Subsurface Investigation Report

Port of Long Beach
Pier E/Middle Harbor Redevelopment
Long Beach, California

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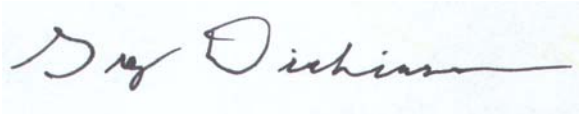

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PROFESSIONAL CERTIFICATION

Pacific Edge Engineering, Inc., under the professional supervision of Greg Dickinson, has prepared this report. The findings, conclusions, specifications, and/or professional opinions presented in this report have been prepared in accordance with generally accepted professional engineering practice, and within the scope of the project. There is no other warranty, either expressed or implied.

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1.0 INTRODUCTION

A subsurface site investigation was conducted by Pacific Edge Engineering, Inc. (Pacific Edge) between April 4 and May 2, 2006 at Piers D and E in Long Beach, California. The approximate site location is presented on Figure 1. The investigation was performed for the Port of Long Beach (Port) Planning Division in support of a Environmental Impact Statement/Environmental Impact Report (EIS/EIR) being prepared jointly by the Port and the United States Army Corps of Engineers (Corps). The EIS/EIR is being prepared as part of a permit application for a proposed marine terminal expansion at Piers D, E and F in the Middle Harbor District of the Port of Long Beach, Los Angeles County, California. The permit is being applied for to conduct dredge and fill activities to redevelop and consolidate two existing container terminals for the construction of a 342-acre marine terminal including redevelopment of 294-acres of existing land and the placement of dredged material in open water to create 48-acres of new land. The components of the proposed Port project relevant to the subsurface investigation completed by Pacific Edge include the following:

- Widening of Slip 3 by 110 feet to accommodate four deep-water berths
- Filling the 22-acre Slip 1 and the Pier E extension (existing oil field area) with material excavated during widening of Slip 3.

The investigation was performed in accordance with our March 16, 2006 proposal PE06-014 and the Port's March 8, 2006 Request for Cost Proposal, Pier E Redevelopment/Middle Harbor Redevelopment Soil Characterization Project. The purpose of the investigation was to evaluate whether excavated soil from Slip 3 could be discharged into ocean waters at Slip 1 and the Pier E extension without violating Regional Water Quality Control Board (RWQCB) discharge limitations or threatening human health or the environment.

The objectives of the investigation were as follows:

1. Characterize soil by continuous coring and logging 45 soil borings to various depths within the proposed expansion of Slip 1.
2. Collect and analyze representative soil samples to evaluate the presence of Total Extractable Hydrocarbons (TEH), Volatile Organic Compounds (VOCs), Organochlorine Pesticides (OCPs), Polychlorinated Biphenyls (PCBs), metals, and Polynuclear Aromatic Hydrocarbons (PAHs).
3. Prepare elutriates utilizing the representative soil samples and samples of ocean water collected at Slip 1, and evaluate the presence of TEH, OCPs, PCBs, metals, and PAHs.

2.0 INVESTIGATION SCOPE OF WORK

The following sections describe the implementation of the proposed subsurface investigation program. Standard field protocols utilized to collect soil samples at the Site are presented in Appendix A.

2.1 SOIL BORINGS

Soil samples were collected from the following boring locations:

- Pier D Cutback - 9 borings (PE1, PE3, PE5, PE6, PE8, PE10, PE12, PE14, and PE15) to 30-feet below ground surface (bgs) and 6 borings (PE2, PE4, PE7, PE9, PE11, and PE13) to 64-feet bgs
- Pier E Cutback[1] - 1 boring (PE22) to 44-feet bgs, 8 borings (PE19, PE21, PE24, PE26, PE28, PE30, PE32, and PE33) to 48-feet bgs, 9 borings (PE17, PE34, PE36, PE37, PE39, PE41, PE42, PE43, and PE44) to 56-feet bgs, 1 boring (PE45) to 60-feet bgs, and 10 borings (PE18, PE20, PE23, PE25, PE27, PE29, PE31, PE35, PE38, and PE40) to 64-feet bgs
- North End of Slip 3 - 1 boring (PE16) to 40-feet bgs

All borings were continuously sampled to the total depth of the boring. Soil samples were logged in general accordance with the Unified Soil Classification System (USCS). Soil descriptions are presented on boring logs included in Appendix B.

VOC concentrations were evaluated qualitatively in the field using a photoionization detector (PID). Soil samples, collected at 5-foot intervals to a depth of 20-feet bgs and at 10-foot intervals thereafter to the total depth of each boring, were placed in a plastic bag and allowed to sit for a minimum of 15-minutes. PID readings of the air in the headspace of the plastic bag were recorded on the boring logs included in Appendix B.

Boring location, proposed and actual total depth, date each boring was completed, and exceptions to the proposed boring program are summarized on Table 1. Figure 2 graphically presents all boring locations.

2.2 LABORATORY SOIL ANALYSIS

Three aliquots were selected for analysis from each boring. These included a discrete sample collected at 3-feet bgs, a composite sample of discrete samples generally collected at 5-, 10-, and 15-feet bgs, and a second composite sample of discrete samples generally collected at 20-, 30-,

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[1] Borings PE19, PE21, PE24, PE26, PE28, PE30, PE32, PE33 were moved from approximately 185-feet from the pier face (PHL) to approximately 75-feet from the PHL. As a result, the proposed total depth of these borings was changed from 80-feet to 48-feet based on the new location within the proposed cutback.

and at 10-foot intervals thereafter to the total depth of each boring. Samples that were not utilized for the discrete or composite samples were archived at the laboratory.

All soil samples were placed on ice in a thermally-insulated cooler for subsequent delivery to an off-site State certified laboratory via chain-of-custody. Samples submitted to the laboratory included the following:

- "Discrete" samples that generally included a 6-inch long, 2-inch diameter acetate sleeve.
- "Composite" samples that generally included multiple 6-inch long, 2-inch diameter acetate sleeves that were composited at the laboratory into a single sample for analysis.

A total of 133[2], 45 discrete and 88 composite, soil samples were analyzed by the following analytical methods:

- Title 22 Total Metals by United States Environmental Protection Agency (USEPA) Method 6000/7000
- TEH by Department of Health Services (DHS) Method 8015M
- OCPs by USEPA Method 8081A
- PCBs by USEPA Method 8082
- PAHs by USEPA Method 8310

A total of 93 discrete samples[3] were analyzed for VOCs, including fuel oxygenates, by USEPA Method 8260B. Samples for VOC analysis were collected with Encore samplers in accordance with USEPA Method 5035 from acetate sleeves generally collected at approximately 3- and 15-feet bgs.

Elevated total copper was detected in one (1) soil sample; therefore, the soluble copper concentration was determined in this sample by analyzing an extract prepared in accordance with the California Assessment Manual (CAM) Waste Extraction Test (WET).

Approximately three-quarters of one (1) ton of waste soil and 55-gallons of decontamination water were generated during the project. The Investigation Derived Wastes (IDW) were stored onsite in three (3) 55-gallon drums (two drums of soil and one drum of decontamination water) at a location specified by the POLB. One representative sample of the soil, PE1-45 Comp., was collected from the IDW at the completion of the project. The sample was analyzed by the same 6 methods proposed for the soil samples.

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[2] A total of 135 soil samples were proposed for analysis; however, as discussed in Section 2.1.1, proposed composite samples representing the 20- to 30-foot zone at PE10 and the 20- to 40-zone at PE16 were not collected or analyzed.
[3] A total of 90 discrete samples were proposed for VOC analysis; however, 1 composite sample, PE2-5',9'6",16' was analyzed for VOCs inadvertently by the laboratory and two discrete samples PE21-9' and PE24-9' were added based on field observations.

2.3 LABORATORY ELUTRIATE ANALYSIS

A total of four elutriate samples were prepared for analysis using the Effluent Elutriate Test Procedure as specified in the Inland Testing Manual, Appendix B, Section B3.3 (USEPA/Corps, 1998). The samples were prepared by the laboratory by combining a composite soil sample from PE3 (included 9 discrete samples collected between 17' and 29'3" bgs), PE20 (included 21 discrete samples collected between 17' and 52'11" bgs), PE27 (included 22 discrete samples collected between 17' and 62'2" bgs), and PE40 (included 10 discrete samples collected between 5'6" and 17' bgs) with an ocean water sample collected from Pier E, Slip 1. The ocean water sample was collected by lowering a pre-cleaned bailer from the Pier into Slip 1. The ocean water was then transferred from the bailer into new, dedicated, pre-cleaned 5 gallon sample containers which were then transported on ice in a thermally insulated cooler to the laboratory.

Soil samples were selected from borings PE3, PE20, PE27, and PE40 for the elutriate samples based on elevated analyte concentrations observed in the soil analytical data as follows:

- The highest TEH concentrations were found in soil sample PE3-20', 29'3".
- The highest and second highest PAH concentrations were found in soil samples PE27-20', 29'11", 40', 48', 60' and PE20-20', 29'1", 40', 49'1", 56', respectively.
- The highest copper and OCP and second highest TEH concentrations were found in soil sample PE40-5', 10', 14'11".

The elutriate samples and a background sample of the ocean water were analyzed by the same methods proposed for the soil samples with the exception of USEPA Test Method 8260B.

3.0 ANALYTICAL RESULTS

Analytical results for the soil samples are summarized on Tables 2 through 7. Analytical results for the elutriate samples are summarized on Tables 2A through 4A, 6A, and 7A. Analytical reports and chain-of-custody documentation are included in Appendices C (soil) and D (elutriate).

The following sections summarize the soil and elutriate analytical results.

