4.9 U	4.9 U	**1500**	**4600**	**8100**	**3600**	**120**	**36**	**880**	**11**
Phenanthrene	1170	**160**	**270**	**18000**	**200**	**1400**	**130**	**5.3**	**5.9**	**2900**	**7500**	**14000**	**6500**	**230**	**8.9**	**1600**	**16**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**260**	**400**	**35000**	**450**	**3000**	**220**	**12**	**12**	**6200**	**14000**	**30000**	**14000**	**490**	**6.4**	**3200**	**38**
TPH (mg/kg)																	
Motor Oil		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TPH - Diesel Range		--	--	**550**	**36**	**96**	**8.1**	--	--	**150**	**340**	**320**	**440**	**7.6**	--	**140**	6.5 U
TPH - Motor Oil Range		--	--	**1400**	**220**	**200**	**15**	--	--	**350**	**720**	**650**	**960**	**16**	--	**300**	13 U

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-08	T4-S3-08	T4-S3-08	T4-S3-08	T4-WB-01	T4-WB-02	T4-WB-03	T4-WB-04
Top of Interval Elevation		-38.9	-39.9	-40.9	-41.9	-42.9	-47	-48	-48	-49				
Bottom of Interval Elevation		-39.9	-40.9	-41.9	-42.9	-43.9	-48	-49	-49	-50				
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-S3-07-B	T4-S3-07-C	T4-S3-07-D	T4-S3-07-E	T4-S3-07-F	T4-S3-08-B	T4-S3-08-C	T4-S3-08-C-DUP	T4-S3-08-D	T4-WB-01	T4-WB-02	T4-WB-03	T4-WB-04
Conventionals (%)														
Moisture		--	--	--	--	--	--	--	--	--	--	--	--	--
Total organic carbon		**1.66**	**2.07**	**1.71**	**0.442**	--	**1.87 J**	**0.196 J**	**0.130**	--	**1.81**	**1.72**	**2.05**	**1.69**
Total solids		**51.60**	**55.70**	**66.60**	**82.30**	--	**68.50**	**83.00**	**83.00**	--	**40.30**	**52.70**	**43.90**	**44.30**
Metals (mg/kg)														
Arsenic	33	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	5	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	149	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	128	**57**	**53**	**81**	**14**	--	**188**	**89**	**12**	--	**30**	**35**	**24**	**20**
Mercury	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	459	**212**	**156**	**217**	**57.5**	--	**297 J**	**142 J**	**69.6**	--	**129**	**141**	**127**	**112**
PCBs (µg/kg)														
Aroclor 1016		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262		--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268		--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg)														
2,4'-DDD		--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE		--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT		--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD	28	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE	31	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT	63	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--
SVOC (µg/kg)														
1,1'-Biphenyl		50 U	49 U	49 U	4.9 U	4.9 U	49 U	4.8 U	49 U	4.9 U	4.9 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene		**30 J**	49 U	**34 J**	4.8 U	4.9 U	49 U	4.8 U	49 U	**2.0 J**	**5.9**	**4.0 J**	**5.9**	**5.0**
1-Methylphenanthrene		**140**	**59**	**140**	**8.7**	4.9 U	**140**	**7.7**	49 U	**7.4 M**	**16**	**10**	**16**	**12**
2,3,5-Trimethylnaphthalene		**64**	49 U	48 U	4.8 U	4.9 U	49 U	4.8 U	49 U	4.9 U	**5.4**	**12**	**5.0**	5.0 U
2,4-Dimethylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dimethylnaphthalene		50 U	49 U	48 U	4.8 U	4.9 U	49 U	4.8 U	49 U	4.9 U	**6.4**	**5.0**	**6.9**	**6.5**
2-Methylnaphthalene		**45 J**	49 U	**63**	**2.9 J**	4.9 U	**49**	4.8 U	49 U	**3.9 J**	**11**	**5.4**	**12**	**9.0**
2-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol		--	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
Summary of Sediment Chemistry Results Compared to PEC Criteria

Station Location		T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-08	T4-S3-08	T4-S3-08	T4-S3-08	T4-WB-01	T4-WB-02	T4-WB-03	T4-WB-04
Top of Interval Elevation		-38.9	-39.9	-40.9	-41.9	-42.9	-47	-48	-48	-49				
Bottom of Interval Elevation		-39.9	-40.9	-41.9	-42.9	-43.9	-48	-49	-49	-50				
Sample Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date		7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006
Sample Name	PEC	T4-S3-07-B	T4-S3-07-C	T4-S3-07-D	T4-S3-07-E	T4-S3-07-F	T4-S3-08-B	T4-S3-08-C	T4-S3-08-C-DUP	T4-S3-08-D	T4-WB-01	T4-WB-02	T4-WB-03	T4-WB-04
Acenaphthene		**300**	**200**	**520**	**21**	**3.4 J**	**550**	**26**	**88**	**29**	**41**	**8.4**	**32**	**22**
Acenaphthylene		**79**	49 U	**29 J**	**2.9 J**	4.9 U	49 U	4.8 U	49 U	4.9 U	**13**	**13**	**15**	**14**
Anthracene	845	**410**	**190**	**430**	**26**	**3.9 J**	**500**	**26**	**93**	**26**	**68**	**25**	**79**	**48**
Benzo(a)anthracene	1050	**2200**	**1200**	**2600**	**140**	**25**	**3100**	**170**	**540**	**160**	**280**	**120**	**230**	**130**
Benzo(a)pyrene	1450	**3100**	**1500**	**3400**	**190**	**33**	**4400**	**230**	**660**	**220**	**400**	**190**	**310**	**160**
Benzo(b)fluoranthene		**2800**	**1400**	**3400**	**160**	**28**	**4000**	**240**	**830**	**190**	**420**	**160**	**300**	**150**
Benzo(e)pyrene		**1900**	**940**	**2100**	**120**	**22**	**2600**	**140**	**490**	**130**	**250**	**120**	**200**	**110**
Benzo(g,h,i)perylene		**2400**	**1200**	**2400**	**140**	**18**	**2000**	**120**	**500**	**110**	**210**	**94**	**140**	**79**
Benzo(k)fluoranthene		**2600**	**1300**	**2800**	**160**	**31**	**4100**	**180 J**	**620**	**190 J**	**320**	**150 J**	**260**	**160**
Benzoic acid		--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol		--	--	--	--	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate		**40**	**24**	**60**	20 U	20 U	200 U	58 U	59 U	20 U	**65**	**60**	**90**	**79**
Butylbenzylphthalate		20 U	20 U	20 U	20 U	20 U	59 U	58 U	59 U	20 U	20 U	20 U	20 U	20 U
Chrysene	1290	**2800**	**1400**	**3200**	**170**	**30**	**3800**	**210**	**780**	**190 J**	**390**	**190 J**	**330**	**190**
Dibenzo(a,h)anthracene		**620**	**370**	**700**	**39**	**6.9**	**700**	**40**	**150**	**39**	**71**	**20**	**42**	**23**
Dibenzofuran		--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate		20 U	20 U	20 U	20 U	20 U	59 U	58 U	59 U	20 U	20 U	20 U	20 U	20 U
Dimethylphthalate		20 U	20 U	20 U	20 U	20 U	59 U	58 U	59 U	20 U	20 U	20 U	20 U	20 U
Di-n-butylphthalate		35 U	32 U	22 U	36 U	20 U	59 U	58 U	59 U	20 U	22 U	29 U	24 U	30 U
Di-n-octylphthalate		20 U	20 U	20 U	20 U	20 U	59 U	58 U	59 U	20 U	20 U	20 U	20 U	20 U
Fluoranthene	2230	**4500**	**1800**	**4500**	**250**	**43**	**4900**	**280**	**1100**	**250**	**560**	**280**	**460**	**290**
Fluorene	536	**200**	**110**	**250**	**13**	4.9 U	**260**	**14**	**59**	**12**	**27**	**8.9**	**25**	**18**
Hexachlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene		--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachloroethane		--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene		**2000**	**990**	**2100**	**120**	**17**	**2000**	**110**	**440**	**110**	**200**	**81**	**120**	**70**
Naphthalene	561	**120**	**54**	**110**	**7.3**	**2.4 J**	**93**	**4.8**	49 U	**6.4**	**20**	**12**	**25**	**20**
n-Nitrosodiphenylamine		--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol		--	--	--	--	--	--	--	--	--	--	--	--	--
Perylene		**1000**	**640**	**1100**	**64**	**12**	**1300**	**71**	**280**	**69**	**160**	**71**	**150**	**88**
Phenanthrene	1170	**1800**	**860**	**2000**	**90**	**16**	**2100**	**120**	**560**	**110 J**	**240**	**96 J**	**190**	**120**
Phenol		--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	1520	**4300**	**1700**	**3800**	**250**	**36**	**4500**	**250**	**900**	**220**	**550**	**290**	**440**	**280**
TPH (mg/kg)														
Motor Oil		--	--	--	--	--	--	--	--	--	--	--	--	--
TPH - Diesel Range		**110**	**88**	**130**	**9.2**	--	**130**	**6.2**	**43**	--	**32**	**22**	**32**	**31**
TPH - Motor Oil Range		**330**	**290**	**370**	**25**	--	**280**	**14**	**160**	--	**130**	**110**	**140**	**150**

Notes:
J - Result is estimated
U - Result is below quantitation limit
UJ - Non-detected result is estimated
Bold - Analyte was detected
Result 1-10 times PEC
Result 10-20 times PEC
Result ≥ 20 times PEC