3.1 SOIL

Metals

A total of 133 soil samples were analyzed for total metal concentrations by USEPA Method 6000/7000. The following maximum total metal concentrations were detected:

Parameter	Maximum Total Metal Concentration (mg/kg[4])	Sample Location
Antimony	**1.34**	PE36-5', 9', 14'3"
Arsenic	**5.53**	PE11-3'
Barium	**873**	PE45-3'
Beryllium	<0.05	NA
Cadmium	<0.05	NA
Chromium	**34.8**	PE4-20', 30', 40', 49'4", 60'
Cobalt	**11.6**	PE4-20', 30', 40', 49'4", 60'
Copper	**1600**	PE40-5', 10', 14'11"
Lead	**41.8**	PE44-21'9", 29'6", 40', 50'
Mercury	**0.3**	PE4-20', 30', 40', 49'4", 60'
Molybdenum	**2.69**	PE20-20', 29'1", 40', 49'1", 56'
Nickel	**21.4**	PE4-20', 30', 40', 49'4", 60'
Selenium	**1.13**	PE4-5', 10', 16'
Silver	**0.73**	PE41-20', 29'10", 40', 49'4"
Thallium	<0.2	NA
Vanadium	**58.9**	PE4-20', 30', 40', 49'4", 60'
Zinc	**102**	PE44-21'9", 29'6", 40', 50'

Total copper was detected in sample PE40-5', 10', 14'11" at a concentration of 1,600 mg/kg. This value is below California's Total Threshold Limit Concentration (TTLC), a determinant level for hazardous waste classification; however the level did exceed 10-times California's

[4] mg/kg = milligrams per kilogram

Soluble Threshold Limit Concentration (STLC), requiring additional testing to determine the soluble concentration. Therefore, the soluble copper concentration was determined in sample PE40-5', 10', 14'11" by analyzing an extract prepared in accordance with the CAM WET procedure. Soluble copper was detected in sample PE40-5', 10', 14'11" at a concentration of 1.4 milligrams per liter (mg/L) which is below the STLC of 25 mg/L.

TEH

A total of 133 soil samples were analyzed for TEH concentrations by DHS Method 8015M. TEH as diesel (C13-C22) and/or oil range (C23+) organics were detected in 10 of the 133 soil samples analyzed. The maximum TEH as diesel concentration was 105 mg/kg in PE36-5', 9', 14'3". The maximum TEH as oil concentration was 180 mg/kg in PE3-20', 29'3".

OCPs

A total of 133 soil samples were analyzed for OCP concentrations by USEPA Method 8081A. The following OCP concentrations were detected above Practical Quantitation Limits (PQLs):

- Dichlorodiphenyldichloroethylene (DDE) was detected in PE40-5', 10', 14'11" at a concentration of 4.48 micrograms per kilogram (µg/kg)
- Dichlorodiphenyltrichloroethane (DDT) was detected in the following samples:
  - PE40-5', 10', 14'11" at a concentration of 36.1 µg/kg
  - PE27-3' at a concentration of 15.4 µg/kg
  - PE45-3' at a concentration of 14.6 µg/kg
  - PE28-3' at a concentration of 11.8 µg/kg

Several OCPs, including dichlorodiphenyldichloroethane (DDD), DDE, DDT, alpha-chlordane, gamma-chlordane, and dieldrin were detected below the PQL but above the Method Detection Limit (MDL). The reported concentrations for these OCPs are "J-flagged" by the laboratory to indicate that the values are estimated.

PCBs

A total of 133 soil samples were analyzed for PCB concentrations by USEPA Method 8082. PCBs were not detected in the soil samples analyzed.

PAHs

A total of 133 soil samples were analyzed for PAH concentrations by USEPA Method 8270. The following summarizes the results of the PAH analyses:

- Carcinogenic and/or non-carcinogenic PAHs[5] were detected in 21 of the 133 soil samples analyzed.
- Carcinogenic PAHs benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-c,d)pyrene, and/or naphthalene were detected in the following 8 soil samples:
  - PE1-20', 28'4"
  - PE9-20', 30', 40', 49'11", 60'
  - PE13-20', 30', 40', 50', 60'
  - PE14-20', 29'7"
  - PE20-20', 29'1", 40', 49'1", 56'
  - PE27-20', 29'11", 40', 48', 60'
  - PE43-5', 9'11", 13'11"
  - PE44-21'9", 29'6", 40', 50'
- Benzo(a)pyrene (BaP) equivalent concentrations for the 8 samples with detected carcinogenic PAH concentrations are summarized on Table 8. BaP concentrations ranged from 13.1 µg/kg in PE43-5', 9'11", 13'11" to 733.8 µg/kg in PE27-20', 29'11", 40', 48', 60'.

VOCs

A total of 93 soil samples were analyzed for VOC concentrations by USEPA Method 8260B. VOCs were not detected above PQLs in the soil samples analyzed. Acetone was detected in three samples, chloroform was detected in two samples, cis-1,2-dichlorethene was detected in one sample (one of the three samples that acetone was detected), and trichloroethene was detected in one sample above their respective MDL and below their PQL at maximum concentrations of 27 µg/kg, 8 µg/kg, 4.6 µg/kg, and 7 µg/kg, respectively.

3.2 ELUTRIATE AND SEAWATER BLANK

Elutriate samples were prepared and analyzed from ocean water collected from Pier E, Slip 1 and soil collected from borings PE3 (17-' to 29'3" bgs), PE20 (17' to 52'11" bgs), PE27 (17' to 62'2" bgs), and PE40 (5'6" to 17' bgs). The following summarizes the analytical results for the elutriate samples and seawater blank:

[5] PAHs considered carcinogenic or non-carcinogenic based on listing in the USEPA Region 9 Preliminary Remediation Goals (PRGs).

Metals

A total of four (4) elutriate samples and one (1) seawater blank were analyzed for total metal concentrations by USEPA Method 6000/7000. The following maximum total metal concentrations were detected:

Parameter	Maximum Concentration (mg/L)	Sample Location
Antimony	<0.00209	NA
Arsenic	<0.00308	NA
Barium	**0.257**	PE40-Comp.
Beryllium	<0.000176	NA
Cadmium	<0.00035	NA
Chromium	<0.00035	NA
Cobalt	**0.00783**	PE3-Comp.
Copper	<0.00134	NA
Lead	<0.00236	NA
Molybdenum	<0.0008	NA
Nickel	**0.0159**	PE3-Comp.
Selenium	<0.00295	NA
Silver	<0.0004	NA
Thallium	<0.00233	NA
Vanadium	**0.0053**	PE3-Comp.
Zinc	**0.034**	PE40-Comp.

TEH

A total of four (4) elutriate samples and one (1) seawater blank were analyzed for TEH concentrations by DHS Method 8015M. TEH as diesel was detected in PE3-Comp. at a concentration of 140 microgram per liter (µg/L). TEHs were not detected in PE20-Comp., PE27-Comp., or PE40-Comp. or the seawater blank.

OCPs

A total of four (4) elutriate samples and one (1) seawater blank were analyzed for OCP concentrations by USEPA Method 8081A. OCPs were not detected in the elutriate samples or seawater blank.

PCBs

A total of four (4) elutriate samples and one (1) seawater blank were analyzed for PCB concentrations by USEPA Method 8082. PCBs were not detected in the elutriate samples or seawater blank.

PAHs

A total of four (4) elutriate samples and one (1) seawater blank were analyzed for PAH concentrations by USEPA Method 8310. PAHs were not detected in the elutriate samples or seawater blank.

3.3 IDW

Metals

One sample of the IDW-soil, PE1-45 Comp., was analyzed for total metal concentrations by USEPA Method 6000/7000. The following total metal concentrations were detected:

Parameter	Maximum Total Metal Concentration (mg/kg)
Antimony	<5
Arsenic	<2.5
Barium	**35.3**
Beryllium	<0.5
Cadmium	<0.5
Chromium	**11.2**
Cobalt	**3.61**
Copper	**7.21**
Lead	**1.71**
Mercury	<0.2
Molybdenum	<0.5
Nickel	**6.07**
Selenium	**0.64**
Silver	<0.5
Thallium	<0.5
Vanadium	**19.2**
Zinc	**21.5**

TEH

One sample of the IDW-soil, PE1-45 Comp., was analyzed for TEH concentrations by DHS Method 8015M. TEHs were not detected in the sample of IDW.

OCPs

One sample of the IDW-soil, PE1-45 Comp., was analyzed for OCP concentrations by USEPA Method 8081A. DDT is the only OCP detected in the sample at a concentration of 17.5 µg/kg.

PCBs

One sample of the IDW-soil, PE1-45 Comp., was analyzed for PCB concentrations by USEPA Method 8082. PCBs were not detected in the sample of IDW.

PAHs

One sample of the IDW-soil, PE1-45 Comp., was analyzed for PAH concentrations by USEPA Method 8270. PAHs were not detected in the sample of IDW.

4.0 CONCLUSIONS

4.1 SOIL

Soil concentrations were compared to Effects Range-Low (ERL) and Effects Range-Median (ERM) sediment quality guidelines published by the National Oceanic & Atmospheric Administration (NOAA, 1999). This comparison was made to assess which chemical constituents may represent a potential contaminant source to aquatic habitats of concern.

ERL and ERM guidelines are based on data compiled from numerous studies in the United States that included sediment contaminant and biological effects information. The guidelines were developed to identify concentrations of contaminants that were associated with biological effects in laboratory, field, or modeling studies. The Effects Range-Low (ERL) value is the concentration equivalent to the lower 10th percentile of the compiled study data. The Effects Range-Median (ERM) is the concentration equivalent to the 50th percentile of the compiled study data. Sediment concentrations below the ERL are interpreted as being "rarely" associated with adverse effects. Concentrations between the ERL and ERM are "occasionally" associated with adverse effects, and concentrations above the ERM represent a probable-effects range within which adverse effects are "frequently" associated (SFEI, 1997).