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-B411-01	T4-B411-01	T4-B411-02	T4-B411-02	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-03	T4-B411-04	T4-B411-04	T4-B411-04
Top of Interval Elevation	-39.8	-40.8	-38.8	-39.8	-42.6	-43.6	-44.6	-45.6	-46.6	-47.6	-42.3	-43.3	-44.3
Bottom of Interval Elevation	-40.8	-41.5	-39.8	-41	-43.6	-44.6	-45.6	-46.6	-47.6	-48.6	-43.3	-44.3	-45.3
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	1/8/2007	1/8/2007	1/8/2007	1/8/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007	1/4/2007
Sample Name	T4-B411-01-A	T4-B411-01-B	T4-B411-02-A	T4-B411-02-B	T4-B411-03-A	T4-B411-03-B	T4-B411-03-C	T4-B411-03-C-DUP	T4-B411-03-D	T4-B411-03-E	T4-B411-04-A	T4-B411-04-B	T4-B411-04-C
Grain Size (%)													
Clay	--	--	--	--	**11.7**	**9.3**	**10.1**	**10.7**	**7.7**	**14.6**	**9.3**	**14.5**	**16.5**
Clay, Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Fine	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Medium	--	--	--	--	--	--	--	--	--	--	--	--	--
Fines	--	--	--	--	--	--	--	--	--	--	--	--	--
Gravel	**2.5**	**4.3**	**0**	**0**	0	0	0	0	0	0	0	0	0
Sand, Coarse	**3.4**	**0.8**	**0.7**	**0.7**	0	0	0	0	0	0	0	0	0
Sand, Fine	**47.4**	**63.3**	**67.2**	**64.1**	**22.5**	**28.8**	**29.3**	**28.1**	**36.8**	**25**	**27.3**	**5.6**	**3.9**
Sand, Medium	**34.8**	**26.1**	**21**	**34**	0.1	0	0	0	0	**0.1**	0	0	**0.1**
Sand, Very Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--
Sand, Very Fine	--	--	--	--	--	--	--	--	--	--	--	--	--
Silt, Coarse	--	--	--	--	**13.2**	**10**	**10.1**	**10.1**	**7.7**	**10.6**	**8**	**15.9**	**14.4**
Silt, Fine	--	--	--	--	**10.3**	**7.1**	**8.7**	**8**	**4.9**	**7.9**	**9.4**	**13.7**	**12.9**
Silt, Medium	--	--	--	--	**8.8**	**8.5**	**9.4**	**10.1**	**6**	**9.2**	**7.3**	**10.9**	**12.2**
Silt, Very Coarse	**11.9**	**5.6**	**11**	**1.2**	**27.6**	**31.4**	**27**	**27.3**	**33.5**	**27.4**	**34**	**32.1**	**30.7**
Silt, Very Fine	--	--	--	--	**5.9**	**5**	**5.4**	**5.4**	**3.3**	**5.3**	**4.7**	**7.2**	**9.3**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-B411-04	T4-B411-04	T4-B411-06	T4-B411-06	T4-B411-06	T4-B414-01	T4-B414-01	T4-B414-01	T4-B414-02	T4-B414-02	T4-B414-02	T4-B414-03	T4-B414-03
Top of Interval Elevation	-45.3	-46.3	-42.8	-43.8	-44.8	-21	-22	-23	-24.7	-25.7	-26.7	-32	-33
Bottom of Interval Elevation	-46.3	-47.3	-43.8	-44.8	-45.8	-22	-23	-24	-25.7	-26.7	-27.7	-33	-34
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	1/4/2007	1/4/2007	1/3/2007	1/3/2007	1/3/2007	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006
Sample Name	T4-B411-04-D	T4-B411-04-E	T4-B411-06-A	T4-B411-06-B	T4-B411-06-C	T4-B414-01-A	T4-B414-01-B	T4-B414-01-C	T4-B414-02-A	T4-B414-02-B	T4-B414-02-C	T4-B414-03-A	T4-B414-03-B
Grain Size (%)													
Clay	**15.1**	**12.2**	**15.2**	**11.8**	**11.5**	**18.1**	**18.2**	**19.4**	**18.7**	**19.3**	**20.8**	**13.3**	**17.2**
Clay, Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Fine	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Medium	--	--	--	--	--	--	--	--	--	--	--	--	--
Fines	--	--	--	--	--	--	--	--	--	--	--	--	--
Gravel	0	0	0.1	0	1.1	0.1	--	--	--	--	--	--	--
Sand, Coarse	0	0	0.3	0.1	0.1	0.2	0.1	**0.1**	--	--	--	--	--
Sand, Fine	**6.9**	**21.4**	**31.2**	**51.9**	**46.1**	**24.3**	**19.2**	**9.7**	**15.1**	**13.8**	**13.7**	**23.8**	**19.8**
Sand, Medium	0	**0.2**	**4.6**	**5**	**4.8**	**1.9**	**2.8**	**0.9**	**0.9**	**0.5**	**2.0**	**2.7**	**1.4**
Sand, Very Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--
Sand, Very Fine	--	--	--	--	--	--	--	--	--	--	--	--	--
Silt, Coarse	**14.4**	**11.5**	**6.9**	**3.3**	**5.1**	**7.9**	**12.2**	**9.4**	**11.2**	**10.7**	**13.4**	**10.4**	**5.5**
Silt, Fine	**13.7**	**6.8**	**13.8**	**9.8**	**10.2**	**9.4**	**10.9**	**11.4**	**11.2**	**10.6**	**12.7**	**8.8**	**12.4**
Silt, Medium	**12.9**	**9.5**	**11.1**	**5.2**	**6.4**	**7.9**	**10.8**	**14.0**	**11.2**	**12.0**	**9.4**	**10.4**	**15.1**
Silt, Very Coarse	**29.7**	**31.6**	**7.1**	**5.7**	**8.4**	**22.4**	**15.1**	**27.1**	**23.7**	**22.5**	**17.9**	**22.5**	**18.9**
Silt, Very Fine	**7.2**	**6.8**	**9.7**	**7.2**	**6.4**	**7.9**	**10.8**	**8.0**	**8.1**	**10.7**	**10.1**	**8.1**	**9.6**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-B414-03	T4-B414-04	T4-B414-04	T4-B414-04	T4-MD-01	T4-MD-01	T4-MD-02	T4-MD-02	T4-MD-02	T4-MD-02	T4-MD-02	T4-PI-01	T4-PI-01	T4-PI-01	T4-PI-01
Top of Interval Elevation	-34	-36.4	-37.4	-38.4	-37.9	-38.9	-37.2	-38.2	-39.2	-40.2	-41.2	-42.5	-43.5	-44.5	-45.5
Bottom of Interval Elevation	-35	-37.4	-38.4	-39.4	-38.9	-39.9	-38.2	-39.2	-40.2	-41.2	-42	-43.5	-44.5	-45.5	-46.5
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	7/20/2006	7/20/2006	7/20/2006	7/20/2006	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/14/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007
Sample Name	T4-B414-03-C	T4-B414-04-A	T4-B414-04-B	T4-B414-04-C	T4-MD-01-A	T4-MD-01-B	T4-MD-02-A	T4-MD-02-B	T4-MD-02-C	T4-MD-02-D	T4-MD-02-E	T4-PI-01-A	T4-PI-01-B	T4-PI-01-C	T4-PI-01-D
Grain Size (%)															
Clay	**17.3**	**17.5**	**16.5**	**17.0**	--	--	--	--	--	--	--	--	--	--	--
Clay, Coarse	--	--	--	--	**3.0**	**3.1**	**2.2**	**2.7**	**3.1**	**3.5**	**1.8**	**1.8**	**1.9**	**2.5**	**2.6**
Clay, Fine	--	--	--	--	**4.5**	**4.5**	**2.7**	**5.1**	**4.6**	**6.0**	**2.3**	**2.1**	**2.3**	**3.7**	**5.5**
Clay, Medium	--	--	--	--	**2.7**	**2.6**	**1.6**	**0.6**	**2.4**	**2.9**	**1.4**	**1.5**	**1.7**	**2.3**	**2.8**
Fines	--	--	--	--	**51.3**	**53.7**	**35.5**	**37.2**	**46.5**	**54.6**	**22.0**	**29.3**	**27.3**	**35.7**	**61.1**
Gravel	--	--	--	--	**0.5**	**0.3**	**0.3**	**0.2**	**0**	**0.1**	**1.2**	**5.3**	**1.6**	**3.8**	**7.2**
Sand, Coarse	--	--	**0.3**	--	**5.5**	**4.5**	**8.5**	**9.2**	**8.4**	**5.7**	**12.4**	**11.4**	**15.6**	**12.1**	**4.0**
Sand, Fine	**10.0**	**12.6**	**15.9**	**21.1**	**7.5**	**8.1**	**8.7**	**8.3**	**6.2**	**7.2**	**12.8**	**9.3**	**7.8**	**7.3**	**5.5**
Sand, Medium	**1.4**	**0.6**	**0.5**	**0.9**	**27.8**	**21.7**	**37.4**	**35.3**	**29.3**	**22.0**	**45.2**	**39.3**	**43.2**	**36.2**	**17.6**
Sand, Very Coarse	--	--	--	--	**0.5**	**0.6**	**0.4**	**0.4**	**0.3**	**0.4**	**1.1**	**1.6**	**1.8**	**1.7**	**0.9**
Sand, Very Fine	--	--	--	--	**6.9**	**11.0**	**9.2**	**9.5**	**9.1**	**10.0**	**5.4**	**3.8**	**2.7**	**3.3**	**3.6**
Silt, Coarse	**12.5**	**12.1**	**10.5**	**9.8**	**16.2**	**17.8**	**11.6**	**9.8**	**12.3**	**11.5**	**3.2**	**6.0**	**4.3**	**6.3**	**6.4**
Silt, Fine	**13.8**	**11.4**	**12.5**	**12.4**	**8.0**	**7.6**	**5.1**	**5.9**	**7.6**	**9.8**	**4.1**	**6.7**	**6.5**	**9.5**	**24.2**
Silt, Medium	**12.5**	**10.7**	**11.2**	**9.8**	**12.3**	**12.9**	**8.7**	**9.1**	**11.5**	**15.0**	**6.3**	**6.5**	**6.2**	**5.4**	**11.7**
Silt, Very Coarse	**21.4**	**27.0**	**25.3**	**21.3**	--	--	--	--	--	--	--	--	--	--	--
Silt, Very Fine	**11.1**	**8.1**	**7.3**	**7.8**	**4.6**	**5.2**	**3.7**	**4.1**	**5.1**	**5.8**	**2.9**	**4.8**	**4.4**	**6.0**	**8.0**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-PI-01	T4-PI-01	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-02	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03	T4-PI-03
Top of Interval Elevation	-46.5	-47.5	-35.3	-36.3	-37.3	-38.3	-39.3	-40.3	-41.3	-42.3	-45.6	-46.6	-47.6	-48.6	-49.6	-50.6
Bottom of Interval Elevation	-47.5	-48.5	-36.3	-37.3	-38.3	-39.3	-40.3	-41.3	-42.3	-43.3	-46.6	-47.6	-48.6	-49.6	-50.6	-51.6
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007	12/11/2007
Sample Name	T4-PI-01-E	T4-PI-01-F	T4-PI-02-A	T4-PI-02-B	T4-PI-02-C	T4-PI-02-D	T4-PI-02-E	T4-PI-02-F	T4-PI-02-G	T4-PI-02-H	T4-PI-03-A	T4-PI-03-B	T4-PI-03-C	T4-PI-03-D	T4-PI-03-E	T4-PI-03-F
Grain Size (%)																
Clay	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Coarse	**4.1**	**4.3**	**2.0**	**2.1**	**2.5**	**4.1**	**4.3**	**4.3**	**4.5**	**3.4**	**1.1**	**2.5**	**2.6**	**2.7**	**2.0**	**2.4**
Clay, Fine	**9.4**	**10.0**	**1.7**	**2.6**	**3.7**	**7.8**	**9.6**	**8.7**	**8.3**	**7.1**	**1.8**	**6.0**	**6.1**	**6.8**	**4.5**	**5.3**
Clay, Medium	**4.1**	**4.3**	**1.7**	**1.7**	**2.2**	**3.8**	**4.2**	**3.9**	**4.1**	**3.4**	**0.9**	**2.1**	**2.2**	**2.3**	**1.6**	**1.8**
Fines	**84.9**	**82.2**	**33.0**	**32.7**	**42.8**	**70.6**	**84.0**	**75.3**	**66.0**	**52.7**	**16.0**	**44.7**	**49.8**	**56.2**	**38.5**	**48.1**
Gravel	**0.2**	**0.3**	**1.7**	**0.5**	**0.5**	**0.1**	**0.4**	**1.2**	**0.4**	**2.5**	**0.1**	**0**	**0**	**0**	**0**	**0**
Sand, Coarse	**1.1**	**1.1**	**7.6**	**8.9**	**5.8**	**1.7**	**0.9**	**2.5**	**4.0**	**4.4**	**14.8**	**1.5**	**0**	**0.1**	**0**	**0**
Sand, Fine	**3.6**	**4.6**	**12.9**	**11.2**	**10.7**	**7.1**	**3.5**	**4.0**	**6.9**	**11.8**	**11.3**	**17.1**	**10.3**	**6.9**	**20.3**	**9.9**
Sand, Medium	**6.0**	**3.3**	**37.9**	**41.3**	**33.7**	**12.0**	**3.5**	**8.9**	**16.0**	**18.9**	**52.1**	**6.3**	**0.2**	**0.2**	**0.2**	**0.1**
Sand, Very Coarse	**0.3**	**0.6**	**0.6**	**0.8**	**0.8**	**0.5**	**0.5**	**0.9**	**0.8**	**1.2**	**0.7**	**0.2**	**0**	**0.1**	**0**	**0**
Sand, Very Fine	**3.9**	**7.9**	**6.3**	**4.7**	**5.7**	**7.9**	**7.2**	**7.2**	**6.0**	**8.6**	**5.0**	**30.1**	**39.7**	**36.6**	**40.9**	**41.8**
Silt, Coarse	**10.7**	**13.4**	**12.4**	**8.8**	**13.1**	**16.3**	**19.3**	**15.6**	**10.7**	**10.6**	**4.8**	**15.2**	**20.4**	**23.8**	**15.6**	**21.2**
Silt, Fine	**23.0**	**18.9**	**5.0**	**5.6**	**7.2**	**13.1**	**15.9**	**15.7**	**14.0**	**9.5**	**2.3**	**6.0**	**5.6**	**6.4**	**4.7**	**5.1**
Silt, Medium	**23.5**	**21.1**	**6.8**	**7.9**	**9.5**	**18.5**	**22.4**	**18.3**	**15.3**	**12.2**	**3.7**	**9.4**	**9.4**	**10.1**	**7.2**	**9.0**
Silt, Very Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silt, Very Fine	**10.1**	**10.2**	**3.4**	**4.0**	**4.5**	**7.1**	**8.3**	**8.8**	**9.0**	**6.4**	**1.4**	**3.6**	**3.5**	**4.0**	**2.8**	**3.4**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-PI-03	T4-PI-03	T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04-2	T4-PI-04	T4-PI-04	T4-PI-04	T4-PI-07	T4-PI-07	T4-PI-08	T4-PI-08	T4-PI-08
Top of Interval Elevation	-51.6	-52.6	-41.4	-42.4	-43.4	-44.4	-45.4	-45.8	-46.8	-47.8	-47	-49	-38.8	-39.8	-40.8
Bottom of Interval Elevation	-52.6	-53.6	-42.4	-43.4	-44.4	-45.4	-46.4	-46.8	-47.8	-48.8	-48	-49.8	-39.8	-40.8	-41.8
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	12/11/2007	12/11/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/12/2007	12/13/2007	12/13/2007	12/14/2007	12/14/2007	12/14/2007
Sample Name	T4-PI-03-G	T4-PI-03-H	T4-PI-04-2-A	T4-PI-04-2-B	T4-PI-04-2-C	T4-PI-04-2-D	T4-PI-04-2-E	T4-PI-04-A	T4-PI-04-B	T4-PI-04-C	T4-PI-07-A	T4-PI-07-C	T4-PI-08-A	T4-PI-08-B	T4-PI-08-C
Grain Size (%)															
Clay	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Coarse	**2.9**	**2.4**	**3.6**	**2.4**	**4.3**	**3.3**	**2.7**	**2.6**	**1.1**	**1.2**	**0.5**	**3.0**	**3.2**	**2.1**	**2.3**
Clay, Fine	**5.6**	**5.8**	**5.3**	**5.2**	**8.0**	**6.3**	**5.4**	**3.4**	**1.6**	**2.1**	**0.5**	**5.5**	**3.9**	**3.0**	**4.1**
Clay, Medium	**2.1**	**2.0**	**3.1**	**2.5**	**3.6**	**2.9**	**2.3**	**1.8**	**1.0**	**0.9**	**0.4**	**2.6**	**2.8**	**2.1**	**2.2**
Fines	**46.7**	**45.7**	**52.7**	**54.0**	**62.0**	**41.8**	**57.0**	**44.7**	**19.9**	**19.9**	**5.4**	**44.3**	**50.2**	**31.0**	**34.0**
Gravel	**0**	**0**	**0.3**	**0.1**	**0.3**	**0.6**	**1.1**	**5.3**	**0.7**	**1.6**	**1.2**	**0.3**	**0.6**	**0.6**	**0.9**
Sand, Coarse	**0.1**	**0**	**5.6**	**3.7**	**2.8**	**4.9**	**2.1**	**5.9**	**20.9**	**20.3**	**29.0**	**9.7**	**5.3**	**10.0**	**9.5**
Sand, Fine	**15.6**	**15.9**	**8.8**	**12.8**	**12.1**	**18.0**	**6.4**	**7.7**	**6.6**	**6.1**	**7.1**	**10.5**	**8.9**	**9.5**	**9.0**
Sand, Medium	**0.3**	**0.4**	**25.6**	**17.8**	**13.3**	**18.6**	**7.5**	**22.3**	**46.5**	**40.7**	**53.1**	**26.8**	**28.0**	**43.8**	**40.8**
Sand, Very Coarse	**0**	**0**	**0.3**	**0.4**	**0.5**	**0.7**	**0.3**	**1.1**	**1.7**	**1.5**	**3.1**	**1.1**	**0.9**	**0.7**	**1.2**
Sand, Very Fine	**37.4**	**37.9**	**6.8**	**11.2**	**9.0**	**15.5**	**25.6**	**13.0**	**3.8**	**9.9**	**1.2**	**7.3**	**6.3**	**4.4**	**4.5**
Silt, Coarse	**17.9**	**17.8**	**9.0**	**9.7**	**7.8**	**8.7**	**22.2**	**15.1**	**7.6**	**6.5**	**0.9**	**7.3**	**13.2**	**6.1**	**5.5**
Silt, Fine	**5.9**	**5.6**	**11.8**	**12.2**	**16.5**	**7.3**	**7.3**	**8.2**	**3.2**	**3.0**	**1.1**	**9.2**	**8.8**	**5.9**	**6.8**
Silt, Medium	**8.6**	**8.6**	**12.4**	**15.7**	**11.1**	**7.1**	**12.3**	**8.2**	**3.4**	**4.5**	**1.3**	**11.2**	**11.8**	**7.7**	**8.6**
Silt, Very Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silt, Very Fine	**3.6**	**3.6**	**7.4**	**6.2**	**10.7**	**6.1**	**4.8**	**5.4**	**2.0**	**1.8**	**0.8**	**5.4**	**6.5**	**4.1**	**4.5**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-PI-08	T4-PI-08	T4-PI-08	T4-PI-09	T4-PI-09	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-01	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02
Top of Interval Elevation	-41.8	-42.8	-43.8	-10	-11	-38	-39	-40	-41	-42	-43	-44	-36.9	-37.9	-38.9	-39.9
Bottom of Interval Elevation	-42.8	-43.8	-44.5	-11	-12	-39	-40	-41	-42	-43	-44	-44.9	-37.9	-38.9	-39.9	-40.9
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	12/14/2007	12/14/2007	12/14/2007	12/13/2007	12/13/2007	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/18/2006
Sample Name	T4-PI-08-D	T4-PI-08-E	T4-PI-08-F	T4-PI-09-A	T4-PI-09-B	T4-S3-01-D	T4-S3-01-E	T4-S3-01-F	T4-S3-01-G	T4-S3-01-H	T4-S3-01-J	T4-S3-01-K	T4-S3-02-C	T4-S3-02-D	T4-S3-02-E	T4-S3-02-F
Grain Size (%)																
Clay	--	--	--	--	--	**0.8**	**11.6**	**8.4**	**16.8**	**16.5**	**10.8**	**10.1**	**17.9**	**13.3**	**10.9**	**20.6**
Clay, Coarse	**4.1**	**2.3**	**1.6**	**1.0**	**0.6**	--	--	--	--	--	--	--	--	--	--	--
Clay, Fine	**6.6**	**4.7**	**3.4**	**0.9**	**0.5**	--	--	--	--	--	--	--	--	--	--	--
Clay, Medium	**3.5**	**2.3**	**1.5**	**0.9**	**0.6**	--	--	--	--	--	--	--	--	--	--	--
Fines	**57.8**	**41.9**	**25.3**	**9.5**	**6.6**	--	--	--	--	--	--	--	--	--	--	--
Gravel	**0.1**	**0.3**	**0.4**	**2.9**	**10.2**	--	--	**0.9**	**1.2**	**5.8**	0.01 U	0.01 U	--	--	--	--
Sand, Coarse	**6.2**	**8.3**	**13.9**	**15.3**	**19.4**	--	0.1	**0.4**	**0.2**	**0.7**	**0.3**	0.01 U	--	--	--	**0.2**
Sand, Fine	**5.3**	**9.7**	**10.6**	**9.5**	**7.9**	**0.8**	**31.0**	**53.2**	**28.3**	**23.0**	**40.5**	**31.2**	**19.8**	**34.6**	**45.3**	**18.6**
Sand, Medium	**22.6**	**30.5**	**42.9**	**59.7**	**49.6**	**0.1**	**2.3**	**6.5**	**4.5**	**4.2**	**3.1**	**0.2**	**2.6**	**3.8**	**8.4**	**2.4**
Sand, Very Coarse	**0.7**	**1.3**	**1.1**	**1.8**	**5.1**	--	--	--	--	--	--	--	--	--	--	--
Sand, Very Fine	**7.4**	**8.0**	**5.8**	**1.3**	**1.3**	--	--	--	--	--	--	--	--	--	--	--
Silt, Coarse	**10.6**	**10.0**	**5.7**	**1.8**	**1.4**	**0.5**	**18.0**	**6.0**	**8.7**	**10.8**	**7.2**	**9.4**	**10.4**	**7.0**	**5.4**	**12.7**
Silt, Fine	**11.7**	**7.6**	**4.6**	**1.7**	**1.2**	**0.7**	**12.2**	**8.4**	**13.1**	**11.6**	**8.7**	**9.3**	**13.4**	**9.4**	**7.8**	**14.2**
Silt, Medium	**14.0**	**10.6**	**5.9**	**1.9**	**1.4**	**0.5**	**1.9**	**3.6**	**8.7**	**7.2**	**6.5**	**7.9**	**11.2**	**10.2**	**9.3**	**11.1**
Silt, Very Coarse	--	--	--	--	--	**96.1**	**15.2**	**6.5**	**8.7**	**9.5**	**16.4**	**26.9**	**14.2**	**14.7**	**7.4**	**8.3**
Silt, Very Fine	**7.3**	**4.5**	**2.6**	**1.3**	**0.8**	**0.4**	**7.7**	**6.0**	**10.0**	**10.8**	**6.5**	**5.0**	**10.4**	**7.0**	**5.4**	**11.9**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-02	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-03	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-04	T4-S3-05	T4-S3-05
Top of Interval Elevation	-40.9	-41.9	-42.9	-43.9	-38.1	-39.1	-40.1	-41.1	-42.1	-43.1	-46.1	-47.1	-48.1	-49.1	-41.2	-42.2
Bottom of Interval Elevation	-41.9	-42.9	-43.9	-44.8	-39.1	-40.1	-41.1	-42.1	-43.1	-44.1	-47.1	-48.1	-49.1	-50.1	-42.2	-43.2
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	7/18/2006	7/18/2006	7/18/2006	7/18/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006
Sample Name	T4-S3-02-G	T4-S3-02-H	T4-S3-02-J	T4-S3-02-K-DUP	T4-S3-03-B	T4-S3-03-C	T4-S3-03-D	T4-S3-03-E	T4-S3-03-F	T4-S3-03-G	T4-S3-04-A	T4-S3-04-B	T4-S3-04-C	T4-S3-04-D	T4-S3-05-E	T4-S3-05-F
Grain Size (%)																
Clay	**10.8**	**8.5**	**4.0**	**1.3**	**20.3**	**17.9**	**11.9**	**3.5**	**2.2**	**2.7**	**7.1**	**0.4**	**3.1**	**0.4**	**20.3**	**18.2**
Clay, Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Fine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Medium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fines	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gravel	0.01 U	0.01 U	0.01 U	**1.6**	--	--	--	**0.1**	0.01 U	0.01 U	**0.2**	0 U	**1.3**	0 U	--	**0.2**
Sand, Coarse	0.01 U	0.01 U	**0.1**	**0.9**	--	--	--	**0.1**	**0.2**	**0.3**	**0.2**	**0.5**	**0.4**	**0.4**	--	**0.2**
Sand, Fine	**28.2**	**51.0**	**55.4**	**60.2**	**16.1**	**26.1**	**29.1**	**51.7**	**51.3**	**52.2**	**41.7**	**50.9**	**56.3**	**60.0**	**13.7**	**19.0**
Sand, Medium	**2.6**	**12.3**	**14.8**	**27.4**	**2.0**	**5.4**	**6.1**	**22.3**	**37.1**	**34.8**	**20.6**	**43.6**	**20.5**	**36.6**	**1.8**	**4.6**
Sand, Very Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sand, Very Fine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silt, Coarse	**7.7**	**1.4**	**3.5**	**1.3**	**13.3**	**6.7**	**10.4**	**2.1**	**0.9**	**0.9**	**3.9**	**0.4**	**3.1**	**0.4**	**9.4**	**7.9**
Silt, Fine	**10.8**	**7.2**	**4.6**	**1.8**	**13.2**	**13.5**	**10.4**	**5.6**	**1.6**	**2.7**	**6.2**	**0.9**	**3.5**	**0.8**	**16.7**	**14.2**
Silt, Medium	**6.9**	**3.6**	**4.0**	**1.3**	**14.1**	**11.2**	**8.2**	**4.2**	**1.3**	**1.8**	**7.8**	**0.9**	**1.3**	**0.4**	**10.9**	**12.6**
Silt, Very Coarse	**26.7**	**11.7**	**10.1**	**3.4**	**9.2**	**10.2**	**17.2**	**7.6**	**3.2**	**2.6**	**7.4**	**1.5**	**7.6**	**0.9**	**17.1**	**13.7**
Silt, Very Fine	**6.1**	**4.3**	**3.5**	**0.9**	**11.7**	**9.0**	**6.7**	**2.8**	**1.3**	**2.2**	**4.7**	**0.9**	**2.7**	**0 U**	**10.2**	**9.5**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 3
Summary of Sediment Grain Size Results

Station Location	T4-S3-05	T4-S3-05	T4-S3-05	T4-S3-06	T4-S3-06	T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-07	T4-S3-08	T4-S3-08	T4-WB-01	T4-WB-02	T4-WB-03	T4-WB-04
Top of Interval Elevation	-43.2	-44.2	-45.2	-44.7	-45.7	-38.9	-39.9	-40.9	-41.9	-47	-48				
Bottom of Interval Elevation	-44.2	-45.2	-46.2	-44.8	-46.7	-39.9	-40.9	-41.9	-42.9	-48	-49				
Sample Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Sample Date	7/19/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006	7/19/2006	7/19/2006	7/20/2006	7/20/2006	7/20/2006	7/20/2006
Sample Name	T4-S3-05-G	T4-S3-05-H	T4-S3-05-J	T4-S3-06-A	T4-S3-06-B	T4-S3-07-B	T4-S3-07-C	T4-S3-07-D	T4-S3-07-E	T4-S3-08-B	T4-S3-08-C	T4-WB-01	T4-WB-02	T4-WB-03	T4-WB-04
Grain Size (%)															
Clay	**12.2**	**19.7**	**0 U**	**11.3**	0 U	**18.7**	**20.7**	**12.0**	**1.3**	**5.0**	0 U	**14.3**	**9.4**	**19.3**	**13.9**
Clay, Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Fine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Clay, Medium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fines	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gravel	--	--	--	--	--	0 U	0 U	0 U	0 U	--	**0.2**	0 U	**0.6**	0 U	0 U
Sand, Coarse	**0.2**	--	**0.1**	--	**0.1**	0 U	0 U	**0.1**	**0.2**	--	**0.3**	**0.1**	**0.3**	0 U	0 U
Sand, Fine	**27.5**	**20.7**	**59.0**	**36.7**	**57.6**	**12.9**	**11.0**	**32.2**	**59.7**	**44.0**	**53.2**	**6.0**	**46.4**	**6.9**	**17.1**
Sand, Medium	**9.1**	**5.9**	**38.8**	**5.1**	**38.3**	**1.1**	**1.3**	**15.4**	**34.6**	**25.9**	**42.2**	**0.7**	**5.8**	**0.5**	**1.1**
Sand, Very Coarse	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sand, Very Fine	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silt, Coarse	**6.8**	**5.3**	0 U	**6.8**	0 U	**7.0**	**11.5**	**7.8**	**0.4**	**3.1**	**0.4**	**11.2**	**9.4**	**12.9**	**9.3**
Silt, Fine	**11.4**	**12.9**	**0.8**	**11.2**	0 U	**14.8**	**16.9**	**10**	**1.3**	**5.6**	**1.3**	**13.6**	**7.1**	**12.9**	**11.6**
Silt, Medium	**9.9**	**11.4**	0 U	**11.3**	0 U	**12.5**	**10.0**	**7.8**	**0.4**	**6.2**	0 U	**13.6**	**6.3**	**12.1**	**10.8**
Silt, Very Coarse	**13.0**	**14.3**	**1.3**	**7.5**	**3.2**	**23.6**	**16.5**	**7.6**	**1.1**	**6.4**	**1.8**	**31.1**	**9.3**	**26.6**	**27.7**
Silt, Very Fine	**9.9**	**9.8**	0 U	**10.1**	**0.9**	**9.4**	**12.3**	**7.1**	**0.9**	**3.7**	**0.4**	**9.6**	**5.5**	**8.9**	**8.5**

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

Table 4
Summary of Geotechnical Results

Chemical Name	Unit	Sample ID: T4-COMP-01 Sample Date: 7/20/2006 Sample Matrix: SE	Sample ID: T4-COMP-02 Sample Date: 7/20/2006 Sample Matrix: SE
Conventionals			
Moisture Content	%	60.6	71.6
Grain Size			
Gravel	%	2.2	0.1
Sand, Coarse	%	0.8	0.1
Sand, Medium	%	21.2	7.2
Sand, Fine	%	45.2	26
Total Fine Particles	%	30.6	66.7
Silt, Very Coarse	%	3.4	12
Silt, Coarse	%	4.3	5.8
Silt, Medium	%	3.7	9.3
Silt, Fine	%	3.1	6.5
Silt, Very Fine	%	6.8	13.7
Clay	%	9.3	19.4
Specific Gravity			
Total		2.70	2.64
Particles >0.074 mm		2.69	2.62
Particles <0.074 mm		2.62	2.63
Atterberg Limits			
Liquid Limit	%	None	55.7
Plastic Limit	%	Non-plastic	32.9
Plasticity Index	%	Non-plastic	22.8
Classification		Non-plastic	OH*

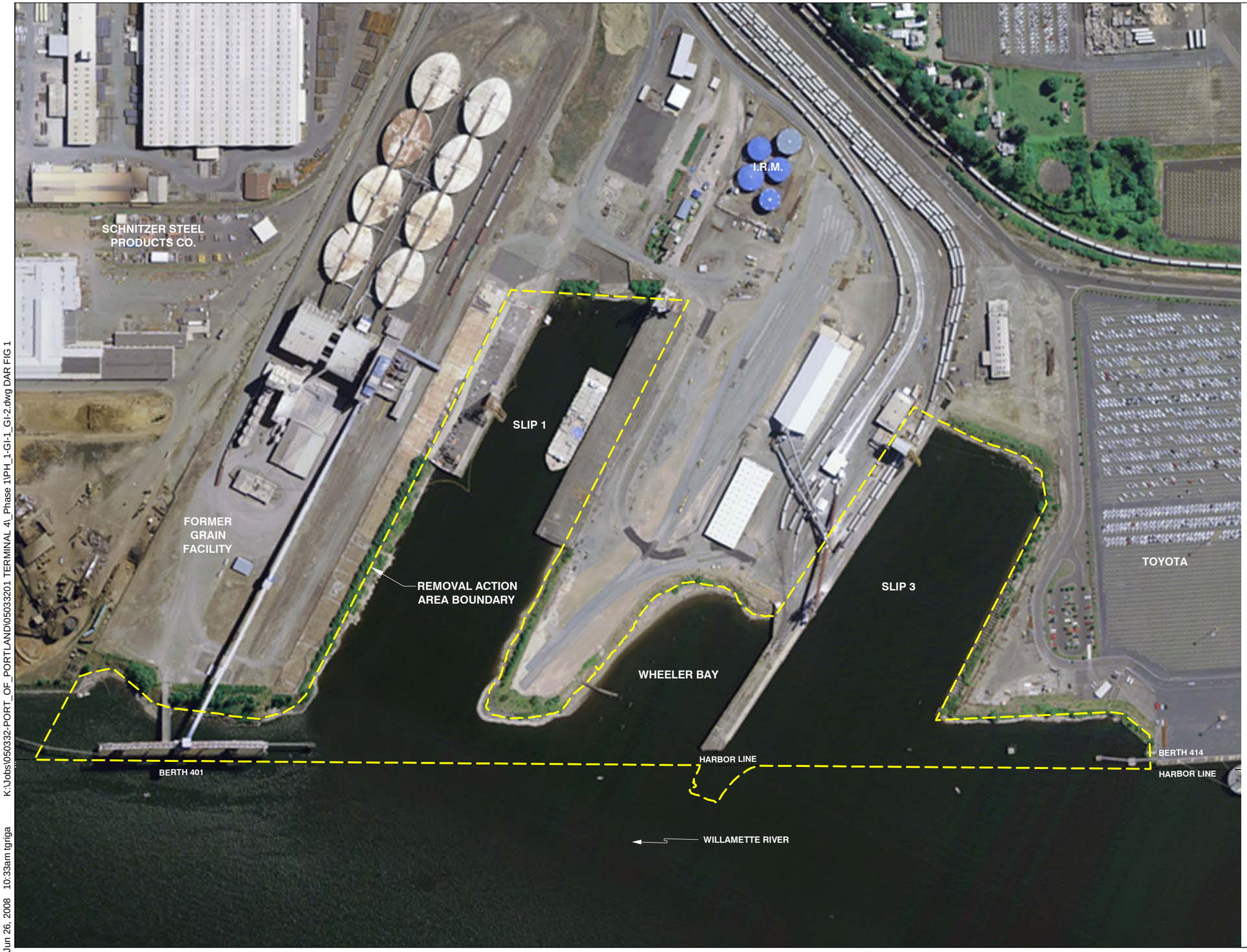
Note:
* OH classification indicates a highly plastic, organic silt.

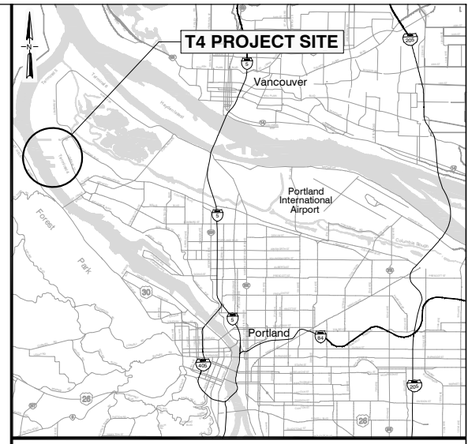
Table 5
Toxicity Characteristic Leaching Procedure Results

Sample Name	T4-B411 Plus	T4-B410
Metals (mg/kg)		
Cadmium	0.01 U	--
Lead	**0.2**	0.1 U

Notes:
U - Result is below quantitation limit
Bold - Analyte was detected

FIGURES





VICINITY MAP
SCALE: N.T.S.

0 150 300
SCALE IN FEET

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Figure 1
Site Plan and Vicinity Map
Terminal 4 Phase I Removal Action
Portland, Oregon

Jun 26, 2008 10:33am tgriga K:\Jobs\050332-PORT_OF_PORTLAND\05033201 TERMINAL 4_Phase 1\PH_1-GI-1_GI-2.dwg DAR FIG 1

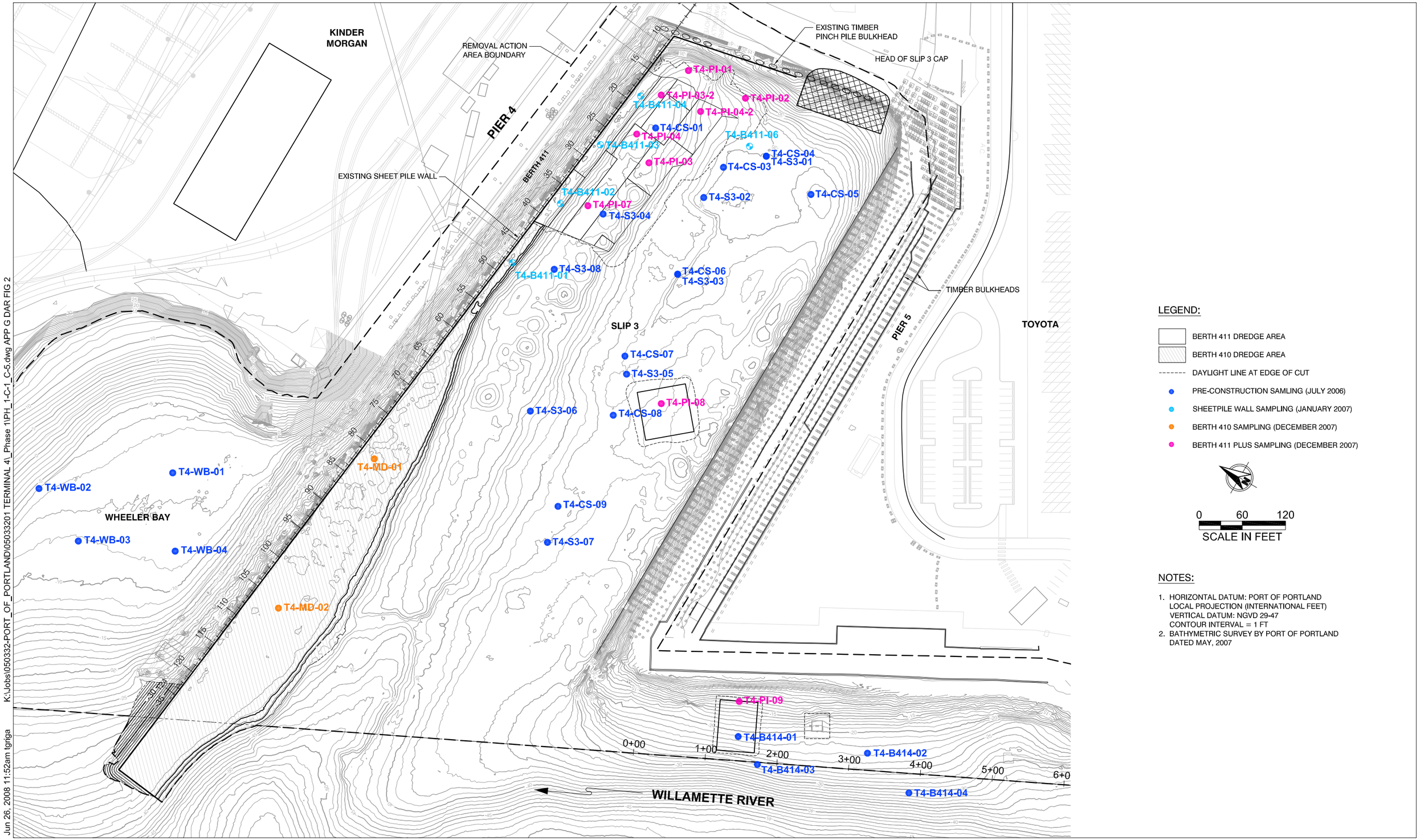

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Figure 2
Sampling Locations
Terminal 4 Phase I Removal Action
Portland, Oregon

ATTACHMENT A

SEDIMENT CORE LOGS, SURFACE SEDIMENT COLLECTION FORMS, AND COMPOSITING FORMS

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-B414-01**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/20/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**0826**
DRILL METHOD	**Vibracore**	PENETRATION	**9.8'**
LOGGED BY	**K. Titkemeier & T. Stone**	RECOVERY	**8.2'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**84%**
X COORDINATE	**7619646**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**712872**	MUDLINE ELEVATION (CRD)	**-22.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-21.0'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 8.2 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium plasticity fines; 20 percent fine sand; trace wood chunks; soft to 1.8 feet, firm from 1.8 to 4.2 feet, stiff from 4.2 to 8.2 feet; wet to 1.8 feet, moist from 1.8 to 8.2 feet. Trace root hairs from 0.0 to 0.3 feet. @ 0.7 to 8.2 feet: hydrocarbon-like odor. @ 0.7 to 8.2 feet: hydrocarbon-like odor.
B	B			
C	C			
D	D			
E	E			
F	F			
G	G			
H	H			
J	J			
K	K			
				Bottom of core at 8.2 feet.