PQLs reported by the laboratory for PCBs, OCPs, and select metals exceeded the ERL/ERM guidelines. Therefore, the laboratory was requested to report the analytical data with MDLs. Values between PQLs and MDLs were J-flagged by the laboratory as estimated data.

4.1.1 Comparison of Soil Results with ERL/ERM Guidelines

Soil results were compared to applicable ERL/ERM guidelines to evaluate if any parameters exceeded ERLs but were below ERMs. A summary of this comparison is presented on Table 9. In summary the following parameters exceeded the ERL and were below the ERM in the number of samples listed:

- Copper (3 samples)
- Mercury (4 samples)
- Nickel (1 sample)
- Chlordane (1 sample)
- Dieldrin (1 sample)
- p,p-DDE (2 samples)
- p,p-DDT (10 samples)

- DDT, Total (10 samples)
- Naphthalene (1 sample)
- PAHs[6] (1 sample)

The MDLs of the following parameters were above ERLs:

- Three samples analyzed for PAHs were diluted due to matrix interferences causing the MDL for fluorene (20 µg/kg in the three diluted samples) to slightly exceed the ERL of 19 µg/kg. The MDL for fluorene of 10 µg/kg in the 130 undiluted samples was below the ERL of 19 µg/kg. Fluorene was only detected in one of the 133 samples analyzed.
- Acenaphthene was not detected; however, the MDL (100 µg/kg in 130 undiluted samples and 200 µg/kg in 3 diluted samples) exceeded the ERL of 16 µg/kg.
- Acenaphthylene was only detected in one sample. The MDL for acenaphthylene (50 µg/kg in 130 undiluted samples and 100 µg/kg in 3 diluted samples), exceeded the ERL of 44 µg/kg.
- Dieldrin was not detected; however, the MDL of 0.2 µg/kg exceeded the ERL of 0.02 µg/kg.

Soil results were also evaluated to determine if any parameters exceeded the ERMs. Copper exceeded the ERM in one (1) of 133 samples and p,p-DDT exceeded the ERM in four (4) of the 10 samples that exceeded the ERL. No other parameters exceeded ERMs.

There were no parameters with MDLs above ERM values.

4.1.2 Comparison of 95% UCL of Soil Results to ERL/ERM Values

It is unlikely that a column of soil represented by one of the 133 soil samples analyzed as part of this project will be discharged instantaneously to the receiving waters at Slip 1. As a result, soil results should be evaluated giving consideration to the volume and rate that the soil will be discharged into Slip 1.

A detailed analysis of the proposed method for excavation and discharge is outside the scope of this project. However, the 95% Upper Confidence Limit (UCL) was calculated for detected parameters in soil and is considered a more representative value of concentrations that could be expected as a result of the inherent dilution that occurs as soil is excavated, transported, and discharged to Slip 1.

The 95% UCL values were compared to both ERL and ERM guidelines. The 95% UCL for copper and DDT exceeded their respective ERLs. All other 95% UCL concentrations were

[6] PAHs exceeding the ERL include acenaphthylene, anthracene, benz(a)anthracene, benzo(a)pyrene, fluoranthene, fluorene, phenanthrene, pyrene

below ERL guidelines and there were no 95% UCL values above ERM guidelines. It should be noted that the majority of the calculated 95% UCL values were based on a non-parametric distribution suggesting a detailed analysis of the data set is warranted before relying on the calculated values. Calculated 95% UCL values are also summarized on Table 9.

4.1.3 Comparison of Soil Results to State and Federal Hazardous Waste Criteria

Analytical results were compared to TTLCs. All parameters were below applicable TTLC criteria. Analytical results were then compared to applicable California STLC and Federal Toxic Characteristic Leaching Procedure (TCLP) values. Industry standard is to compare total results for applicable parameters to 10-times STLC values and 20-times TCLP values due to dilution associated with associated soluble extraction procedures. If a parameters concentration exceeds either 10-times the STLC or 20-times the TCLP, the soluble concentration is determined in the sample by either the CAM Wet (State) or TCLP (Federal) procedures.

Total copper, detected at a concentration of 1,600 mg/kg in sample PE40-5', 10', 14'11", is the only sample that required testing to determine the soluble concentration. This value is below the TTLC of 2,500 mg/kg but exceeds 10-times the STLC of 5 mg/L. Therefore, the soluble copper concentration was determined in sample PE40-5', 10', 14'11" by analyzing an extract prepared in accordance with the CAM WET procedure. Soluble copper was detected in sample PE40-5', 10', 14'11" at a concentration of 1.4 mg/L.

4.2 ELUTRIATE

Elutriate concentrations were compared to the California Toxics Rule (CTR) Criterion Maximum Concentrations (CMC) and Criterion Continuous Concentrations (CCC). CMC values represent the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. CCC values represent the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects (40CFR131.38).

PQLs reported by the laboratory for select metals and OCPs exceeded the CTR guidelines. Therefore, the laboratory was requested to report metals and OCPs with MDLs. Values between PQLs and MDLs were J-flagged by the laboratory.

Comparison of the results of the elutriate samples and Seawater Blank with applicable CMC/CCC values is summarized below and on Table 10.

4.2.1 CMC Comparison

There were no detected parameters that exceeded CMC values. Toxaphene and chlordane are the only parameters whose MDL exceeded CMC values.

4.2.2 CCC Comparison

Nickel is the only detected parameter that exceeded a CCC value. Nickel exceeded the CCC of 8.2 µg/L in one of the four elutriate samples (PE3-Comp. at a concentration of 15.9 µg/L). Nickel was detected in all elutriate samples and in the Seawater Blank sample.

OCPs were not detected in the elutriate samples or Seawater Blank; however, the MDL of several OCPs[7] exceeded CCC values.

PCBs were not detected in the elutriate samples or Seawater Blank; however, the MDLs, which ranged from of 0.11 to 0.27 µg/L, exceeded the CCC of 0.02 µg/kg.

4.3 SUMMARY

4.3.1 Soil

The following summarizes our comparison of soil concentrations to NOAA published ERL/ERM sediment quality guidelines and State and Federal hazardous waste criteria.

OCPs

OCPs above ERL/ERM guidelines were not found at Pier D. One or more OCPs exceeded ERL sediment quality guidelines at 12 of 29 locations sampled at Pier E. DDT was the most common OCP found above the ERL. OCPs were fairly evenly distributed laterally over the entire length of Pier E and were biased vertically to be more prevalent in near surface soils. Seven (7) of the samples exceeding ERLs were collected at a depth of 3-feet bgs; three (3) were composite samples collected from approximately 5-, 10-, and 15-feet bgs; and, two (2) samples were composite samples collected from approximately 20- to 50-feet bgs.

p,p-DDT, the only OCP that exceeded ERM guidelines, exceeded the ERM in four (4) of the ten (10) samples collected at Pier E that exceeded the ERL. p,p-DDT was also biased vertically on Pier E to near surface soils with three (3) of the samples exceeding ERMs collected at a depth of 3-feet bgs and one (1) sample collected from approximately 5-, 10-, and 15-feet bgs.

There were no OCPs that exceeded State and Federal hazardous waste criteria.

[7] OCPs with MDL above CCC values include chlordane, 4,4-DDT, dieldrin, alpha-endosulfan, beta-endosulfan, endrin, heptachlor, heptachlor epoxide, and toxaphene.

Metals

Copper, mercury, and nickel are the only metals that exceeded ERL guidelines. Metals above ERLs were detected in Pier D borings PE2, PE4, and PE9 and Pier E borings PE18, PE40, and PE45.

Copper is the only metal that exceeded ERM guidelines. Copper was only detected above the ERM at one location at Pier E (PE40).

A vertical trend in the distribution of elevated metal concentrations was not noted. Laterally, elevated metal concentrations were slightly biased to the southern end of Piers D and E.

Copper is also the only metal that could have exceeded the STLC. Soluble copper was detected below the STLC of 5 mg/L at a concentration of 1.4 mg/L in PE40-5', 10', 14'11". All other metals were below State and Federal hazardous waste criteria.

PAHs

PAHs only exceeded the ERLs in samples PE27-20', 29'11", 40', 48', 60' and PE39-21', 29'8", 37'6", 49'5". Several PAHs exceeded ERLs in the sample collected from PE27 and naphthalene is the only PAH that exceeded the ERL at PE39.

There are no State or Federal hazardous waste criteria for PAHs.

4.3.2 Elutriate

The following summarizes our comparison of elutriate concentrations to CMC/CCC guidelines presented in the CTR:

- There were no detected parameters that exceeded CMC values.
- Nickel, in elutriate sample PE3-Comp., is the only detected parameter that exceeded a CCC value.
- Toxaphene and chlordane are the only parameters whose MDL exceeded CMC values.
- Several OCP and PCB MDLs exceeded CCC values.

4.3.3 IDW

One composite sample, PE1-45 Comp., was collected from the IDW. Analytical results were compared to applicable TTLC and STLC (California) and TCLP (Federal) hazardous waste guidelines. All parameters were below applicable criteria and it is our opinion that the IDW can be disposed as non-hazardous waste.

5.0 REFERENCES

National Oceanic & Atmospheric Administration (NOAA). 1999. *Screening Quick Reference Tables*. September

San Francisco Estuary Institute. 1997. *Regional Monitoring Program 1997 Annual Report*.

State Water Resources Control Board. 2005. *Water Quality Control Plan, Ocean Waters of California*.