5

10

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-B414-02**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1355**
DRILL METHOD	**Vibracore**	PENETRATION	**9.7'**
LOGGED BY	**K. Titkemeier, T. Stone & E. Appy**	RECOVERY	**8.4'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**87%**
X COORDINATE	**7619706**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**712702**	MUDLINE ELEVATION (CRD)	**-26.4'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-24.7'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 5.4 feet: SILT (ML)**; gray-brown; 90 percent medium to high plasticity fines; 10 percent fine sand; trace wood chunks, twigs, and root hairs; soft to 2.3 feet, firm from 2.3 to 4.7 feet, stiff from 2.7 to 5.4 feet; wet to 2.3 feet, moist from 2.3 to 5.4 feet.
B	B			
C	C			
	D			
D				
	E			
E				
	F			
F	G	5		**5.4 to 6.3 feet: SILTY SAND (SM)**; gray-brown; 60 percent sand; 40 percent medium plasticity fines; soft; wet. @ 5.4 to 5.9 feet: twigs and root chunks composing 40 to 50 percent of core material; no twigs or roots below 5.9 feet.
G	H			**6.3 to 8.4 feet: SILT (ML)**; gray-brown; 90 percent medium to high plasticity fines; 10 percent fine sand; stiff to 7.4 feet, very stiff from 7.4 to 8.4 feet; moist. @ 7.8 feet: sand lens. @ 8.0 to 8.4 feet: several chunks of black to white-gray, low-density material approximately ¼- to 1-inch in diameter. (POSSIBLE COAL SLAG)
H	J			
	K			
J				Bottom of core at 8.4 feet.
K		10		

REMARKS

*Duplicate sample collected and analyzed.

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-B414-03**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/20/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**0931**
DRILL METHOD	**Vibracore**	PENETRATION	**9.8'**
LOGGED BY	**K. Titkemeier & T. Stone**	RECOVERY	**7.0'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**71%**
X COORDINATE	**7619619**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**712829**	MUDLINE ELEVATION (CRD)	**-33.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-32.0'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 4.1 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium plasticity fines; 20 percent fine sand; very soft to 0.5 feet, soft from 0.5 to 1.6 feet, firm from 1.6 to 3.7 feet, stiff from 3.7 to 4.1 feet; wet to 3.7 feet, moist from 3.7 to 4.1 feet. Trace roots from 0.0 to 0.5 feet.
	B			
B				
	C			
C	D			
	E			
D				
	F			
E				**4.1 to 7.0 feet: SAND (SP)**; gray-brown; 100 percent fine to medium sand; trace coarse sand; firm; moist.
	G			
		5		
F	H			
	J			
G				
	K			
H				Bottom of core at 7.0 feet.
J				
K				
		10		

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-B414-04**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**7/20/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**0728**
DRILL METHOD	**Vibracore**	PENETRATION	**9.8'**
LOGGED BY	**E. Appy, T. Stone & N. Hung**	RECOVERY	**7.2'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**73%**
X COORDINATE	**7619685**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**712625**	MUDLINE ELEVATION (CRD)	**-38.1'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-36.4'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 6.3 feet: SILT (ML)**; gray-brown; 100 percent medium plasticity fines; very soft to 2.9 feet, soft from 2.9 to 6.3 feet; wet to 2.9 feet, moist from 2.9 to 6.3 feet.
	B			
B	C			
C	D			
D	E			
	F			
E	G			
		5		
F	H			
	J			
G	K			**6.3 to 7.2 feet: SILTY SAND (SM)**; gray-brown; 60 percent fine to medium sand; 40 percent medium plasticity fines; firm; damp.
H				Bottom of core at 7.2 feet.
J				
K				
		10		

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-01**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1627**
DRILL METHOD	**Vibracore**	PENETRATION	**5.3'**
LOGGED BY	**K. Titkemeier & T. Stone**	RECOVERY	**2.3'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**43%**
X COORDINATE	**7620329**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713376**	MUDLINE ELEVATION (CRD)	**-47.2'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-45.5'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-1	COMP-1	Grain Size Specific Gravity Total Solids Atterberg		**0.0 to 1.4 feet: GRAVELLY SAND (SP)**; dark gray-brown; 75 percent fine to coarse sand; 25 percent fine to coarse sub-angular to sub-rounded gravel; trace wood chunks and twigs; firm; wet.
				1.4 to 2.3 feet: SILT WITH SAND (ML); gray-brown; 80 percent medium plasticity fines; 20 percent very fine sand; stiff; moist.
		5		Bottom of core at 2.3 feet.
		10		

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-03**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1050**
DRILL METHOD	**Vibracore**	PENETRATION	**7.0'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**6.8'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**97%**
X COORDINATE	**7620326**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713267**	MUDLINE ELEVATION (CRD)	**-36.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-34.9'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-1	COMP-1	Grain Size Specific Gravity Total Solids Atterberg		**0.0 to 1.6 feet: SILTY SAND (SM)**; medium gray; 70 percent fine sand; 30 percent medium plasticity fines; trace twigs; very soft to 0.4 feet, soft from 0.4 to 1.6 feet; soupy and wet to 0.4 feet, wet from 0.4 to 1.6 feet. Trace twigs, wood chunks, and root hairs from 0.4 to 1.6 feet.
				1.6 to 5.3 feet: SANDY SILT (ML); medium gray; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunks and twigs; soft to firm to 2.5 feet, firm from 2.5 to 4.8 feet, very firm from 4.8 to 5.3 feet; wet. @ 3.0 to 3.5 feet: faint hydrocarbon-like odor.
		5		**5.3 to 6.8 feet: SANDY SILT (ML)**; medium gray; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunks and twigs; soft to firm to 2.5 feet, firm from 2.5 to 4.8 feet, very firm from 4.8 to 5.3 feet; wet.
				Bottom of core at 6.8 feet.
		10		

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-04**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1415**
DRILL METHOD	**Vibracore**	PENETRATION	**7.4'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**6.1'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**82%**
X COORDINATE	**7620368**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713222**	MUDLINE ELEVATION (CRD)	**-36.5'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-34.8'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-1	COMP-1	Grain Size Specific Gravity Total Solids Atterberg		**0.0 to 5.7 feet: SANDY SILT (ML)**; gray-brown; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunks and twigs; very soft to 0.1 feet, soft from 0.1 to 4.0 feet, firm from 4.0 to 5.7 feet; wet. @ 1.4 to 1.7 feet: black staining with a faint hydrocarbon-like odor. @ 4.7 to 5.7 feet: black staining with a faint hydrocarbon-like odor.
		5		**5.7 to 6.1 feet: SAND WITH SILT (SW)**; gray-brown; 90 percent fine sand; 10 percent medium plasticity fines; firm; moist. Bottom of core at 6.1 feet.
		10		

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-05**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1233**
DRILL METHOD	**Vibracore**	PENETRATION	**7.0'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**5.3'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**76%**
X COORDINATE	**7620351**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713142**	MUDLINE ELEVATION (CRD)	**-36.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-34.9'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-1	COMP-1	Grain Size Specific Gravity Total Solids Atterberg		**0.0 to 0.5 feet: SILTY SAND (SM)**; gray; 70 percent fine sand; 30 percent medium plasticity fines; trace twigs; very soft; soupy; wet. Hard, brittle piece of black, asphalt-like material, ¼-inch in diameter, breaks easily into sand-sized grains.
				0.5 to 2.7 feet: SANDY SILT (ML); gray; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunk and fine gravel, subrounded; soft; wet.
				2.7 to 5.3 feet: SAND (SW); gray-brown; 100 percent fine sand; trace fine gravel, subrounded; very firm; moist.
		5		
				Bottom of core at 5.3 feet.
		10		

REMARKS

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LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-06**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**0833**
DRILL METHOD	**Vibracore**	PENETRATION	**7.4'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**5.8'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**78%**
X COORDINATE	**7620165**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**713252**	MUDLINE ELEVATION (CRD)	**-38.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.0'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-2	COMP-2	Grain Size Specific Gravity Total Solids Atterberg		**0 to 0.8 feet: SILTY SAND (SM)**; brown-gray; 60 percent fine sand; 40 percent medium plastic fines; trace large wood chunks up to 3-inches in diameter; very soft; soupy; wet.
				0.8 to 1.2 feet: SAND (SW); brown-gray; 100 percent fine sand; soft; wet.
				1.2 to 3.5 feet: SILT WITH SAND (ML); brown-gray; 80 percent medium to high plasticity fines; 20 percent fine sand; trace wood chunks; soft to 1.5 feet, firm from 1.5 to 3.5 feet; wet. @ 2.7 to 3.5 feet: black staining.
				3.5 to 5.8 feet: SILT WITH SAND (ML); brown-gray; 80 percent medium to high plasticity fines; 20 percent fine sand; firm; wet. **INTERBEDDED 50/50 WITH SAND (SW)**; brown-gray; 100 percent fine sand; firm; wet.
		5		
				@ 5.7 to 5.8 feet: trace fine gravel, rounded. Bottom of core at 5.8 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-07**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1800**
DRILL METHOD	**Vibracore**	PENETRATION	**6.7'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**5.2'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**78%**
X COORDINATE	**7620030**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713262**	MUDLINE ELEVATION (CRD)	**-39.4'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.7'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-2	COMP-2	Grain Size Specific Gravity Total Solids Atterberg		**0 to 0.6 feet: SILTY SAND (SM)**; gray-brown; 60 percent fine sand; 40 percent medium plasticity fines; trace wood chunks; very soft to 0.1 feet, soft from 0.1 to 0.6 feet; wet. **0.6 to 5.0 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium to high plasticity fines; 20 percent fine sand; trace root hairs; soft to 2.0 feet, firm from 2.0 to 5.0 feet; wet. @ 1.4 feet: black staining. @ 3.7 feet: black staining.
		5		**5.0 to 5.2 feet: SAND (SW)**; gray-brown; 100 percent fine sand; trace fine subrounded gravel; firm; moist. Bottom of core at 5.2 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-08**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**0736**
DRILL METHOD	**Vibracore**	PENETRATION	**7.4'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**5.9'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**80%**
X COORDINATE	**7619950**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713237**	MUDLINE ELEVATION (CRD)	**-39.2'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.5'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-2	COMP-2	Grain Size Specific Gravity Total Solids Atterberg		**0 to 0.3 feet: SILTY SAND (SM)**; gray-brown; 60 percent fine sand; 40 percent medium plasticity fines; very soft to 0.1 feet, soft from 0.1 to 0.3 feet; wet and soupy to 0.1 feet, wet from 0.1 to 0.3 feet. **0.3 to 4.3 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium to high plasticity; 20 percent fine sand; trace wood chunks and root hairs; soft to 1.6 feet, firm from 1.6 to 4.3 feet; wet. @ 2.6 feet: black staining.
		5		**4.3 to 5.9 feet: SAND (SW)**; gray-brown; 100 percent fine sand; firm; moist. @ 4.5 to 4.7 feet: lens of siltier material.
		10		Bottom of core at 5.9 feet.

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-CS-09**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1717**
DRILL METHOD	**Vibracore**	PENETRATION	**5.3'**
LOGGED BY	**K. Titkemeier & T. Stone**	RECOVERY	**4.9'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**92%**
X COORDINATE	**7619802**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713244**	MUDLINE ELEVATION (CRD)	**-39.8'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-38.1'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
COMP-2	COMP-2	Grain Size Specific Gravity Total Solids Atterberg		**0.0 to 4.9 feet: SANDY SILT (ML)**; gray-brown; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunks; very soft to 0.3 feet, soft from 0.3 to 1.7 feet, firm from 1.7 to 4.9 feet; wet. @ 1.0 feet: sand lens. @ 3.0 to 4.0 feet: faint hydrocarbon-like odor. @ 4.1 feet: sand lens. @ 4.4 feet: sand lens.
		5		Bottom of core at 4.9 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-01**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1500**
DRILL METHOD	**Vibracore**	PENETRATION	**9.9'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**8.0'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**81%**
X COORDINATE	**7620368**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713222**	MUDLINE ELEVATION (CRD)	**-36.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-35.0'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 0.6 feet: SILTY SAND (SM)**; gray-brown; 60 percent fine sand; 40 percent medium plasticity fines; very soft to 0.04 feet, soft from 0.04 to 06 feet; wet and soupy to 0.04 feet, wet from 0.04 to 0.6 feet.
B	B			**0.6 to 5.3 feet: SANDY SILT (ML)**; gray-brown; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunks; soft to 1.1 feet, firm from 1.1 to 3.9 feet, soft from 3.9 to 4.8 feet, firm from 4.8 to 5.3 feet; wet.
C	C			@ 1.2 to 1.4 feet: mottled black and grayish-brown.
D	D			
E	E			@ 3.9 to 4.8 feet: twigs and wood chunks composing 50 percent of core material.
F	F			
G	G	5		**5.3 to 6.9 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium to high plasticity fines; 20 percent fine sand; trace wood chunks; firm; wet.
H	H			
J	J			**6.9 to 7.4 feet: SAND (SW)**; gray-brown; 100 percent fine sand; firm; moist.
K	K			**7.4 to 7.95 feet: SANDY SILT (ML)**; gray-brown; 55 percent medium to high plasticity fines; 45 percent very fine sand; firm; wet.
				7.95 to 8.0 feet: SAND (SW); gray-brown; 100 percent fine sand; firm; moist.
		10		Bottom of core at 8.0 feet.