United States Environmental Protection Agency (USEPA) and United States Army Corps of Engineers (Corps). 1998. *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual*. February

USEPA. 2004. *Region 9 Preliminary Remediation Goals*. November (http://www.epa.gov/region09/waste/sfund/prg/)

Figures

FIGURE 1
SITE LOCATION MAP

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MN (13.0° E)

0 400 800 1200 1600 2000 2400 2800 ft
Data Zoom 13-5

LEGEND

- Cross Section Lines (Geotechnical Site Characterization, Pier E Redevelopment Project, Port of Long Beach, California, March 2006)
- Daylight Lines for Rock Dredged Slopes
- Existing Sheet Pile
- Proposed Toe and Crest of Cut Slope

- 2006-Pacific Edge Borings
- 2005-Fugro Borings
- 2005-Fugro CPT
- 2004-Fugro Borings
- 2004-Fugro CPT
- 2003-Fugro Borings
- 2003-Fugro CPT
- 1994 Dames&Moore Borings (location approximate)
- 1991 Ch2MHill Borings (location approximate)
- 1977 LeRoy Crandall Borings (location approximate)
- 1994 Dames&Moore Borings (location approximate)

Oil Well Locations

0 100 200 300
SCALE

PLOT PLAN

PIER E/MIDDLE HARBOR REDEVELOPMENT
PORT OF LONG BEACH, CALIFORNIA

Pacific Edge Engineering, Inc.

CHECKED BY:	CAS
DRAFTED BY:	GRD
FILENAME:	FIGURE2
DATE:	8/21/06

FIGURE 2

DWG INFO: P:\5469\CADD\546900UTILPLAN.DWG; FEB 01 2006 - 02:52 PM; SSALAZAR; (C) MOFFATT AND NICHOL ENGINEERS

Tables

TABLE 1
SUMMARY OF BORING PROGRAM
PIER E/MIDDLE HARBOR REDEVELOPMENT PROJECT
PORT OF LONG BEACH, CALIFORNIA

BORING ID	DATE DRILLED	PROPOSED TOTAL DEPTH (Feet)	ACTUAL TOTAL DEPTH (Feet)	EXCEPTIONS
PIER D CUTBACK				
PE1	4/11 & 4/28 & 5/1/06	30'	28'10"	Refusal was met at 18-feet on 4/28/06. The boring was moved approximately 2-feet and was sampled from 20- to 30-feet on 5/1/06. All proposed samples were collected and submitted for analysis.
PE2	4/4 & 4/6/06	64'	53'6"	The sampler was broken attempting to sample from 56-to 60-feet on 4/6/06. The boring was moved approximately 2-feet and met refusal again at 52-feet on 5/2/06. Sampling was complete at PE2 with the exception of the 56-to 60-foot and 60- to 64-foot samples. A composite sample representing the 20- to 50-foot, instead of the proposed 20- to 60-foot zone, was submitted for laboratory analysis.
PE3	4/6/2006	30'	29'9"	
PE4	4/6/2006	64'	62'5"	
PE5	5/1/2006	30'	30'	
PE6	4/7/2006	30'	30'10"	
PE7	4/7/2006	64'	62'8"	
PE8	4/7/2006	30'	30'6"	
PE9	4/7 & 4/10/06	64'	62'4"	
PE10	4/11/2006	30'	20'8"	Refusal was met at 24-feet on 4/11/06. A water line was broken at approximately 3-feet attempting to re-drill this location on 5/2/06. Samples were collected and analyzed from PE10 at 3-feet, 5-feet, 10-feet, and 15-feet. The proposed 20- to 30-foot composite sample was not analyzed.
PE11	4/10/2006	64'	62'4"	
PE12	4/11/2006	30'	29'10"	
PE13	4/10 & 4/11/06	64'	62'4"	
PE14	4/11/2006	30'	30'1"	
PE15	5/1/2006	30'	26'3"	

TABLE 1
SUMMARY OF BORING PROGRAM
PIER E/MIDDLE HARBOR REDEVELOPMENT PROJECT
PORT OF LONG BEACH, CALIFORNIA

BORING ID	DATE DRILLED	PROPOSED TOTAL DEPTH (Feet)	ACTUAL TOTAL DEPTH (Feet)	EXCEPTIONS
NORTH END OF SLIP 3				
PE16	4/28/2006	40'	32'9"	Refusal was met during collection of the 32- to 36-feet on 4/28 and 5/2/06. Sampling was complete at PE16 with the exception of the 36- to 40-foot sample. The proposed 20- to 40-foot composite sample was not analyzed.
PIER E CUTBACK				
PE17	4/27/2006	56'	53'3"	
PE18	4/27/2006	64'	62'7"	
PE19	4/28/2006	48'	46'	The sampler was broken attempting to sample from 36- to 40-feet on 4/28/06. The boring was moved approximately 2-feet north and re-sampled to 48-feet. All proposed samples were collected and submitted for analysis.
PE20	4/20 & 5/2/06	64'	56'7"	Refusal was met at 24-feet on 4/20/06. The boring was re-sampled starting at 20-feet on 5/2/06 and refusal was encountered again at 57-feet. Refusal was caused by timbers present at this depth. A limited amount of recovery was obtained in the 56- to 57-feet sample (most of the sample was wood). Sampling was complete at PE20 with the exception of the 60-foot samples. The sample collected from 56-feet to 57-feet was utilized in the 20-feet to 60-feet composite sample.
PE21	4/20/2006	48'	45'8"	
PE22	4/20/2006	44'	42'5"	
PE23	4/19-20/06	64'	60'8"	
PE24	4/26/2006	48'	44'10"	
PE25	4/14/2006	64'	62'	
PE26	4/26/2006	48'	45'11"	
PE27	4/13/2006	64'	62'2"	
PE28	4/12/2006	48'	45'7"	
PE29	4/12/2006	64'	62'	
PE30	4/12 & 4/13/06	48'	45'10"	

TABLE 1
SUMMARY OF BORING PROGRAM
PIER E/MIDDLE HARBOR REDEVELOPMENT PROJECT
PORT OF LONG BEACH, CALIFORNIA

BORING ID	DATE DRILLED	PROPOSED TOTAL DEPTH (Feet)	ACTUAL TOTAL DEPTH (Feet)	EXCEPTIONS
PE31	4/26/2006	64'	62'1"	
PIER E CUTBACK				
PE32	4/28/2006	48'	45'10"	
PE33	4/25/2006	48'	46'	
PE34	4/25/2006	56'	53'9"	
PE35	4/17/2006	64'	62'2"	
PE36	4/17/2006	56'	49'3"	The sampler was broken attempting to sample from 52- to 56-feet on 4/17/06. All samples for analysis were collected at PE36. A sample for logging from 52-feet to 56-feet was the only sample that was not collected.
PE37	4/18/2006	56'	53'2"	
PE38	4/18/2006	64'	60'11"	
PE39	4/21/2006	56'	53'6"	
PE40	4/21/2006	64'	60'10"	
PE41	4/21 & 4/24/06	56'	53'6"	
PE42	5/1/2006	56'	53'3"	
PE43	4/25/2006	56'	54'9"	
PE44	4/24/2006	56'	54'3"	
PE45	4/24/2006	60'	62'4"	

Table 2 - 6010B Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
Between Pier D and E																		
PE16-3'	04-28-06	< 0.15	0.5	27.5	< 0.05	< 0.05	12.6	3.26	4.97	2.0	< 0.1	< 0.05	6.5	< 0.2	< 0.4	< 0.2	18.5	16.0
PE16-5',10'5",16'	04-28-06	0.69	1.4	29.8	< 0.05	< 0.05	10.6	3.9	3.56	1.5	< 0.1	< 0.05	6.37	< 0.2	< 0.4	< 0.2	19.4	20.4
Pier D																		
PE1-3'	04-11-06	< 0.15	< 0.1	25.9	< 0.05	< 0.05	10.6	4.54	3.07	1.35	< 0.1	< 0.05	7.49	0.84	< 0.4	< 0.2	18.8	23.3
PE1-5',10'1",16'	04-28-06	0.52	1.24	63.6	< 0.05	< 0.05	16.9	6.06	9.15	3.94	< 0.1	< 0.05	10.1	0.71	< 0.4	< 0.2	30.4	34.4
PE1-20',28'4"	05-01-06	0.71	< 0.1	66.1	< 0.05	< 0.05	16.7	6.59	10.7	4.89	< 0.1	1.25	9.65	< 0.2	< 0.4	< 0.2	29.5	37.6
PE2-3'	04-04-06	0.55	< 0.1	34.5	< 0.05	< 0.05	11.0	3.91	3.36	1.29	< 0.1	< 0.05	5.93	0.72	< 0.4	< 0.2	22.3	21.1
PE2-5',9'6",16'	04-04-06	0.57	< 0.1	40.7	< 0.05	< 0.05	11.6	5.2	6.07	1.22	< 0.1	< 0.05	8.48	0.87	< 0.4	< 0.2	25.0	24.9
PE2-20',29'6",40'6",49'	04-04-06	0.71	2.6	98.0	< 0.05	< 0.05	24.6	8.26	28.1	17.6	0.25	0.98	16.2	0.79	< 0.4	< 0.2	42.5	70.8
PE3-3'	04-06-06	< 0.15	< 0.1	34.3	< 0.05	< 0.05	10.1	3.86	3.08	1.02	< 0.1	< 0.05	5.68	0.74	< 0.4	< 0.2	21.8	19.7
PE3-5',10',15'	04-06-06	0.7	2.0	141.0	< 0.05	< 0.05	17.9	7.73	12.4	2.32	< 0.1	0.68	12.2	0.62	0.64	< 0.2	42.3	40.2
PE3-20',29'3"	04-06-06	0.67	< 0.1	120.0	< 0.05	< 0.05	25.6	10.1	16.0	2.81	< 0.1	< 0.05	16.5	0.53	< 0.4	< 0.2	44.2	40.8
PE4-3'	04-06-06	0.73	2.39	86.5	< 0.05	< 0.05	25.9	7.3	11.9	4.5	< 0.1	< 0.05	13.2	< 0.2	< 0.4	< 0.2	42.5	33.8
PE4-5',10',16'	04-06-06	0.64	0.26	67.2	< 0.05	< 0.05	14.7	6.28	8.86	2.94	< 0.1	< 0.05	9.58	1.13	< 0.4	< 0.2	28.9	32.3
PE4-20',30',40',49'4",60'	04-06-06	1.01	5.21	115.0	< 0.05	< 0.05	34.8	11.6	43.9	20.2	0.3	0.66	21.4	< 0.2	0.54	< 0.2	58.9	95.9
PE5-3'	05-01-06	0.72	0.6	38.4	< 0.05	< 0.05	10.5	3.33	4.23	1.78	< 0.1	< 0.05	5.83	< 0.2	< 0.4	< 0.2	18.4	19.3
PE5-5',10'2",14'6"	05-01-06	0.56	< 0.1	49.8	< 0.05	< 0.05	11.7	5.4	7.63	2.06	< 0.1	< 0.05	8.45	0.6	< 0.4	< 0.2	23.2	26.7
PE5-20',29'6"	05-01-06	0.63	< 0.1	85.6	< 0.05	< 0.05	18.6	7.09	14.1	3.25	< 0.1	< 0.05	12.6	< 0.2	< 0.4	< 0.2	29.6	42.0
PE6-3'	04-07-06	< 0.15	< 0.1	36.1	< 0.05	< 0.05	12.7	4.03	4.78	1.76	< 0.1	< 0.05	6.97	< 0.2	< 0.4	< 0.2	22.0	22.7
PE6-5',10',14'9"	04-07-06	< 0.15	< 0.1	40.0	< 0.05	< 0.05	12.4	4.79	6.05	1.39	< 0.1	< 0.05	7.38	< 0.2	< 0.4	< 0.2	23.0	24.1
PE6-20',30'	04-07-06	< 0.15	< 0.1	79.7	< 0.05	< 0.05	15.2	5.96	17.0	3.74	< 0.1	< 0.05	10.7	< 0.2	< 0.4	< 0.2	28.2	41.8
PE7-3'	04-07-06	< 0.15	0.52	58.9	< 0.05	< 0.05	16.3	5.09	7.53	1.54	< 0.1	< 0.05	11.9	0.56	< 0.4	< 0.2	26.9	31.0
PE7-5',10',14'4"	04-07-06	0.6	< 0.1	43.6	< 0.05	< 0.05	33.0	5.27	6.29	1.7	< 0.1	0.65	8.56	< 0.2	< 0.4	< 0.2	23.4	33.3
PE7-20',30',40',49'11",60'	04-07-06	0.71	1.64	99.7	< 0.05	< 0.05	24.0	9.03	16.7	5.23	< 0.1	< 0.05	14.7	< 0.2	< 0.4	< 0.2	40.9	52.9
PE8-3'	04-07-06	0.63	4.48	60.5	< 0.05	< 0.05	25.1	8.21	16.5	3.95	< 0.1	< 0.05	16.1	< 0.2	< 0.4	< 0.2	36.5	42.5
PE8-5',10',14'8"	04-07-06	< 0.15	0.55	46.2	< 0.05	< 0.05	11.4	5.0	6.47	1.81	< 0.1	< 0.05	7.42	< 0.2	< 0.4	< 0.2	23.2	26.4

Table 2 - 6010B Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
PE8-20',30'	04-07-06	0.56	< 0.1	61.2	< 0.05	< 0.05	13.2	5.51	7.14	1.7	< 0.1	< 0.05	8.41	< 0.2	< 0.4	< 0.2	24.6	28.2
PE9-3'	04-07-06	< 0.15	1.21	38.1	< 0.05	< 0.05	13.7	5.4	5.34	2.08	< 0.1	< 0.05	8.41	< 0.2	< 0.4	< 0.2	24.9	24.7
PE9-5',10',14'6"	04-07-06	< 0.15	< 0.1	37.2	< 0.05	< 0.05	10.9	4.33	5.98	1.31	< 0.1	< 0.05	6.56	0.6	< 0.4	< 0.2	21.0	21.4
PE9-20',30',40',49'11",60'	04-10-06	0.94	1.97	109.0	< 0.05	< 0.05	21.6	10.1	21.3	5.84	0.22	< 0.05	15.3	0.58	< 0.4	< 0.2	47.5	65.3
PE10-3'	04-11-06	< 0.15	2.19	50.1	< 0.05	< 0.05	14.1	6.14	6.19	1.89	< 0.1	< 0.05	9.82	0.61	< 0.4	< 0.2	28.0	34.0
PE10-5',10',14'6"	04-11-06	< 0.15	< 0.1	59.2	< 0.05	< 0.05	13.5	6.03	8.15	2.53	< 0.1	< 0.05	9.18	0.73	< 0.4	< 0.2	24.5	27.7
PE11-3'	04-10-06	< 0.15	5.53	56.3	< 0.05	< 0.05	14.5	6.5	6.43	2.33	< 0.1	< 0.05	11.7	0.6	< 0.4	< 0.2	29.5	35.2
PE11-5',10',15'	04-10-06	0.58	2.2	44.8	< 0.05	< 0.05	8.95	5.17	7.03	1.58	< 0.1	< 0.05	7.63	0.7	< 0.4	< 0.2	21.1	24.1
PE11-20',29'10",40',50'1",60'	04-10-06	0.64	1.06	89.6	< 0.05	< 0.05	16.9	8.56	12.3	3.14	< 0.1	< 0.05	12.5	0.58	< 0.4	< 0.2	38.3	49.2
PE12-3'	04-11-06	< 0.15	1.24	57.1	< 0.05	< 0.05	14.6	5.54	6.47	3.29	< 0.1	< 0.05	9.56	0.59	< 0.4	< 0.2	29.5	24.5
PE12-5',9'9",14'	04-11-06	< 0.15	< 0.1	27.3	< 0.05	< 0.05	9.63	3.52	2.91	1.31	< 0.1	< 0.05	5.91	0.6	< 0.4	< 0.2	17.1	22.2
PE12-20',29'4"	04-11-06	0.51	< 0.1	59.2	< 0.05	< 0.05	17.7	8.81	11.9	2.98	< 0.1	0.97	16.6	0.62	< 0.4	< 0.2	31.5	35.1
PE13-3'	04-10-06	< 0.15	< 0.1	25.5	< 0.05	< 0.05	7.07	3.12	2.72	1.22	< 0.1	< 0.05	5.06	0.62	< 0.4	< 0.2	16.5	17.7
PE13-5',10',15'	04-10-06	< 0.15	< 0.1	30.3	< 0.05	< 0.05	6.34	3.14	4.64	1.09	< 0.1	< 0.05	4.99	0.67	< 0.4	< 0.2	13.7	15.4
PE13-20',30',40',50',60'	04-10-06	0.8	2.73	111.0	< 0.05	< 0.05	21.2	9.67	19.0	4.91	< 0.1	< 0.05	15.5	< 0.2	< 0.4	< 0.2	42.7	56.7
PE14-3'	04-11-06	< 0.15	< 0.1	30.1	< 0.05	< 0.05	10.9	4.0	3.68	1.47	< 0.1	< 0.05	7.13	0.77	< 0.4	< 0.2	19.3	22.7
PE14-5',10',16'	04-11-06	< 0.15	< 0.1	25.4	< 0.05	< 0.05	8.37	3.14	2.06	1.05	< 0.1	< 0.05	5.26	0.85	< 0.4	< 0.2	15.1	19.8
PE14-20',29'7"	04-11-06	< 0.15	< 0.1	83.9	< 0.05	< 0.05	14.5	7.63	11.0	3.96	< 0.1	< 0.05	10.2	0.71	< 0.4	< 0.2	32.0	43.4
PE15-3'	05-01-06	0.53	1.42	84.9	< 0.05	< 0.05	24.4	7.22	16.8	4.46	< 0.1	< 0.05	14.5	< 0.2	< 0.4	< 0.2	37.8	37.8
PE15-5',9'7",14'	05-01-06	0.58	< 0.1	30.2	< 0.05	< 0.05	11.5	4.33	5.22	1.77	< 0.1	< 0.05	7.3	< 0.2	< 0.4	< 0.2	18.7	20.3
PE15-20'	05-01-06	0.54	< 0.1	60.4	< 0.05	< 0.05	10.6	5.45	7.28	4.55	< 0.1	< 0.05	6.55	0.58	< 0.4	< 0.2	23.4	34.6
Pier E																		
PE17-3'	04-27-06	< 0.15	< 0.1	42.3	< 0.05	< 0.05	11.9	4.33	3.32	1.37	< 0.1	< 0.05	6.5	0.6	< 0.4	< 0.2	24.7	25.1
PE17-5',10',13'11"	04-27-06	< 0.15	< 0.1	37.6	< 0.05	< 0.05	11.7	3.78	5.68	0.94	< 0.1	< 0.05	7.14	0.55	< 0.4	< 0.2	20.7	27.2
PE17-20',28'9",40',49'10"	04-27-06	< 0.15	< 0.1	33.6	< 0.05	< 0.05	11.1	4.27	5.9	1.89	< 0.1	< 0.05	6.97	0.68	< 0.4	< 0.2	19.4	22.5
PE18-3'	04-27-06	< 0.15	< 0.1	34.3	< 0.05	< 0.05	11.8	4.03	3.68	1.74	< 0.1	< 0.05	7.04	0.7	< 0.4	< 0.2	20.7	23.6
PE18-5',9'8",14'1"	04-27-06	< 0.15	< 0.1	27.7	< 0.05	< 0.05	8.22	3.26	5.43	3.71	< 0.1	< 0.05	5.72	0.59	< 0.4	< 0.2	15.1	18.6