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-02**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/18/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1627**
DRILL METHOD	**Vibracore**	PENETRATION	**9.9'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**8.0'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**81%**
X COORDINATE	**7620276**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713271**	MUDLINE ELEVATION (CRD)	**-36.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-34.9'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0 to 1.4 feet: SILTY SAND (SM)**; gray-brown; 60 percent fine sand; 40 percent fines; very soft to 0.7 feet, soft to 1.4 feet; soupy and wet to 0.7 feet, wet from 0.7 to 1.4 feet.
B	B			**1.4 to 5.3 feet: SILTY SAND (SM)**; gray-brown; 80 percent fine sand; 20 percent medium plasticity fines; firm; moist.
C	C			@ 2.4 feet: black and brown mottling.
D	D			
E	E			@ 3.4 to 3.55 feet: fine sand lens.
F	F			@ 4.7 to 5.3 feet: black staining.
G	G	5		**5.3 to 5.7 feet: SILTY SAND (SM)**; gray-brown; 80 percent fine sand; 20 percent medium plasticity fines; firm; moist.
H	H			**5.7 to 8.0 feet: SAND (SW)**; gray-brown; 100 percent fine sand; trace coarse gravel, rounded; firm; moist. Silty lenses.
J	J			@ 5.9 to 6.2 feet: SANDY SILT (ML); wood chunk.
K	K			
				Bottom of core at 8.0 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-03**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**0858**
DRILL METHOD	**Vibracore**	PENETRATION	**9.7'**
LOGGED BY	**K. Titkemeier & E. Appy**	RECOVERY	**8.4'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**87%**
X COORDINATE	**7620165**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713252**	MUDLINE ELEVATION (CRD)	**-38.9'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.1'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 1.9 feet: SANDY SILT (ML)**; brown-gray; 60 percent medium plasticity fines; 40 percent fine sand; very soft to 0.3 feet, soft from 0.3 to 1.9 feet; wet.
B	B			
C	C			**1.9 to 4.0 feet: SILT WITH SAND (ML)**; brown-gray; 80 percent medium plasticity fines; 20 percent fine sand; trace wood chunks; firm; moist. **INTERBEDDED 50/50 WITH SAND (SW)**; brown-gray; 100 percent fine sand; trace wood chunks; firm; moist.
D	D			
	E			
E				**4.0 to 8.4 feet: SAND (SW)**; gray-brown; 100 percent fine sand; firm; moist.
	F	5		
F	G			
G	H			
H	J			@ 7.6 feet: trace fine to medium gravel, rounded.
J	K			Bottom of core at 8.4 feet.
K				
		10		

REMARKS

*Duplicate sample collected and analyzed. **Duplicate sample collected and archived.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-04**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**7/20/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1426**
DRILL METHOD	**Vibracore**	PENETRATION	**8.1'**
LOGGED BY	**E. Appy, T. Stone & B. Hung**	RECOVERY	**5.5'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**68%**
X COORDINATE	**7620189**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713383**	MUDLINE ELEVATION (CRD)	**-47.8'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-46.4'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 0.4 feet: SILT (ML)**; gray-brown; 100 percent medium plasticity fines; very soft; wet.
	B			**0.4 to 1.8 feet: SAND WITH SILT (SP)**; gray-brown; 90 percent fine to medium sand; 10 percent fines; trace wood debris; firm; damp.
B	C			
C	D			**1.8 to 5.5 feet: SAND (SP)**; gray-brown; 100 percent fine to medium sand; trace fine to coarse gravel; firm; damp.
	E			
D	F			
E	G			
	H	5		
F				Bottom of core at 5.5 feet.
G				
H				
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-05**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1006**
DRILL METHOD	**Vibracore**	PENETRATION	**9.7'**
LOGGED BY	**K. Titkemeier, T. Stone & E. Appy**	RECOVERY	**6.9'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**71%**
X COORDINATE	**7620009**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713248**	MUDLINE ELEVATION (CRD)	**-38.9'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.2'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 2.4 feet: SILTY SAND (SM)**; gray-brown; 60 percent fine sand; 40 percent medium plasticity fines; very soft to 0.8 feet; soft from 0.8 to 2.4 feet; wet.
	B			
B	C			
C	D			**2.4 to 5.8 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium plasticity fines; 20 percent fine sand; trace wood chunks; soft to 2.7 feet, firm from 2.7 to 5.1 feet, stiff from 5.1 to 5.8 feet; wet.
D	E			
	F			
E	G			
		5		
F	H			
	J			**5.8 to 6.9 feet: SAND (SW)**; gray-brown; 100 percent fine sand; firm; moist.
G	K			@ 6.7 feet: silt lens.
H				Bottom of core at 6.9 feet.
J				
K				
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-06**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**7/20/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1217**
DRILL METHOD	**Vibracore**	PENETRATION	**9.8'**
LOGGED BY	**K. Titkemeier & T. Stone**	RECOVERY	**6.3'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**64%**
X COORDINATE	**7619900**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713341**	MUDLINE ELEVATION (CRD)	**-46.4'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-44.7'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 0.5 feet: SILT WITH SAND (ML)**; gray-brown; 80 percent medium plasticity fines; 20 percent fine sand; very soft; soupy; wet.
	B			**0.5 to 6.3 feet: SAND (SP)**; gray-brown; 100 percent fine to coarse sand; firm; moist.
B	C			
C	D			
	E			
D	F			
E	G			
	H			
F		5		@ 4.7 to 6.3 feet: fell out of core tube during recovery.
G				Bottom of core at 6.3 feet.
H				
		10		

REMARKS

Volume in top interval lost due to decant procedure. Sand from between 4.7 and 6.3 feet fell out of the bottom of the core when the core was raised to the deck of the coring vessel. When the sleeve was pulled out, the top level of the soft sediment was marked and used to calculate core length.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-07**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**7/20/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1330**
DRILL METHOD	**Vibracore**	PENETRATION	**9.8'**
LOGGED BY	**T. Stone & E. Appy**	RECOVERY	**7.8'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**80%**
X COORDINATE	**7619751**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**713233**	MUDLINE ELEVATION (CRD)	**-39.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.9'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 2.2 feet: SILT (ML)**; gray-brown; 100 percent medium plasticity fines; very soft to 1.6 feet, soft from 1.6 to 2.2 feet; trace sand; wet.
B	B			
	C			
C				**2.2 to 4.0 feet: SILTY SAND (SM/ML)**; gray-brown; 50 percent fine to medium sand; 50 percent medium plasticity fines; firm; moist.
	D			
D	E			
E	F			**4.0 to 7.8 feet: SAND (SP)**; gray-brown; 100 percent fine to medium sand; firm; damp. Trace wood debris and medium gravel from 4.0 to 4.5 feet.
		5		
F	G			
	H			
G				
	J			
H	K			
J				Bottom of core at 7.8 feet.
K				
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**T4 Early Action**	STATION I.D.	**T4-S3-08**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**7/19/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1505**
DRILL METHOD	**Vibracore**	PENETRATION	**9.4'**
LOGGED BY	**K. Titkemeier, T. Stone & E. Appy**	RECOVERY	**7.6'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**81%**
X COORDINATE	**7620089**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**713406**	MUDLINE ELEVATION (CRD)	**-47.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-46.0'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		**0.0 to 1.0 foot: SANDY SILT (ML)**; gray-brown; 60 percent medium plasticity fines; 40 percent fine sand; trace wood chunks; very soft to 0.4 feet, soft from 0.4 to 1.0 feet; wet.
B	B			**1.0 to 7.6 feet: SAND (SP)**; gray-brown; 100 percent fine to medium sand; trace coarse sand; firm; moist.
C	C			
D	D			
E	E			
F	F			
G	G	5		
H	H			
J	J			
K	K			
		10		Bottom of core at 7.6 feet.

REMARKS

Oregon State Plane - North (US Feet).

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-01**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**1/6/2007**
DRILLED BY	**NW Underwater Construction**	TIME	**1630**
DRILL METHOD	**Vibracore**	PENETRATION	**1.7'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**1.7'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713376**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620329**	MUDLINE ELEVATION (CRD)	**-41.5'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-39.8'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	B	SVOCs Metals TOC Total Solids TPH Grain Size		**0 to 1.7 feet: SAND (SP)**; dark gray; very fine; organic material, shells; occasional gravels to 1 inch. Pencil Pitch pieces found at top of core; 1/2 to 1-inch soft balls (20%).
A	B			
				Bottom of core at 1.7 feet.
		5		
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-02**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**1/6/2007**
DRILLED BY	**NW Underwater Construction**	TIME	**1700**
DRILL METHOD	**Vibracore**	PENETRATION	**2.2'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**2.2'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713312**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620284**	MUDLINE ELEVATION (CRD)	**-40.5'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-38.8'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCOR-RECTED LITHO-LOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
A	B	SVOCs Metals TOC Total Solids TPH Grain Size		**0 to 2.2 feet: SAND (SP)**; fine sand, poorly graded; trace silt; few organics; firm; 1/2 mm to 1 inch round silt balls intermixed.
A	B			
		5 10		Bottom of core at 2.2 feet.

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-03**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**1/4/2007**
DRILLED BY	**NW Underwater Construction**	TIME	**1545**
DRILL METHOD	**Vibracore**	PENETRATION	**11.8'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**11.8'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713267**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620326**	MUDLINE ELEVATION (CRD)	**-41.8'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-40.1'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
AA	AA	SVOCs Metals TOC Total Solids TPH Grain Size DDT PCB		**0 to 0.4 foot: SAND (SP)**; dark gray; fine, poorly graded; numerous pieces of pumus (<5%); nonplastic; np to 1/8-inch diameter.
BB	BB			**0.4 to 11.8 feet: SILT (ML)**; dark gray; nonplastic; trace very fine sand (<5%); soft.
CC	CC			@ 1.6 feet: no sand, nonplastic.
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		@ 2.5 feet: trace very fine sand, nonplastic.
B	B			@ 3.7 feet: silt with lenses of trace (up to 5%) very fine sand.
C	C	5		@ 5.0 feet: very fine sandy silt, dark gray, nonplastic, firm.
D	D			
E	E			
F	F			
G	G			@ 9.3 feet: silt, trace very fine sand, low plasticity, firm.
H	H	10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-03**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**1/4/2007**
DRILLED BY	**NW Underwater Construction**	TIME	**1545**
DRILL METHOD	**Vibracore**	PENETRATION	**11.8'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**11.8'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713267**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620326**	MUDLINE ELEVATION (CRD)	**-41.8'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-40.1'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
H	H			
J	J			
				Bottom of core at 11.8 feet.
		15		
		20		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-04**
PROJECT NUMBER	**050332-01**	ATTEMPT	**3**
LOCATION	**Portland, Oregon**	DATE	**1/4/2007**
DRILLED BY	**NW Underwater Construction**	TIME	**1215**
DRILL METHOD	**Vibracore**	PENETRATION	**11.4'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**11.4'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713222**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**77620368**	MUDLINE ELEVATION (CRD)	**-42.0'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-40.3'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
AA	AA	SVOCs Metals TOC Total Solids TPH Grain Size DDT PCB		**0 to 5.5 feet: SILT (ML)**; dark gray; <10% organic material; soft; very low plasticity (no sand); no odor; no sheen. @ 0 feet: sheen on water coming out of top of core.
BB	BB			@ 1.5 feet: becomes firm, small organic material present.
A	A	SVOCs Metals TOC Total Solids TPH Grain Size		@ 2.5 feet: nonplastic.
B	B			
C	C			
		5		
D	D			**5.5 to 7.0 feet: SAND (SW)**; very fine (<10%).
E	E			
F	F			**7.0 to 8.7 feet: SANDY SILT (SM)**; fine (15 2o 20% very fine sand).
G	G			**8.7 to 11.4 feet: SANDY SILT (SM)**; 40% very fine sand; alternating with silty, very fine sand; trace shell fragments.
H	H			
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-04**
PROJECT NUMBER	**050332-01**	ATTEMPT	**3**
LOCATION	**Portland, Oregon**	DATE	**1/4/2007**
DRILLED BY	**NW Underwater Construction**	TIME	**1215**
DRILL METHOD	**Vibracore**	PENETRATION	**11.4'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**11.4'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713222**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**77620368**	MUDLINE ELEVATION (CRD)	**-42.0'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-40.3'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
J	J			
				Bottom of core at 11.4 feet.
		15		
		20		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland Removal Action**	STATION I.D.	**T4-B411-06**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**1/3/2006**
DRILLED BY	**NW Underwater Construction**	TIME	**1245**
DRILL METHOD	**Vibracore**	PENETRATION	**10.0'**
LOGGED BY	**CW, EA, BH**	RECOVERY	**8.2'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**82%**
X COORDINATE	**713142**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620315**	MUDLINE ELEVATION (CRD)	**-37.5'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-35.8'**

COMPACTION CORRECTED	UNCORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	UNCORRECTED LITHOLOGIC COLUMN	UNCORRECTED LITHOLOGIC DESCRIPTION
AA	AA	SVOCs Metals TOC Total Solids TPH Grain Size		**0 to 8.35 feet: SILT (ML)**; brown; 5 to 15% fine sand; wood fragments (5 to 15%) to 2-inches; saturated; no sheen; slight hydrocarbon odor; nonplastic to slightly plastic.
BB	BB			
CC	CC			
DD	DD			
EE	EE			@ 4.0 feet: trace sand.
FF	FF	5		
GG	GG			
A	A			@ 6.0 feet: increase in wood fragments (~20%).
B	B			@ 7.0 feet: moderate hydrocarbon odor.
C	C			@ 7.5 feet: very fine-grained sand, poorly graded; trace silt.
B				Bottom of core at 8.35 feet.
C		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-MD**	STATION I.D.	**T4-MD-01**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/14/2007**
DRILLED BY	**NWUC**	TIME	**0925**
DRILL METHOD	**Vibracore**	PENETRATION	**-3.3'**
LOGGED BY	**M. Wilson**	RECOVERY	**3.3'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713500**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7619738**	MUDLINE ELEVATION (CRD)	**-39.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.9**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC Total Solids TPH Grain Size		**0 to 3.3 feet: SILT (ML)**; dark grayish brown, slightly plastic, very soft, very wet, organic debris, no sheen/odor. (FILL)
B	B			@ 1.2 feet: slightly sandy (10 percent).
C	C			@ 2.0 feet: some wood debris.
D	D			
		5		Bottom of core = 3.3 feet.
		10		

REMARKS

Woody debris and stiff clay in core catcher.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-MD**	STATION I.D.	**T4-MD-02**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/14/2007**
DRILLED BY	**NWUC**	TIME	**1015**
DRILL METHOD	**Vibracore**	PENETRATION	**4.8'**
LOGGED BY	**M. Wilson**	RECOVERY	**4.6'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**95%**
X COORDINATE	**713518**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7619492**	MUDLINE ELEVATION (CRD)	**-38.9'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-37.2'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC Total Solids TPH Grain Size		**0 to 2.0 feet: SLIGHTLY SANDY SILT (ML)**, dark grayish brown, 90 percent slightly plastic silt, 10 percent fine sand, very soft, very wet, no odor/sheen. (FILL)
B	B			
C	C			**2.0 to 4.0 feet: SILT (ML)**, dark grayish brown, slightly plastic, soft, wet. (FILL)
D	D			
E	E			**4.0 to 4.8 feet: SLIGHTLY SILTY SAND (SP)**, dark grayish brown, 90 percent fine sand/10 percent silt, loose, wet, organic odor, woody debris. (FILL)
		5		Bottom of core = 4.8 feet.
		10		

REMARKS

Very stiff clay in core catcher.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-01**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**1420**
DRILL METHOD	**Vibracore**	PENETRATION	**6.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**5.7'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**95%**
X COORDINATE	**713374**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620421**	MUDLINE ELEVATION (CRD)	**-44.2'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-42.5'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC TPH Grain Size		**0 to 1.0 foot: SILT (ML)**, dark grayish brown, very soft, very wet, slight organic odor, wood and plant debris, clams. (FILL)
B	B			**1.0 to 2.6 feet: SANDY SILT (ML)**, dark brownish gray, 70 percent slightly plastic silt, 30 percent fine sand, soft, wet, slight organic odor, gravel and wood debris, clams. (FILL)
C	C			**2.6 to 6.0 feet: SILT (ML)**, dark brownish gray, slightly plastic, soft, wet, slight organic odor. (ALLUVIUM)
D	D			
E	E			
F	F			
		5		Bottom of core = 6.0 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-02**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**1545**
DRILL METHOD	**Vibracore**	PENETRATION	**8.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**6.4'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**80%**
X COORDINATE	**713286**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620425**	MUDLINE ELEVATION (CRD)	**-37.0'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-35.3'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMPACTION CORRECTED LITHOLOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC TPH Grain Size Total Solids		**0 to 3.0 feet: SANDY SILT (ML)**, dark brownish gray, 70 percent slightly plastic silt, 30 percent fine sand, very soft, very wet, slight organic odor. (FILL)
B	B			
C	C			
D				
E	D			**3.0 to 8.0 feet: SILT (ML)**, dark brownish gray, slightly plastic, soft, wet, slight organic odor. (ALLUVIUM)
F	E			
G	F	5		@ 5.6 feet: 2-inch sandy layer.
H	G			
	H			
		10		Bottom of core = 8.0 feet.