Table 2 - 6010B Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
PE18-20',29'2",40',48'8",60'	04-27-06	< 0.15	1.2	73.7	< 0.05	< 0.05	21.3	8.06	17.3	5.15	0.19 J	< 0.05	14.2	0.51	< 0.4	< 0.2	35.9	47.8
PE19-3'	04-28-06	< 0.15	< 0.1	34.5	< 0.05	< 0.05	11.3	3.93	3.9	< 0.1	< 0.1	< 0.05	6.15	0.51	< 0.4	< 0.2	19.5	21.1
PE19-5',10',16'	04-28-06	0.56	1.33	41.9	< 0.05	< 0.05	23.5	4.61	12.6	5.52	< 0.1	2.61	8.25	0.5	< 0.4	< 0.2	20.9	28.6
PE19-20',28'10",40',46'	04-28-06	0.67	< 0.1	70.5	< 0.05	< 0.05	16.7	5.98	11.9	3.89	< 0.1	< 0.05	9.99	< 0.2	< 0.4	< 0.2	25.9	34.3
PE20-3'	04-20-06	< 0.15	< 0.1	33.3	< 0.05	< 0.05	9.03	3.48	3.81	1.21	< 0.1	< 0.05	6.04	< 0.2	< 0.4	< 0.2	18.6	20.1
PE20-5',10',15'3"	04-20-06	< 0.15	< 0.1	25.6	< 0.05	< 0.05	6.7	2.47	3.38	0.7	< 0.1	< 0.05	4.2	< 0.2	< 0.4	< 0.2	12.1	12.8
PE20-20',29'1",40',49'1",56'	05-02-06	0.54	1.33	70.1	< 0.05	< 0.05	22.0	7.47	20.0	6.67	< 0.1	2.69	13.0	< 0.2	< 0.4	< 0.2	32.2	51.4
PE21-3'	04-20-06	< 0.15	< 0.1	38.7	< 0.05	< 0.05	9.24	3.75	3.96	< 0.1	< 0.1	< 0.05	6.34	< 0.2	< 0.4	< 0.2	17.8	20.3
PE21-5',9',14'2"	04-20-06	0.96	2.01	70.0	< 0.05	< 0.05	16.8	7.59	19.9	4.16	< 0.1	< 0.05	14.5	0.73	< 0.4	< 0.2	28.6	37.7
PE21-20',30'4",40'	04-20-06	0.66	< 0.1	40.7	< 0.05	< 0.05	10.4	5.07	6.46	2.02	< 0.1	< 0.05	7.93	0.56	< 0.4	< 0.2	21.3	27.6
PE22-3'	04-20-06	< 0.15	< 0.1	24.6	< 0.05	< 0.05	7.74	3.11	2.96	0.87	< 0.1	< 0.05	5.25	< 0.2	0.64	< 0.2	16.1	17.1
PE22-5',10'5",13'10"	04-20-06	< 0.15	< 0.1	30.4	< 0.05	< 0.05	7.28	2.7	3.68	1.07	< 0.1	< 0.05	5.01	< 0.2	< 0.4	< 0.2	13.8	14.6
PE22-20',29'11",40'	04-20-06	0.59	< 0.1	36.8	< 0.05	< 0.05	10.0	4.53	5.65	1.52	< 0.1	< 0.05	7.2	< 0.2	< 0.4	< 0.2	19.1	24.3
PE23-3'	04-19-06	< 0.15	< 0.1	58.5	< 0.05	< 0.05	14.9	4.69	5.29	2.14	< 0.1	< 0.05	7.88	0.6	< 0.4	< 0.2	27.3	28.0
PE23-5',10',13'11"	04-19-06	< 0.15	< 0.1	59.2	< 0.05	< 0.05	11.0	3.81	4.92	2.58	< 0.1	< 0.05	6.52	0.56	< 0.4	< 0.2	17.6	21.8
PE23-20',29'5",40',49'10",60'	04-19-06	< 0.15	< 0.1	52.0	< 0.05	< 0.05	16.6	5.53	7.05	2.45	< 0.1	< 0.05	10.8	0.55	< 0.4	< 0.2	26.1	31.3
PE24-3'	04-26-06	< 0.15	< 0.1	32.1	< 0.05	< 0.05	10.7	3.59	2.4	1.17	< 0.1	< 0.05	6.16	< 0.2	< 0.4	< 0.2	20.6	19.1
PE24-5',9',13'8"	04-26-06	< 0.15	< 0.1	44.9	< 0.05	< 0.05	10.5	3.99	5.05	1.45	< 0.1	< 0.05	6.5	< 0.2	< 0.4	< 0.2	18.9	20.1
PE24-20',29'6",40',44'10"	04-26-06	< 0.15	< 0.1	35.9	< 0.05	< 0.05	11.7	4.49	6.14	2.29	< 0.1	2.29	7.15	0.53	< 0.4	< 0.2	20.1	24.5
PE25-3'	04-14-06	< 0.15	< 0.1	28.7	< 0.05	< 0.05	8.66	3.52	2.49	1.39	< 0.1	< 0.05	5.74	0.71	< 0.4	< 0.2	17.0	18.2
PE25-5',10',14'4"	04-14-06	< 0.15	< 0.1	25.2	< 0.05	< 0.05	10.6	4.19	5.43	1.5	< 0.1	< 0.05	9.21	0.82	< 0.4	< 0.2	14.2	18.1
PE25-20',29'7",40',48'7",60'	04-14-06	< 0.15	1.49	51.8	< 0.05	< 0.05	10.5	5.21	6.58	2.44	< 0.1	< 0.05	8.15	0.89	< 0.4	< 0.2	23.4	29.2
PE26-3'	04-26-06	< 0.15	< 0.1	32.1	< 0.05	< 0.05	9.82	3.55	3.48	1.24	< 0.1	< 0.05	6.21	< 0.2	< 0.4	< 0.2	17.9	20.4
PE26-5',10'4",14'	04-26-06	< 0.15	< 0.1	29.0	< 0.05	< 0.05	8.71	3.21	4.21	1.36	< 0.1	< 0.05	5.62	< 0.2	< 0.4	< 0.2	14.2	16.4
PE26-20',29'6",40',45'11"	04-26-06	< 0.15	< 0.1	45.0	< 0.05	< 0.05	13.0	4.64	7.04	2.82	< 0.1	< 0.05	7.89	< 0.2	< 0.4	< 0.2	21.4	24.9
PE27-3'	04-13-06	< 0.15	< 0.1	35.1	< 0.05	< 0.05	10.0	4.16	3.83	1.58	< 0.1	< 0.05	7.45	0.68	< 0.4	< 0.2	18.4	22.0

Table 2 - 6010B Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
PE27-5',10',14'1"	04-13-06	< 0.15	< 0.1	34.5	< 0.05	< 0.05	11.8	4.9	6.57	2.91	< 0.1	< 0.05	10.7	0.77	< 0.4	< 0.2	18.7	22.4
PE27-20',29'11",40',48',60'	04-13-06	< 0.15	< 0.1	39.6	< 0.05	< 0.05	9.18	4.27	4.97	1.98	< 0.1	< 0.05	7.04	0.81	< 0.4	< 0.2	17.9	21.9
PE28-3'	04-12-06	< 0.15	< 0.1	27.5	< 0.05	< 0.05	8.27	3.44	2.96	1.21	< 0.1	< 0.05	5.93	0.69	< 0.4	< 0.2	15.2	22.6
PE28-5',10',13'11"	04-12-06	0.53	1.32	46.5	< 0.05	< 0.05	13.2	5.5	8.99	4.5	< 0.1	< 0.05	10.5	0.65	< 0.4	< 0.2	22.0	29.1
PE28-20',29'5",40'	04-12-06	< 0.15	< 0.1	43.0	< 0.05	< 0.05	9.56	4.69	5.32	1.76	< 0.1	< 0.05	7.48	0.62	< 0.4	< 0.2	18.0	24.6
PE29-3'	04-12-06	< 0.15	< 0.1	43.8	< 0.05	< 0.05	12.5	4.97	3.91	0.91	< 0.1	< 0.05	8.32	0.69	< 0.4	< 0.2	22.1	28.3
PE29-5',10',14'1"	04-12-06	< 0.15	0.45	31.7	< 0.05	< 0.05	9.05	3.93	4.07	1.69	< 0.1	< 0.05	6.33	0.81	< 0.4	< 0.2	17.4	19.9
PE29-20',29'7",40',49',60'	04-12-06	0.65	< 0.1	57.9	< 0.05	< 0.05	13.2	6.17	8.68	2.77	< 0.1	< 0.05	10.0	0.76	< 0.4	< 0.2	24.3	34.4
PE30-3'	04-12-06	< 0.15	< 0.1	33.4	< 0.05	< 0.05	8.93	3.56	2.62	1.22	< 0.1	< 0.05	5.84	0.61	< 0.4	< 0.2	17.0	20.0
PE30-5',10',14'3"	04-12-06	< 0.15	< 0.1	27.3	< 0.05	< 0.05	14.4	6.19	9.32	1.63	< 0.1	< 0.05	15.5	0.82	< 0.4	< 0.2	16.9	23.7
PE30-20',29'8",40'	04-13-06	< 0.15	< 0.1	29.6	< 0.05	< 0.05	10.0	4.23	5.45	2.27	< 0.1	< 0.05	7.47	0.62	< 0.4	< 0.2	17.3	23.5
PE31-3'	04-26-06	< 0.15	< 0.1	34.4	< 0.05	< 0.05	9.8	3.34	3.27	1.27	< 0.1	< 0.05	4.43	< 0.2	< 0.4	< 0.2	17.0	19.3
PE31-5',10',13'10"	04-26-06	< 0.15	< 0.1	31.3	< 0.05	< 0.05	11.0	5.58	7.1	2.37	< 0.1	< 0.05	11.8	0.71	< 0.4	< 0.2	16.3	22.5
PE31-20',29'4",40',50',60'	04-26-06	0.52	< 0.1	42.7	< 0.05	< 0.05	11.3	4.62	5.94	2.05	< 0.1	< 0.05	7.5	0.57	< 0.4	< 0.2	20.3	25.1
PE32-3'	04-28-06	< 0.15	< 0.1	33.3	< 0.05	< 0.05	11.4	3.78	4.32	1.14	< 0.1	< 0.05	6.3	< 0.2	< 0.4	< 0.2	20.0	21.6
PE32-5',10',16'	04-28-06	0.69	< 0.1	49.0	< 0.05	< 0.05	17.2	6.63	9.47	3.92	< 0.1	< 0.05	16.1	0.65	< 0.4	< 0.2	22.3	29.7
PE32-20',29'1",40',45'10"	04-28-06	< 0.15	< 0.1	35.9	< 0.05	< 0.05	11.7	4.49	6.14	2.29	< 0.1	< 0.05	7.15	0.53	< 0.4	< 0.2	20.1	24.5
PE33-3'	04-25-06	< 0.15	< 0.1	36.1	< 0.05	< 0.05	11.6	4.06	4.1	1.4	< 0.1	< 0.05	6.82	< 0.2	< 0.4	< 0.2	21.3	21.7
PE33-5',10',14'1"	04-25-06	< 0.15	< 0.1	86.1	< 0.05	< 0.05	17.8	5.63	9.74	7.6	< 0.1	0.87	13.6	< 0.2	< 0.4	< 0.2	26.4	39.1
PE33-20',28'11",40',46'	04-25-06	0.83	< 0.1	89.3	< 0.05	< 0.05	17.3	6.99	10.9	8.04	< 0.1	< 0.05	11.0	< 0.2	< 0.4	< 0.2	31.4	42.4
PE34-3'	04-25-06	< 0.15	< 0.1	31.1	< 0.05	< 0.05	9.98	3.57	3.49	2.17	< 0.1	< 0.05	6.3	0.59	< 0.4	< 0.2	17.1	20.1
PE34-5',10',16'	04-25-06	0.73	< 0.1	44.8	< 0.05	< 0.05	13.4	4.85	4.53	2.5	< 0.1	< 0.05	8.05	0.67	< 0.4	< 0.2	24.3	27.4
PE34-20',29'7",40',49'7"	04-25-06	< 0.15	2.91	87.9	< 0.05	< 0.05	13.6	5.84	9.19	5.54	< 0.1	< 0.05	8.8	< 0.2	< 0.4	< 0.2	27.6	36.5
PE35-3'	04-17-06	< 0.15	< 0.1	46.8	< 0.05	< 0.05	13.9	5.3	6.25	1.68	< 0.1	< 0.05	9.43	< 0.2	< 0.4	< 0.2	24.0	28.6
PE35-5',10',14'8"	04-17-06	0.54	< 0.1	62.6	< 0.05	< 0.05	10.8	6.1	7.06	4.82	< 0.1	< 0.05	9.81	0.66	< 0.4	< 0.2	21.0	29.2
PE35-20',29'2",40',49'5",60'	04-17-06	0.56	1.03	87.4	< 0.05	< 0.05	16.0	8.04	10.2	4.4	< 0.1	< 0.05	12.2	0.57	< 0.4	< 0.2	35.9	43.3

Table 2 - 6010B Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
PE36-3'	04-17-06	< 0.15	< 0.1	39.2	< 0.05	< 0.05	11.9	4.51	4.96	1.85	< 0.1	< 0.05	8.59	0.7	< 0.4	< 0.2	21.5	24.2
PE36-5',9',14'3"	04-17-06	1.34	1.43	74.4	< 0.05	< 0.05	15.8	6.41	15.4	8.39	< 0.1	< 0.05	11.7	0.94	< 0.4	< 0.2	27.0	35.4
PE36-20',29'8",40',48'9"	04-17-06	0.58	< 0.1	77.9	< 0.05	< 0.05	13.0	5.89	8.63	5.33	< 0.1	< 0.05	9.64	0.64	< 0.4	< 0.2	26.5	36.2
PE37-3'	04-18-06	< 0.15	< 0.1	35.5	< 0.05	< 0.05	10.8	4.24	3.79	1.7	< 0.1	< 0.05	6.81	0.78	< 0.4	< 0.2	21.3	20.9
PE37-5',10',14'6"	04-18-06	0.67	0.95	38.9	< 0.05	< 0.05	14.7	5.74	7.29	2.28	< 0.1	< 0.05	10.1	0.73	< 0.4	< 0.2	27.4	30.4
PE37-20',28'8",40',49'2"	04-18-06	0.59	< 0.1	63.3	< 0.05	< 0.05	11.7	5.71	7.66	3.83	< 0.1	< 0.05	8.83	0.69	< 0.4	< 0.2	25.9	30.7
PE38-3'	04-18-06	< 0.15	< 0.1	34.8	< 0.05	< 0.05	11.8	5.91	4.72	1.19	< 0.1	< 0.05	8.15	0.73	< 0.4	< 0.2	20.5	24.5
PE38-5',9'8",14'4"	04-18-06	< 0.15	< 0.1	38.6	< 0.05	< 0.05	11.1	5.0	5.73	2.6	< 0.1	< 0.05	8.13	0.72	< 0.4	< 0.2	23.5	26.3
PE38-20',29'4",40',49'6",60'	04-18-06	0.75	< 0.1	72.0	< 0.05	< 0.05	16.4	5.86	9.26	5.36	< 0.1	0.64	11.2	0.77	< 0.4	< 0.2	27.8	35.1
PE39-3'	04-21-06	0.56	< 0.1	38.8	< 0.05	< 0.05	13.2	4.46	4.59	1.37	< 0.1	< 0.05	8.16	< 0.2	< 0.4	< 0.2	20.9	24.3
PE39-5',10',14'	04-21-06	< 0.15	< 0.1	25.6	< 0.05	< 0.05	9.66	3.49	4.73	1.43	< 0.1	< 0.05	6.81	< 0.2	< 0.4	< 0.2	16.0	18.9
PE39-21',29'8",37'6",49'5"	04-21-06	0.68	< 0.1	83.1	< 0.05	< 0.05	12.3	5.89	9.32	10.4	< 0.1	< 0.05	8.91	0.69	< 0.4	< 0.2	25.7	41.8
PE40-3'	04-21-06	0.61	< 0.1	38.5	< 0.05	< 0.05	12.1	4.16	8.4	1.63	< 0.1	< 0.05	7.24	< 0.2	< 0.4	< 0.2	20.9	24.4
PE40-5',10',14'11"	04-21-06	0.87	< 0.1	58.5	< 0.05	< 0.05	16.3	4.97	1,600.0	6.03	< 0.1	0.84	13.2	< 0.2	0.65	< 0.2	20.0	72.3
PE40-20',29'8",36',40',48'8",60'	04-21-06	0.84	< 0.1	69.4	< 0.05	< 0.05	13.8	6.12	11.4	8.84	< 0.1	< 0.05	10.8	0.55	< 0.4	< 0.2	20.9	39.1
PE41-3'	04-21-06	< 0.15	0.48	43.5	< 0.05	< 0.05	9.73	4.32	5.99	3.02	< 0.1	< 0.05	6.54	0.59	< 0.4	< 0.2	18.5	25.0
PE41-5',10'2",14'4"	04-21-06	0.55	< 0.1	50.5	< 0.05	< 0.05	11.1	4.69	7.53	5.28	< 0.1	< 0.05	9.37	0.52	< 0.4	< 0.2	21.0	27.9
PE41-20',29'10",40',49'4"	04-21-06	0.6	< 0.1	75.6	< 0.05	< 0.05	14.1	5.87	9.3	10.8	< 0.1	< 0.05	9.74	0.78	0.73	< 0.2	26.2	43.3
PE42-3'	05-01-06	< 0.15	< 0.1	24.2	< 0.05	< 0.05	9.07	2.65	3.89	1.6	< 0.1	< 0.05	4.9	0.6	< 0.4	< 0.2	11.2	20.7
PE42-5',9'10",13'7"	05-01-06	< 0.15	< 0.1	30.6	< 0.05	< 0.05	10.3	3.8	4.99	1.94	< 0.1	< 0.05	6.46	< 0.2	< 0.4	< 0.2	17.8	22.7
PE42-20',29'7",40',49'7"	05-01-06	0.87	0.53	79.9	< 0.05	< 0.05	17.4	6.37	13.0	11.9	< 0.1	< 0.05	10.6	0.93	< 0.4	< 0.2	27.7	48.0
PE43-3'	04-25-06	< 0.15	< 0.1	25.2	< 0.05	< 0.05	8.19	2.68	3.73	1.26	< 0.1	< 0.05	4.77	0.62	< 0.4	< 0.2	12.1	14.9
PE43-5',9'11",13'11"	04-25-06	< 0.15	< 0.1	45.0	< 0.05	< 0.05	12.8	5.7	7.88	3.28	< 0.1	< 0.05	8.78	0.69	< 0.4	< 0.2	25.6	33.0
PE43-20',29'1",40',49'10"	04-25-06	0.96	0.84	110.0	< 0.05	< 0.05	19.2	6.41	15.2	19.5	< 0.1	< 0.05	11.5	0.7	< 0.4	< 0.2	29.0	59.5
PE44-3'	04-24-06	< 0.15	< 0.1	21.2	< 0.05	< 0.05	7.32	3.05	3.93	1.37	< 0.1	< 0.05	5.25	< 0.2	< 0.4	< 0.2	13.5	16.3
PE44-5',9'8",16'	04-24-06	< 0.15	< 0.1	41.3	< 0.05	< 0.05	11.5	5.06	5.81	1.95	< 0.1	< 0.05	8.47	< 0.2	< 0.4	< 0.2	23.0	27.1
PE44-21'9",29'6",40',50'	04-24-06	1.32	4.16	198.0	< 0.05	< 0.05	28.0	8.81	26.9	41.8	< 0.1	< 0.05	16.5	< 0.2	< 0.4	< 0.2	43.1	102.0