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-03**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**0845**
DRILL METHOD	**Vibracore**	PENETRATION	**8.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**6.6'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**82%**
X COORDINATE	**713361**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620282**	MUDLINE ELEVATION (CRD)	**-47.3'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-45.6'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMPACTION CORRECTED LITHOLOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC TPH Grain Size Total Solids		**0 to 0.8 foot: SILTY SAND (SM)**, dark gray, 85 percent poorly graded fine sand, 15 percent slightly plastic silt, loose, wet, one cobble size chunk of rock in sample. (FILL)
B	B			**0.8 to 8.0 feet: SILT (ML)**, dark gray, slightly plastic, soft, wet, slight organic odor. (ALLUVIUM)
C	C			
D	D			
E	E			
F	F	5		
G	G			
H	H			
				Bottom of core = 8.0 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-03-2**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**1215**
DRILL METHOD	**Vibracore**	PENETRATION	**2.5'**
LOGGED BY	**M. Wilson**	RECOVERY	**1.9'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**76%**
X COORDINATE	**713391**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620373**	MUDLINE ELEVATION (CRD)	**-45.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-43.9'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC Total Solids TPH Grain Size		**0 to 1.6 feet: SILT (ML)**, dark brownish gray, slightly plastic, very soft, wet, no odor/sheen, organic debris. (FILL)
B	B			
C	C			**1.6 to 2.5 feet: SANDY SILT (ML)**, dark brownish gray, 60 percent slightly plastic silt, 40 percent fine sand, soft, wet, organic debris. (FILL)
				Bottom of core = 2.5 feet.
		5		
		10		

REMARKS
Penetrated to gravel layer.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-04**
PROJECT NUMBER	**050332-01**	ATTEMPT	**3**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**0945**
DRILL METHOD	**Vibracore**	PENETRATION	**3.7'**
LOGGED BY	**M. Wilson**	RECOVERY	**3.7**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713395**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620309**	MUDLINE ELEVATION (CRD)	**-47.5'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-45.8'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC Total Solids TPH Grain Size		**0 to 1.4 feet: SILT (ML)**, dark brownish-gray, slightly plastic, soft, very wet, slight organic odor, wood and twig debris. (FILL)
B	B			**1.4 to 3.0 feet: GRAVELLY SANDY SILT (ML)**, dark grayish-brown, 60 percent slightly plastic silt, 80 percent fine sand, 10 percent well graded, fine to coarse, subangular gravel, loose, wet, slight organic odor, wood debris. (FILL)
C	C			
D	D			**3.0 to 3.7 feet: SILT (ML)**, dark grayish-brown, slightly plastic, firm, wet, slight organic odor. (ALLUVIUM)
		5		Bottom of core = 3.7 feet.
		10		

REMARKS
Very difficult coring.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-04-2**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**1130**
DRILL METHOD	**Vibracore**	PENETRATION	**5.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**5.0'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**100%**
X COORDINATE	**713332**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620379**	MUDLINE ELEVATION (CRD)	**-43.1'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-41.4'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC Total Solids TPH Grain Size		**0 to 2.0 feet: SILT (ML)**, dark brownish gray, slightly plastic, very soft, wet, slight organic odor. (FILL)
B	B			
C	C			**2.0 to 5.0 feet: SILT WITH SAND (ML)**, dark grayish brown, 80 percent slightly plastic silt/20 percent fine sand, soft, wet, slight organic odor. (ALLUVIUM)
D	D			
E	E			
		5		Bottom of core = 5.0 feet.
		10		

REMARKS
Last 2.0 feet of coring difficult.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-05**
PROJECT NUMBER	**050332-01**	ATTEMPT	**3**
LOCATION	**Portland, Oregon**	DATE	**12/11/2007**
DRILLED BY	**NWUC**	TIME	**1600**
DRILL METHOD	**Vibracore**	PENETRATION	**5.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**4.5'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**90%**
X COORDINATE	**713406.40**	REFUSAL ENCOUNTERED	**No**
Y COORDINATE	**7620232**	MUDLINE ELEVATION (CRD)	**-47.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-46.0'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC TPH Grain Size Total Solids		**0 to 2.0 feet: SAND WITH GRAVEL (SP)**, dark gray, 90 percent poorly graded fine sand, 10 percent angular fine gravel, loose, wet, slight organic odor, wood and organic debris, gravel is white to pink in color. (FILL)
B	B			
C	C			**2.0 to 5.0 feet: SANDY SILT WITH GRAVEL (ML)**, dark brownish-gray, 60 percent slightly plastic silt, 30 percent fine sand, 10 percent gravel, soft, wet, slight organic odor, wood debris. (FILL)
D	D			
E	E			
		5		Bottom of core = 5.0 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-06**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**12/11/2007**
DRILLED BY	**NWUC**	TIME	**1250**
DRILL METHOD	**Vibracore**	PENETRATION	**7.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**6.0'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**85%**
X COORDINATE	**713362**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620207**	MUDLINE ELEVATION (CRD)	**-46.6'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-44.9'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMPACTION CORRECTED LITHOLOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC TPH Grain Size Total Solids		**0 to 0.5 foot: SILTY SAND (SM)**, dark gray, 60 percent poorly graded fine sand, 40 percent nonplastic silt, loose, wet, organic debris, slight organic odor. (FILL)
B	B			**0.5 to 5.6 feet: SAND (SP)**, dark gray, poorly graded, loose, wet. (FILL)
C	C			
D	D			@ 3.0 feet: 1-inch silty layer.
E	E			
F	F	5		
G	G			**5.6 to 7.0 feet: SILT (ML)**, dark gray, slightly plastic, soft, wet. (ALLUVIUM)
				Bottom of core = 7.0 feet.
		10		

REMARKS

Difficult coring after first 4.0 feet.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-07**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/12/2007**
DRILLED BY	**NWUC**	TIME	**1650**
DRILL METHOD	**Vibracore**	PENETRATION	**2.8'**
LOGGED BY	**M. Wilson**	RECOVERY	**2.3'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**82%**
X COORDINATE	**713407**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7620189**	MUDLINE ELEVATION (CRD)	**-48.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-47.0'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A		SVOCs, Metals, PCBs, DDT, TOC, Total Solids, TPH, Grain Size		**0 to 0.4 foot: SANDY SILT (ML)**, dark grayish-brown, 80 percent slightly plastic, 20 percent fine sand, very soft, very wet, slight organic odor. (FILL)
B				**0.4 to 2.0 feet: SAND MIXED WITH SILT AND GRAVEL (SM)**; black with occasional grains of white, red, pink, gray, 50 percent well graded, fine to coarse sand, 25 percent slightly plastic silt, loose, wet, slight organic odor. (FILL)
C				**2.0 to 2.8 feet: SANDY SILT (ML)**, dark grayish brown, 80 percent slightly plastic silt, 20 percent fine sand, soft, wet, slight organic odor. (FILL)
				Bottom of core = 2.8 feet.
		5		
		10		

REMARKS
Difficult coring.

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-08**
PROJECT NUMBER	**050332-01**	ATTEMPT	**1**
LOCATION	**Portland, Oregon**	DATE	**12/14/2007**
DRILLED BY	**NWUC**	TIME	**1200**
DRILL METHOD	**Vibracore**	PENETRATION	**5.7'**
LOGGED BY	**M. Wilson**	RECOVERY	**5.0'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**87%**
X COORDINATE	**713186**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7619996**	MUDLINE ELEVATION (CRD)	**-40.5'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-38.8'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC TPH Grain Size		**0 to 5.0 feet: SLIGHTLY SANDY SILT (ML)**, dark grayish brown, 90 percent slightly plastic silt, 10 percent fine sand, very soft, very wet, no odor/sheen, organic debris, clams. (FILL)
B	B			
C	C			@ 2.0 feet: soft, wet, firmer.
D	D			
E	E			
F				
	F	5		**5.0 to 5.7 feet: SILTY GRAVELLY SAND (SW)**, dark gray/black, 70 percent fine sand, 20 percent gravel, 10 percent silt, loose, wet. (FILL)
				Bottom of core = 5.7 feet.
		10		

REMARKS

ANCHOR ENVIRONMENTAL, L.L.C.

LOG OF SUBSURFACE CORE

PROJECT NAME	**Port of Portland T4-PI**	STATION I.D.	**T4-PI-09**
PROJECT NUMBER	**050332-01**	ATTEMPT	**2**
LOCATION	**Portland, Oregon**	DATE	**12/13/2007**
DRILLED BY	**NWUC**	TIME	**1620**
DRILL METHOD	**Vibracore**	PENETRATION	**2.0'**
LOGGED BY	**M. Wilson**	RECOVERY	**1.4'**
CORE DIAMETER	**4-inch**	PERCENT RECOVERY	**70%**
X COORDINATE	**712893**	REFUSAL ENCOUNTERED	**Yes**
Y COORDINATE	**7619684**	MUDLINE ELEVATION (CRD)	**-11.7'**
COORDINATES	**OSP-N (Intl. Ft)**	MUDLINE ELEVATION (NGVD)	**-10.0'**

UNCORRECTED CORE SECTIONS	COMPACTION CORRECTED SAMPLE INTERVAL	SAMPLE ANALYTES	COMP-ACTION COR-RECTED LITHO-LOGIC COLUMN	COMPACTION CORRECTED LITHOLOGIC DESCRIPTION
A	A	SVOCs Metals PCBs DDT TOC Total Solids TPH Grain Size		**0 to 2.0 feet: SAND (SW)**, black with some white, gray, pink grains, well graded, fine to coarse grained, loose, wet, woody debris. (FILL)
B	B			
				Bottom of core = 2.0 feet.
		5		
		10		

REMARKS
Very rough coring.

ANCHOR ENVIRONMENTAL, L.L.C.

Collection Date: 7/20/06
Shipping Date: 7/21/06

ANCHOR ENVIRONMENTAL, L.L.C.

Surface Sediment Field Sample Record

Project Name: POP-TY-EA **Project No:** 050332-01 **Station ID:** TY-WB-01

Sampling Crew: BMH
Sampling Vessel: The Stanley Sampling Method: Van Veen
Subcontractor(s): NWUC
Station Coordinates: N / Lat. 713737 Weather: Windy (Very), Full Sun, Hot
E / W / Long. 7619587
Datum: NAD 83 / WGS 84 Zone: OSP-N

Sample Number: TY-WB-01
Analysis: Metals / BNAs / VOCs / PCBs / Pest / Herb / TBTs / Diox-Furans
TS / Grain Size / TOC / AVS / Ammonia / Sulfides NWTPH-Dx
(Circle Appropriate Analyses)

Field Test Results Comments:
Salinity: ppt
Ammonia: mg/L
Grain Size: ml Coarse: ml Fines:

Grab Number: 1 Water Depth: Penetration/Sampled Depth: Time: 1810
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	No sediment
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: 2 Water Depth: Penetration/Sampled Depth: Time: 1820
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	No Sediment
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: 3 Water Depth: Penetration/Sampled Depth: 0.0-0.5 Time: 1830
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter Trace	brown surface	overwhelming		

Grab Number: Water Depth: Penetration/Sampled Depth: Time:
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Depth not taken due to high winds, obstructions, safety concerns

Recorded by: BMH

Collection Date: 7/20/06
Shipping Date: 7/21/06

ANCHOR ENVIRONMENTAL, L.L.C.

Surface Sediment Field Sample Record

Project Name: POP-T4-EA **Project No:** 050332-01 **Station ID:** T4-WB-02

Sampling Crew: BMH
Sampling Vessel: The Stanley Sampling Method: Van Veen
Subcontractor(s): NWUC
Station Coordinates: N / Lat. 913890 Weather: Windy (very), Full Sun, Hot
E / W / Long. 7619479
Datum: NAD 83 / WGS 84 Zone: OSP-N

Sample Number: T4-WB-02
Analysis: Metals / BNAs / SVOCs / PCBs / Pest / Herb / TBTs / Dioxin-Furans
TS / Grain Size / TOC / TVS / Ammonia / Sulfides NWTPH-Dx
(Circle Appropriate Analyses)

Field Test Results
Salinity: ppt
Ammonia: ~~mg/L~~
Grain Size: ml Coarse: ml Fines:
Comments:

Grab Number: 1 Water Depth: Penetration/Sampled Depth: Time: 1750
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	recovered gravels only
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: 2 Water Depth: Penetration/Sampled Depth: Time: 1753
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	recovered gravels only
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: 3 Water Depth: Penetration/Sampled Depth: Time: 1755
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	no recovery
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: 4 Water Depth: Penetration/Sampled Depth: 0.0-0.5 Time: 1800
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	offset location and recovered good sample
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter Trace	brown surface	overwhelming		

Depth not taken due to high winds, obstructions, safety concerns

Recorded by: BMH

Collection Date: 7/20/06
Shipping Date: 7/21/06

ANCHOR ENVIRONMENTAL, LLC

Surface Sediment Field Sample Record

Project Name: POP-T4-EA **Project No:** 050332-01 **Station ID:** T4-WB-03

Sampling Crew: BMH
Sampling Vessel: The Stanley
Sampling Method: Van Veen
Subcontractor(s): NWUC
Station Coordinates: N / Lat. 717807
E / W / Long. 7619441
Weather: Windy (very), Hot, Full Sun
Datum: NAD 83 / WGS 84 Zone:

Sample Number: T4-WB-03
Analysis: Metals / BNAs / VOCs / PCBs / Pest / Herb / TBTs / Dioxin-Furans
TS / Grain Size / TOC / TVS / Ammonia / Sulfides NWTPH-Dx
(Circle Appropriate Analyses)

Field Test Results
Salinity: ppt
Ammonia: mg/L
Grain Size: ml Coarse: ml Fines:
Comments:

Grab Number: 1 Water Depth: Penetration/Sampled Depth: Time: 1650
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	no recovery
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: 2 Water Depth: Penetration/Sampled Depth: 0.0-0.5 Time: 1710
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	good recovery
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter trace	brown surface	overwhelming		

Grab Number: Water Depth: Penetration/Sampled Depth: Time:
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: Water Depth: Penetration/Sampled Depth: Time:
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Depth not taken due to high winds, obstructions, safety concerns

Recorded by: BMH

Collection Date: 7/20/06
Shipping Date: 7/21/06

ANCHOR ENVIRONMENTAL, L.L.C.

Surface Sediment Field Sample Record

Project Name: POP-T4-EA **Project No:** 050332-01 **Station ID:** T4-WB-04

Sampling Crew: BMH
Sampling Vessel: The Stanley Sampling Method: Van Veen
Subcontractor(s): NWUC
Station Coordinates: N / Lat. 713682 Weather: Windy (very), Full Sun, Hot
E / W / Long. 7619493
Datum: NAD 83 / WGS 84 Zone: OSP-N

Sample Number: T4-WB-04
Analysis: Metals / BNAs / VOCs / PCBs / Pest / Herb / TBTs / Diox-Furans
TS / Grain Size / TOC / TVS / Ammonia / Sulfides NWTPH-Dx
(Circle Appropriate Analyses)

Field Test Results Comments:
Salinity: ppt
Ammonia: mg/L
Grain Size: ml Coarse: ml Fines:

Grab Number: 1 Water Depth: Penetration/Sampled Depth: 0.0-0.5 Time: 1635
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	good recovery
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter trace	brown surface	overwhelming		

Grab Number: Water Depth: Penetration/Sampled Depth: Time:
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: Water Depth: Penetration/Sampled Depth: Time:
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Grab Number: Water Depth: Penetration/Sampled Depth: Time:
Bioassay / Chemistry (circle) AVS/SEM; Total Sulfides; VOC Sample (circle)

Sediment Type:	Sediment Color:	Sediment Odor:		Comments:
cobble	D.O.	none	H2S	
gravel	gray	slight	Petroleum	
sand C M F	black	moderate	other:	
silt clay	brown	strong		
organic matter	brown surface	overwhelming		

Depth not taken due to high winds, obstructions, safety concerns

Recorded by: BMH

ANCHOR ENVIRONMENTAL, L.L.C.

SEDIMENT COMPOSITING AND SAMPLE PREPARATION LOG SHEET

Composite Sample ID [illegible]

Project Name [illegible] **Project No.** [illegible]

Compositing Date: [illegible]		**Team Initials:** [illegible]	
Contributing Sample ID	**Notes**	**Collection Date**	**Processing Date**
[illegible]		7/18/06	7/18/06
[illegible]		7/18/06	7/18/06
[illegible]		7/18/06	7/17/06
[illegible]		7/19/06	7/20/06

Sediment Sample Analyses	**Containers (for PSDDA chem. analysis by ARI, Seattle and bioassay by NAS, Newport)**	✓ **if Yes**
Grain Size	One 16-oz glass jar	
TOC/NH_3/TVS/TS	One 4-oz glass jar	
Total Sulfides	One 2-oz glass jar with 5 ml zinc acetate	
Pesticides/PCBs/PAHs	One 16-oz glass jar	
VOCs	One 2-oz glass jar, no head space	
Metals	One 4-oz glass jar	
TBT (porewater)	Two 32-oz glass jars	
Bioassay Tests (3 tests)	One 1-gallon HDPE bucket	
Bioassay NH3 and $S^{=}$	One 8-oz glass jar (do NOT freeze)	
Archive Composite	One 16-oz glass jar, 80% full(freeze)	
Archive Core(s)	One 16-oz glass jar per core, 80% full (freeze)	
Other		

Comments:

ANCHOR ENVIRONMENTAL, L.L.C.

SEDIMENT COMPOSITING AND SAMPLE PREPARATION LOG SHEET

Composite Sample ID T4-Comp-02

Project Name T4 Early Action **Project No.** 050332-01

Compositing Date: Comp 2 7/19 -		**Team Initials:** EA/KT/BY	
Contributing Sample ID	**Notes**	**Collection Date**	**Processing Date**
T4-CS-06		7/19/06	7/19/06
T4-CS-07		7/18/06	7/19/06
T4-CS-08		7/19/06	7/19/06
T4-CS-09		7/19/06	7/20/06

Sediment Sample Analyses	**Containers (for PSDDA chem. analysis by ARI, Seattle and bioassay by NAS, Newport)**	✓ **if Yes**
Grain Size	One 16-oz glass jar	
TOC/NH_3/TVS/TS	One 4-oz glass jar	
Total Sulfides	One 2-oz glass jar with 5 ml zinc acetate	
Pesticides/PCBs/PAHs	One 16-oz glass jar	
VOCs	One 2-oz glass jar, no head space	
Metals	One 4-oz glass jar	
TBT (porewater)	Two 32-oz glass jars	
Bioassay Tests (3 tests)	One 1-gallon HDPE bucket	
Bioassay NH3 and $S^{=}$	One 8-oz glass jar (do NOT freeze)	
Archive Composite	One 16-oz glass jar, 80% full(freeze)	
Archive Core(s)	One 16-oz glass jar per core, 80% full (freeze)	
Other		

Comments:

ATTACHMENT B

ARCHAEOLOGICAL MONITORING REPORTS

Archaeological Investigations Northwest, Inc.

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MEMO

Date: August 10, 2006

To: Elizabeth Appy, Anchor Environmental, LLC

From: R. Todd Baker and David V. Ellis

Re: Archaeological Inspection of Sediment Samples from Slip 3 for the Port of Portland Terminal 4 Early Action Project
AINW Report No. 1732

Per the contract between the Anchor Environmental LLC (Anchor), and Archaeological Investigations Northwest, Inc. (AINW), we have inspected the sediment core samples obtained from vibracoring in Slip 3 for the Port of Portland's Terminal 4 removal action site located at 11040 North Lombard Street along the northeastern bank of the lower Willamette River (approximately between River Mile 4.4 and 5.7) in Portland, Oregon (Figure 1). Anchor coordinated the sediment collection, and also processed the samples for analysis. The removal action area extends west from the ordinary high water line on the northeast bank of the lower Willamette River to the edge of the navigation channel and south from the downstream end of Berth 414 to the downstream end of Berth 401, including Slip 1, Slip 3, and Wheeler Bay. The terminal extends across the natural lower Willamette River floodplain and has been developed on fill placed along the historical shoreline over the past approximately 85 years.

The Port's Terminal 4 property is located on the Willamette River floodplain. The historical floodplain was covered with dredged sand and silt from the Willamette River beginning in 1917. Construction of Slip 3 in circa 1917-1920 entailed dredging in the Willamette River channel and excavation through the historical shoreline and into the dredge-covered floodplain. The 2003 cultural resource survey of the Port's Terminal 4 property concluded that there was a potential for archaeological deposits in portions of the historical floodplain and along the historical Willamette River bank (Ellis and O'Brien 2003). Given this potential, AINW recommended archaeological monitoring of the sediment collection activities for sample locations that would extend across the alignment of the historical riverbank, including portions of Slip 3.

Anchor had provided a copy of the proposed sampling locations well in advance of the proposed sampling. This information was reviewed by AINW Senior Archaeologist David V. Ellis, M.P.A., who determined which samples were located in archaeologically sensitive areas (i.e., along the historical riverbank).

The archaeological monitoring recommendation was implemented by an Archaeological Protocol developed for the Port that defined the monitoring procedures and steps to be followed if possible archaeological materials or deposits were encountered during sediment sample collection. The protocol was prepared and adopted in consultation with the Oregon Department of Environmental Quality and the Confederated Tribes of the Grand Ronde Community of Oregon, the Nez Perce Tribe, the Confederated Tribes of the Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes and Bands of the Yakama Nation.

On behalf of the Port, AINW notified these six Tribes of the proposed sampling and associated monitoring by letter on July 5, 2006.

Field Investigations and Results

AINW archaeologist R. Todd Baker, M.A., inspected the core and sediment samples obtained from the vibracoring in Slip 3 at the Terminal 4 removal action site on July 19 and July 20, 2006. The inspection was conducted within a designated exclusion zone. Mr. Baker had completed the 40-hour Hazardous Waste Operations and Emergency Response course and the 8-hour refresher course per OSHA 1910.120, and the inspection was conducted within the framework of the Anchor Environmental Health and Safety Plan.

Personal protective equipment (PPE) required for entrance into the exclusion zone consisted of modified Level D. For safety reasons field glasses and nitrile gloves were used to examine dirt as it was being removed from the sampling tubes. If possible artifacts or other archaeological deposits were observed, the archaeological monitor was to request that the sample material be deposited where it could be safely examined.

Sediment core samples were inspected on July 19 and July 20, 2006. Collection of the sediment core samples were completed using a vibracore deployed from the 42-foot sampling vessel. The vibracore is equipped with 8-centimeter (cm) or 10-cm (3-inch [in] or 4-in) diameter aluminum core barrels used for collecting the samples. Plastic tubes are placed inside the aluminum core barrels and the samples are sealed inside the plastic tube so that no handling of the sample takes place. Each vibracore sample was given a designated number and letter in order to keep track of the location and depth of the samples, and the purpose of the samples. Samples inspected during monitoring included T4-S3-03, T4-S3-05, T4-S3-06, T4-S3-08, T4-CS-06, T4-CS-07, and T4-CS-08 (Figure 2). After the samples were collected and brought into the core processing building the plastic sample tubes were cut using electric shears and opened. Only the barrel of the tube, not the sediments, was cut by the shears (Photos 1 and 2).

Two different types of sampling processes took place with the collected sediment samples. The samples labeled CS were collected to run a column settling test, which is used to evaluate water quality during dredging, and seepage induced consolidation test, which is used to predict settlement of material in the confined disposal facility. The samples labeled S3 were collected to run chemistry analyses to further define the extent of contamination in specific areas within Slip 3. The column settling/seepage induced consolidation samples were composited into two samples and the S3 samples were sectioned into 0.3 meter (1 foot) sample intervals and then subsampled. After the S3 samples were sectioned, the subsamples were homogenized in a stainless steel bowl and samples were then collected from the homogenization process. For each core, target sample intervals were submitted for chemical analyses and the remaining core sections were frozen for possible future analysis.

Sediments observed during the inspection of the sediment core samples primarily consisted of grayish brown mottled sandy silt overlying grayish black or grayish brown sand. Some samples had intermixed layers of sand and silt (Photos 3 and 4). Some woody debris and alluvial gravels were noted in some of the samples.

No prehistoric or historic-period cultural material was discovered during the inspection of the sediment core samples obtained from vibracoring in Slip 3. At no time during the inspections did Mr. Baker observe any evidence of artifacts or other possible archaeological deposits, and at no time therefore did he request that sediment samples be deposited where he could examine them.

Summary and Recommendations

AINW inspected the sediment core samples obtained from vibracoring in Slip 3 at the Port of Portland's Terminal 4 removal action site on July 19 and July 20, 2006. No prehistoric or historic-period cultural material was discovered during the inspection of the sediment core samples. Based on the results of the field investigations, it is AINW's professional opinion that the drilling and sample collection did not affect any significant archaeological resources. AINW therefore recommends no additional studies at this time.

References

Ellis, David V., and Elizabeth J. O'Brien
2003 *A Cultural Resources Reconnaissance Survey of the Port of Portland's Terminal 4, Portland, Oregon DRAFT.* Archaeological Investigations Northwest, Inc. Report No. 1048. Prepared for Port of Portland, Oregon.

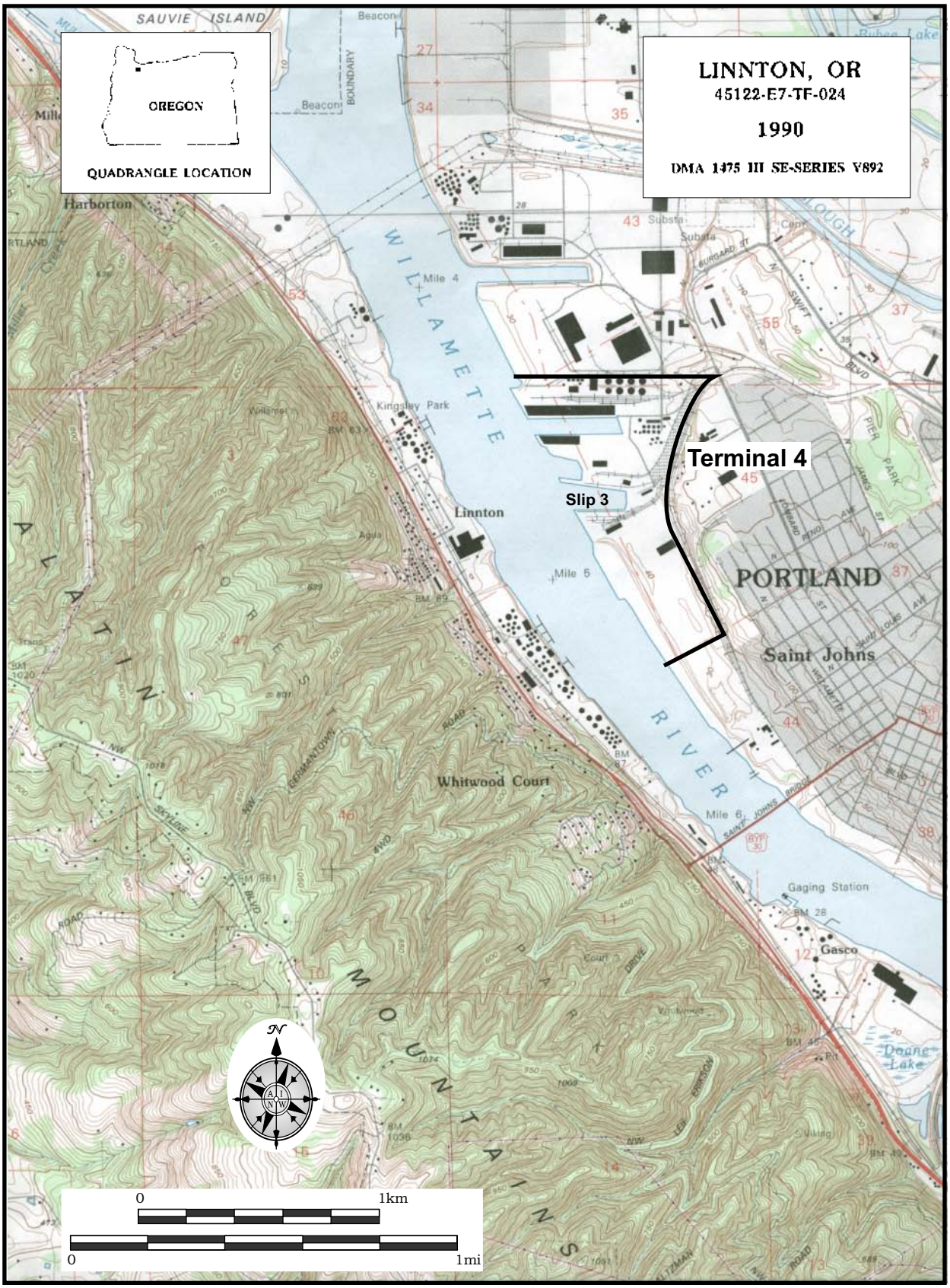

Figure 1. Slip 3 location.

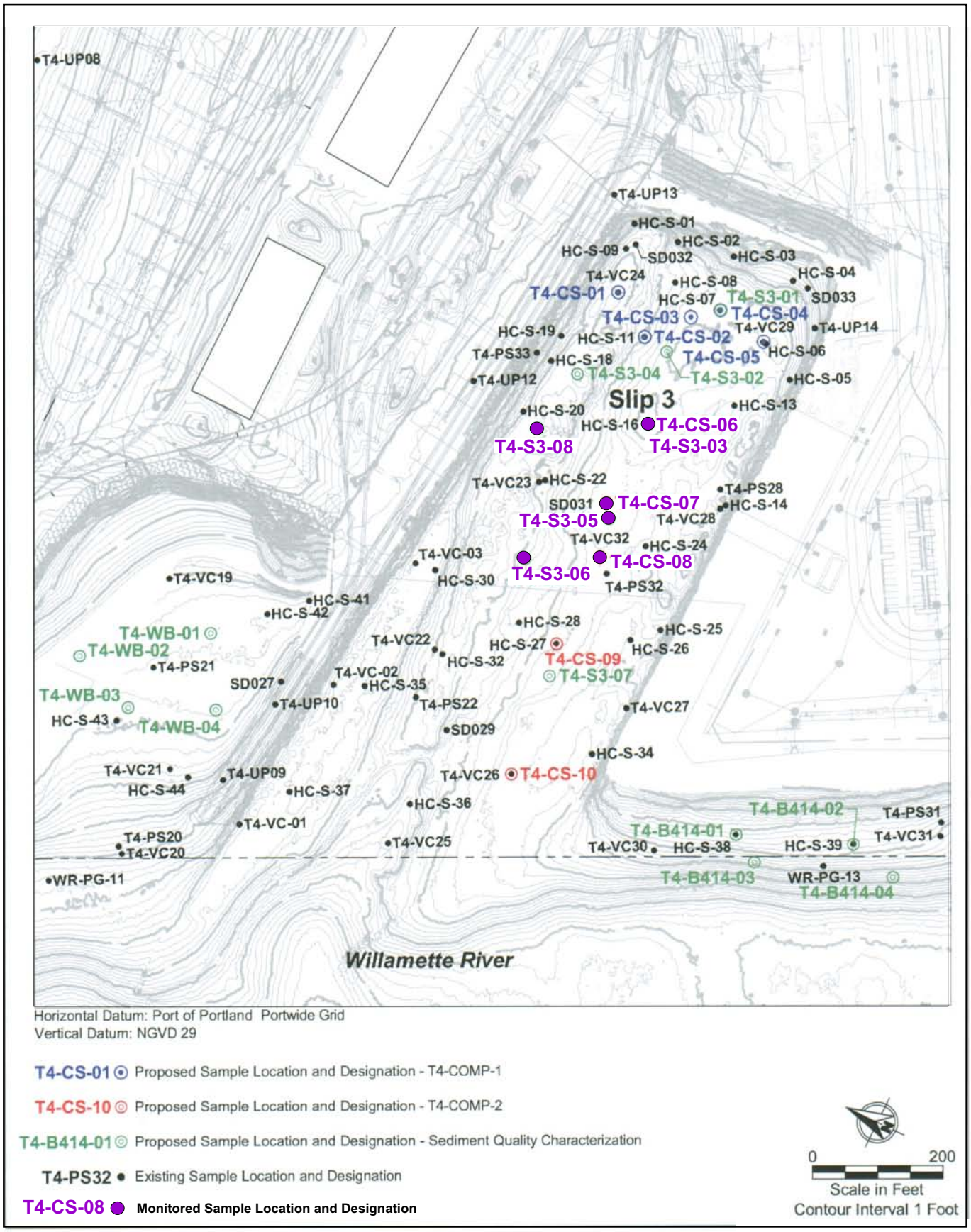

Figure 2. Locations of monitored samples (Base map courtesy of Anchor Environmental, L.L.C.).

Photo 1. Plastic tube containing T4-CS-07 being cut open in preparation for sampling. The view is to the south.

Photo 2. T4-CS-08 after plastice tube has been opened and before sampling has taken place. The view is to the northwest.

Photo 3. Example of grayish brown mottled sandy silt observed in samples. The view is to the west.

Photo 4. Example of grayish black or grayish brown sand observed in samples. The view is to the west.

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Web: www.ainw.com

MEMO

Date: December 19, 2007

To: Elizabeth Appy, Anchor Environmental LLC

From: Nicholas Smits, M.A., R.P.A.

Re: Archaeological Inspection of Additional Sediment Samples from Slip 3 for the Port of Portland Terminal 4 Phase I Removal Action and Maintenance Dredging
AINW Report No. 2061

Under contract with Anchor Environmental LLC (Anchor), Archaeological Investigations Northwest, Inc. (AINW), has inspected sediment core samples obtained for additional sampling and sediment quality testing conducted in Slip 3 of the Port of Portland's Marine Terminal 4, located at 11040 North Lombard Street along the right (northeastern) bank of the Willamette River in Portland, Oregon (Figures 1 and 2). The objective of the additional sampling and sediment quality testing is to provide vertical constraints for the design of Phase I of the Removal Action dredge prism and to confirm sediment quality characteristics within the proposed maintenance dredge prism (Hung et al. 2007:1).

The Port's Terminal 4 extends across the natural Willamette River floodplain and has been developed on fill placed along the historical shoreline over the past 90 years. Beginning in 1917, the historical floodplain was covered with sand and silt material dredged from the river. Construction of Slip 3 in circa 1917-1920 entailed dredging of the river channel and excavating through the historical shoreline and into the dredge-covered floodplain. In 2003, AINW performed a cultural resource survey of the Port's Terminal 4 property and concluded that there was a potential for buried archaeological deposits in portions of the historical floodplain and along the historical shoreline (Ellis and O'Brien 2003). Given this potential, AINW recommended archaeological monitoring of sediment collection activities for sample locations that would extend across the alignment of the historical riverbank, including portions of Slip 3.

The archaeological monitoring recommendation was implemented by an Archaeological Protocol developed for the Port that defined the monitoring procedures and steps to be followed if possible archaeological materials or deposits were encountered during sediment sample collection. The protocol was prepared and adopted in consultation with the Oregon Department of Environmental Quality and the Confederated Tribes of the Grand Ronde Community of Oregon, the Nez Perce Tribe, the Confederated Tribes of the Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Confederated Tribes and Bands of the Yakama Nation.

Field Investigations and Results

AINW Senior Archaeologist Nicholas Smits, M.A., R.P.A., inspected the sediment samples obtained from vibracoring in Slip 3 on December 11 and 12, 2007. The inspection was conducted in a building at Terminal 4 that was used by Anchor for processing the sediment samples. Mr. Smits had completed the 40-hour Hazardous Waste Operations and Emergency Response course and the 8-hour refresher course per OSHA 1910.120, and the inspection was conducted within the framework of the Anchor Environmental Health and Safety Plan.

Collection of the sediment core samples from Slip 3 was completed by Anchor personnel using a vibracore equipped with a 10-centimeter (cm) (4-inch [in]) diameter aluminum core barrel. Plastic tubes were placed inside the aluminum core barrel, and the samples were sealed inside the plastic tubes so that no handling of the sediment took place during collection. Each vibracore sample was assigned a code for tracking purposes. Six core samples were inspected by Mr. Smits, consisting of samples T4-PI-03, T4-PI-04, T4-PI-05, T4-PI-06, T4-PI-04-2, and T4-PI-03-2 (Figure 2). After the samples were collected and brought into the building for processing, the plastic tubes were cut using electric shears and opened. Only the barrel of the tube, not the sediment core itself, was cut by the shears (Photos 1 through 4).

In general, the sediments observed during the inspection consisted of dark grayish brown sand overlying dark gray sandy silt. Woody debris and alluvial gravels were noted in the upper sandy stratum of some of the samples. No pre-contact (Native American) or historic-period cultural materials were identified during the inspection of the samples. At no time during the inspection did Mr. Smits observe any evidence of artifacts or other possible archaeological deposits.

Summary and Recommendations

AINW has inspected six additional sediment core samples obtained from vibracoring in Slip 3 at the Port of Portland's Marine Terminal 4. No pre-contact or historic-period cultural materials were identified during the inspection. Based on the results of the field investigations, it is AINW's professional opinion that the vibracoring did not affect any significant archaeological resources. AINW therefore recommends no additional studies at this time.

References

Ellis, David V., and Elizabeth J. O'Brien
2003 *A Cultural Resources Reconnaissance Survey of the Port of Portland's Terminal 4, Portland, Oregon DRAFT.* Archaeological Investigations Northwest, Inc. Report No. 1048. Prepared for Port of Portland, Oregon.

Hung, Ben, Todd Thornburg, and John Verduin
2007 *Proposed Sampling and Analysis Plan for Additional Sediment Quality Characterization for Phase I of the Removal Action Plan of Portland – Terminal 4 Removal Action and Maintenance Dredging T4 slip 3.* Anchor Environmental, L.L.C., Portland, Oregon. Prepared for Port of Portland, Oregon.

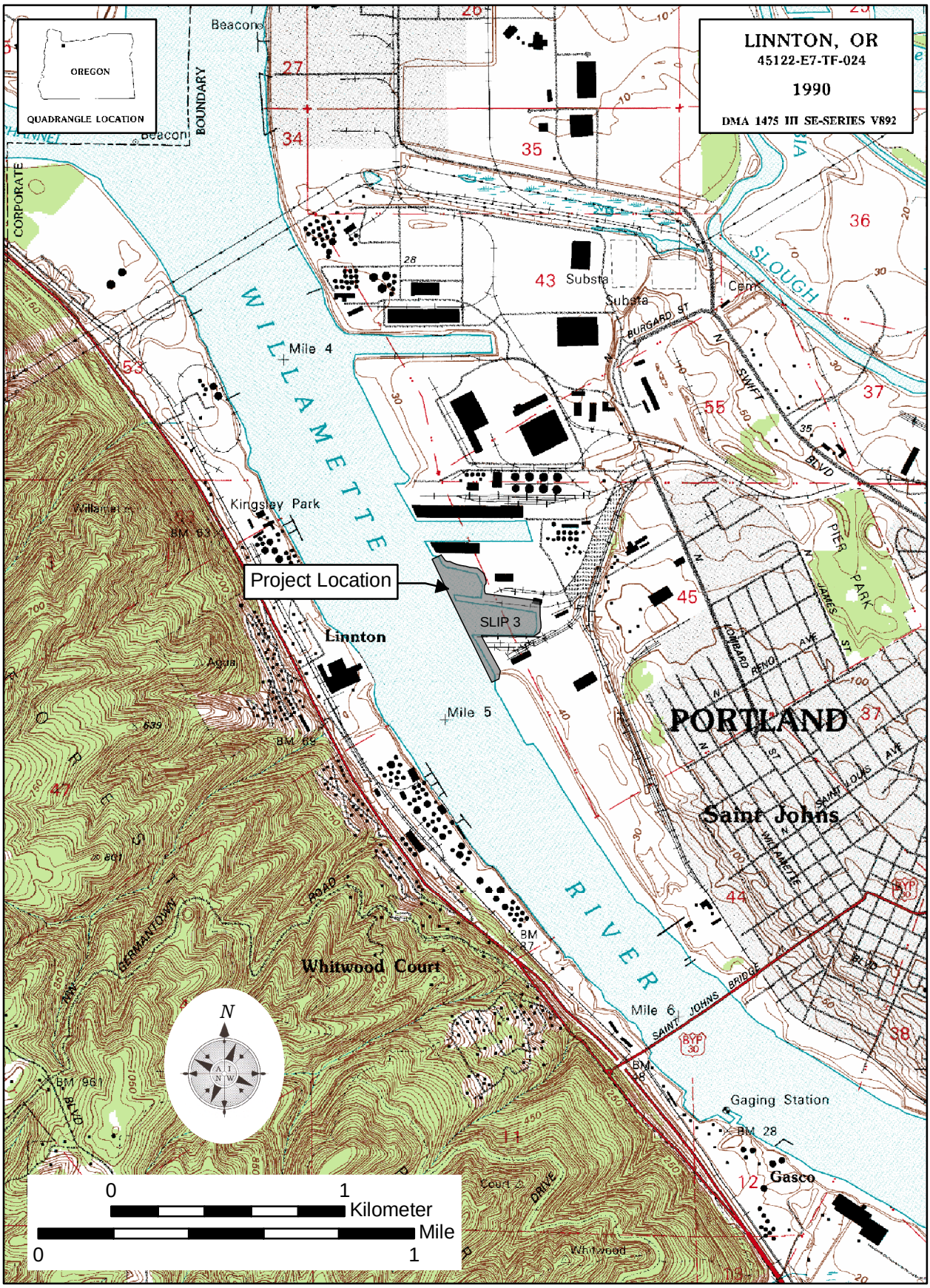

Figure 1. The proposed Maintenance Dredge and Phase 1 Removal Action in Slip 3 of Terminal 4 project location.

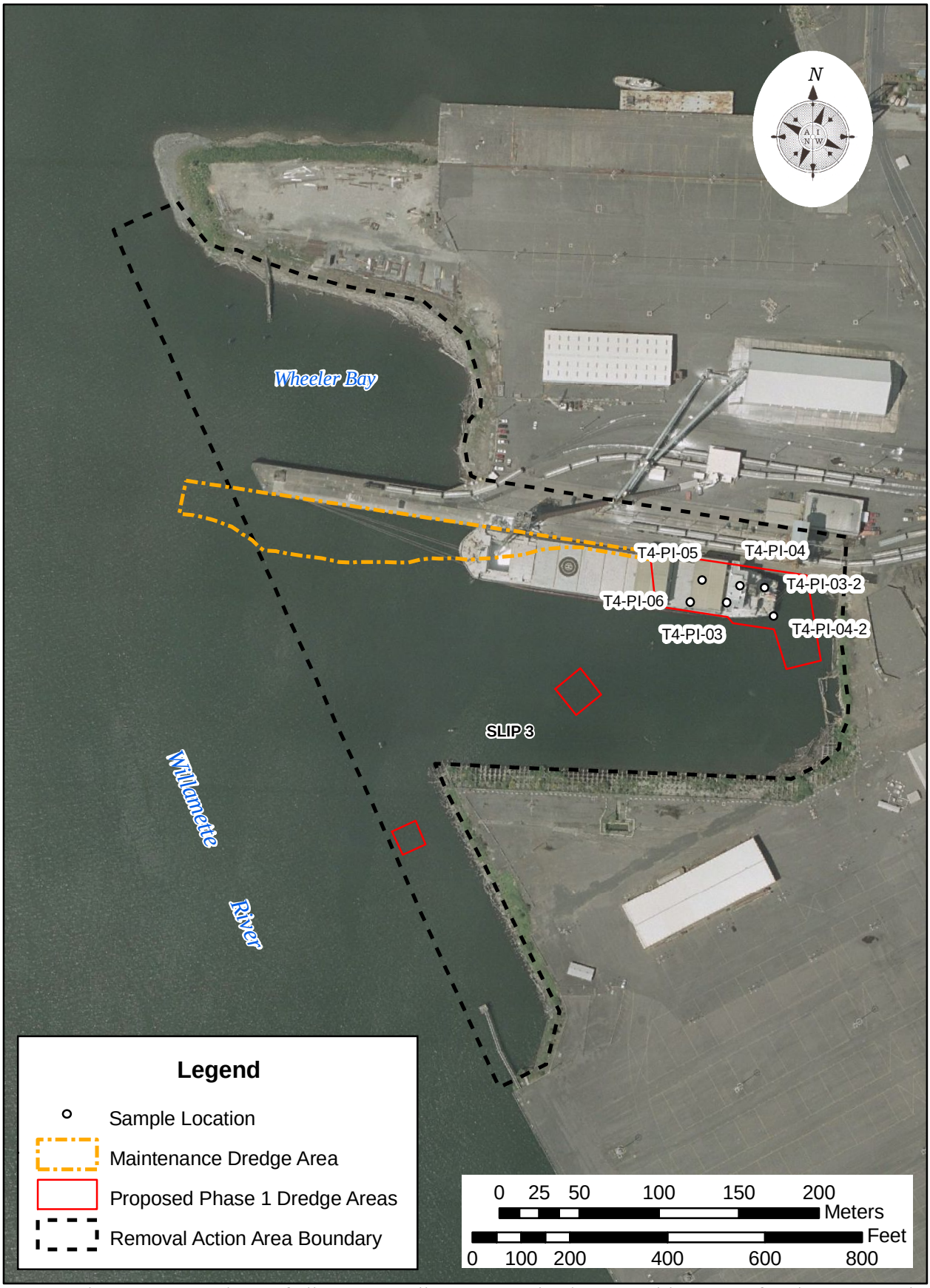

Figure 2. Locations of vibracore sediment samples inspected by AINW for the proposed Maintenance Dredge and Phase 1 Removal Action in Slip 3 of Terminal 4.

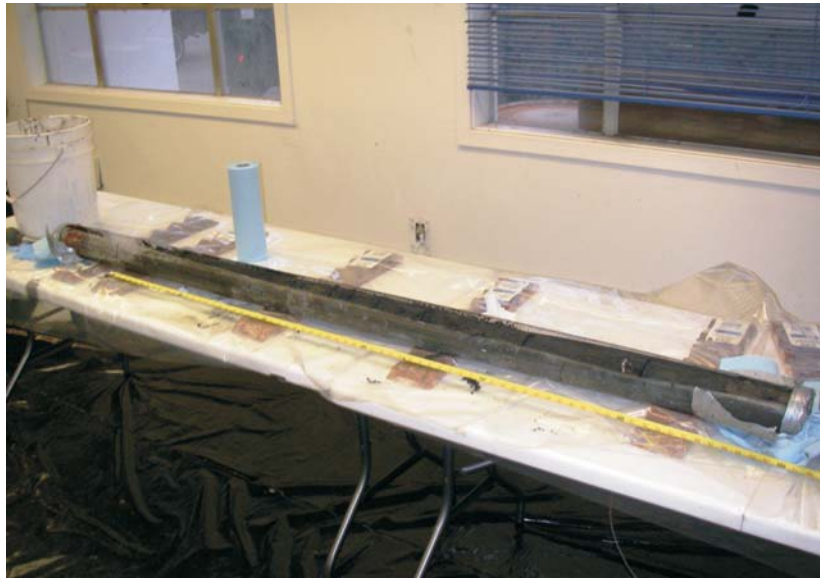

Photo 1. Overview of core T4-PI-06. The top of the core is at the left of the photo.

Photo 2. Overview of core T4-PI-05. The top of the core is at the left of the photo.

Photo 3. Overview of core T4-PI-04. The top of the core is at the left of the photo.

Photo 4. Overview of core T4-PI-2. The top of the core is at that left of the photo.

ATTACHMENT D

GEOTECHNICAL TESTING REPORTS

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: Anchor Environmental	Project No.: JQ30
Client Project: T4 Early Action	

Case Narrative

1. The samples were submitted for grain size analysis according to ASTM methodology, Atterberg limits, specific gravity and column settling.
2. The grain size analysis was run according to ASTM D422, with the dry preparation according to ASTM D421. At the client's request, a #140 sieve was inserted into the sieve stack. Because this is non-standard, this data does not show in our normal plots or tabulation of the data, but is in the electronic data deliverable.
3. The Atterberg limits were run according to ASTM D4318. One sample was non-plastic. A plot of the data is provided.
4. The specific gravity was run on each sample three times, once on the whole sample, once on the fraction retained on the #200 sieve and once on the material passing the #200 sieve. The material passing the #200 sieve was washed through the sieve and air dried.
5. The column setting test was run according to Corps of Engineers guidance with an initial sediment concentration of 262.8 g/L. Because the sample was so sandy, much of this settled out in the first minute or so and the initial measured concentration was only 30.9 g/L. No interface was formed and so all of the ports were sampled at each sampling time (1, 2, 4, 6, 8, 12, 24, 48, 96, 174, 240 hours). This many samplings lead to a rapid drop in the water height in the column. Besides the TSS, each sample was tested for turbidity also. The turbidity data is provided in a table and plot.
6. There were no other noted anomalies in the methods or samples on this project.

Approved by: Harold Berry Date: 11/5/06
Title: Geotechnical Division Manager

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