Table 2 - 6010B Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	*Sb*	*As*	*Ba*	*Be*	*Cd*	*Cr*	*Co*	*Cu*	*Pb*	*Hg*	*Mo*	*Ni*	*Se*	*Ag*	*Th*	*V*	*Zn*
PE45-3'	04-24-06	**1.05**	**3.96**	**873.0**	< 0.05	< 0.05	**19.6**	**5.27**	**65.2**	**23.9**	< 0.1	**1.73**	**11.9**	< 0.2	< 0.4	< 0.2	**22.7**	**99.0**
PE45-5',9'8",13'9"	04-24-06	< 0.15	< 0.1	**42.6**	< 0.05	< 0.05	**9.44**	**4.28**	**5.51**	**2.43**	< 0.1	< 0.05	**7.05**	< 0.2	< 0.4	< 0.2	**20.0**	**27.4**
PE45-21'11",29'10",40',49'11",60'	04-24-06	**0.99**	**0.56**	**105.0**	< 0.05	< 0.05	**17.4**	**6.8**	**15.2**	**16.5**	< 0.1	< 0.05	**11.5**	**0.77**	**0.69**	< 0.2	**30.9**	**56.6**
Piers D - E																		
PE1-45 Drum Comp.	07-05-06	< 0.5	< 0.25	**35.3**	< 0.5	< 0.5	**11.2**	**3.61**	**7.21**	**1.71**	< 0.2	< 0.5	**6.07**	**0.64**	< 0.5	< 0.5	**19.2**	**21.5**

KEY

Sb - Antimony
As - Arsenic
Ba - Barium
Be - Beryllium
Cd - Cadmium
Cr - Chromium
Co - Cobalt
Cu - Copper
Pb - Lead
Hg - Mercury
Mo - Molybdenum
Ni - Nickel
Se - Selenium
Ag - Silver
Th - Thallium
V - Vanadium
Zn - Zinc

Table 2A - 6010B Elutriate Quality Summary (mg/L)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	*Sb*	*As*	*Ba*	*Be*	*Cd*	*Cr*	*Co*	*Cu*	*Pb*	*Hg*	*Mo*	*Ni*	*Se*	*Ag*	*Th*	*V*	*Zn*
Pier D																		
PE3-Comp	06-12-06	0.00435 JB	< 0.00308	**0.24**	< 0.00018	0.00096 J	< 0.00035	0.00783 B	< 0.00134	< 0.00236	< 0.00007	0.00196 J	**0.0159**	< 0.00295	0.00185 J	< 0.00233	**0.0053**	**0.0268**
Pier E																		
PE20-Comp	06-12-06	< 0.00209	< 0.00308	**0.0679**	< 0.00018	< 0.00035	< 0.00035	0.00383 JB	< 0.00134	< 0.00236	< 0.00007	< 0.0008	**0.00508**	< 0.00295	0.00175 J	< 0.00233	< 0.00031	0.00508 J
PE27-Comp	06-12-06	0.00366 JB	< 0.00308	**0.0845**	< 0.00018	< 0.00035	< 0.00035	0.00406 JB	< 0.00134	< 0.00236	< 0.00007	< 0.0008	**0.00711**	< 0.00295	0.00114 J	< 0.00233	< 0.00031	**0.0143**
PE40-Comp	06-12-06	< 0.00209	< 0.00308	**0.257**	< 0.00018	< 0.00035	< 0.00035	0.00285 JB	< 0.00134	< 0.00236	< 0.00007	< 0.0008	0.00428 J	< 0.00295	0.00141 J	< 0.00233	< 0.00031	**0.034**
Pier E, Slip 3																		
Seawater blank	06-12-06	< 0.00209	< 0.00308	0.00784 J	< 0.00018	< 0.00035	< 0.00035	0.00208 JB	< 0.00134	< 0.00236	< 0.00007	< 0.0008	0.00153 J	< 0.00295	0.00074 J	< 0.00233	< 0.00031	0.00343 J

NOTE: "J" indicates value is between the Method Detection Limit and Practical Quantitation Limit.
"B" indicates analyte was detected in the Method Blank.

KEY

Sb - Antimony	***Co - Cobalt***	***Ni - Nickel***
As - Arsenic	***Cu - Copper***	***Se - Selenium***
Ba - Barium	***Pb - Lead***	***Ag - Silver***
Be - Beryllium	***Hg - Mercury***	***Th - Thallium***
Cd - Cadmium	***Mo - Molybdenum***	***V - Vanadium***
Cr - Chromium		***Zn - Zinc***

Table 3 - TPH as Diesel and Oil Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	*TPH-Diesel*	*TPH-Oil*
Between Pier D and E			
PE16-3'	04-28-06	< 10.0	< 50.0
PE16-5',10'5",16'	04-28-06	< 10.0	< 50.0
Pier D			
PE1-3'	04-11-06	< 10.0	< 50.0
PE1-5',10'1",16'	04-28-06	< 10.0	< 50.0
PE1-20',28'4"	05-01-06	< 10.0	< 50.0
PE2-3'	04-04-06	< 10.0	< 50.0
PE2-5',9'6",16'	04-04-06	< 10.0	< 50.0
PE2-20',29'6",40'6",49'	04-04-06	< 10.0	< 50.0
PE3-3'	04-06-06	< 10.0	< 50.0
PE3-5',10',15'	04-06-06	< 10.0	< 50.0
PE3-20',29'3"	04-06-06	**48.0**	**180.0**
PE4-3'	04-06-06	< 10.0	< 50.0
PE4-5',10',16'	04-06-06	< 10.0	< 50.0
PE4-20',30',40',49'4",60'	04-06-06	< 10.0	< 50.0
PE5-3'	05-01-06	< 10.0	< 50.0
PE5-5',10'2",14'6"	05-01-06	< 10.0	< 50.0
PE5-20',29'6"	05-01-06	< 10.0	< 50.0
PE6-3'	04-07-06	< 10.0	< 50.0
PE6-5',10',14'9"	04-07-06	< 10.0	< 50.0
PE6-20',30'	04-07-06	< 10.0	< 50.0
PE7-3'	04-07-06	< 10.0	< 50.0
PE7-5',10',14'4"	04-07-06	< 10.0	< 50.0
PE7-20',30',40',49'11",60'	04-07-06	< 10.0	< 50.0
PE8-3'	04-07-06	< 10.0	< 50.0
PE8-5',10',14'8"	04-07-06	< 10.0	< 50.0
PE8-20',30'	04-07-06	< 10.0	< 50.0
PE9-3'	04-07-06	< 10.0	< 50.0
PE9-5',10',14'6"	04-07-06	< 10.0	< 50.0
PE9-20',30',40',49'11",60'	04-10-06	< 10.0	< 50.0
PE10-3'	04-11-06	< 10.0	< 50.0
PE10-5',10',14'6"	04-11-06	< 10.0	< 50.0
PE11-3'	04-10-06	< 10.0	< 50.0
PE11-5',10',15'	04-10-06	< 10.0	< 50.0
PE11-20',29'10",40',50'1",60'	04-10-06	< 10.0	< 50.0
PE12-3'	04-11-06	< 10.0	< 50.0
PE12-5',9'9",14'	04-11-06	< 10.0	< 50.0
PE12-20',29'4"	04-11-06	< 10.0	< 50.0
PE13-3'	04-10-06	< 10.0	< 50.0
PE13-5',10',15'	04-10-06	< 10.0	< 50.0
PE13-20',30',40',50',60'	04-10-06	< 10.0	< 50.0
PE14-3'	04-11-06	< 10.0	< 50.0
PE14-5',10',16'	04-11-06	< 10.0	< 50.0
PE14-20',29'7"	04-11-06	< 10.0	< 50.0
PE15-3'	05-01-06	< 10.0	< 50.0
PE15-5',9'7",14'	05-01-06	< 10.0	< 50.0
PE15-20'	05-01-06	< 10.0	< 50.0

Table 3 - TPH as Diesel and Oil Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	*TPH-Diesel*	*TPH-Oil*
Pier E			
PE17-3'	04-27-06	< 10.0	< 50.0
PE17-5',10',13'11"	04-27-06	< 10.0	**60.0**
PE17-20',28'9",40',49'10"	04-27-06	< 10.0	< 50.0
PE18-3'	04-27-06	**19.0**	< 50.0
PE18-5',9'8",14'1"	04-27-06	< 10.0	< 50.0
PE18-20',29'2",40',48'8",60'	04-27-06	< 10.0	< 50.0
PE19-3'	04-28-06	< 10.0	< 50.0
PE19-5',10',16'	04-28-06	< 10.0	< 50.0
PE19-20',28'10",40',46'	04-28-06	< 10.0	< 50.0
PE20-3'	04-20-06	< 10.0	< 50.0
PE20-5',10',15'3"	04-20-06	< 10.0	< 50.0
PE20-20',29'1",40',49'1",56'	05-02-06	< 10.0	< 50.0
PE21-3'	04-20-06	< 10.0	< 50.0
PE21-5',9',14'2"	04-20-06	**78.0**	< 50.0
PE21-20',30'4",40'	04-20-06	< 10.0	< 50.0
PE22-3'	04-20-06	< 10.0	< 50.0
PE22-5',10'5",13'10"	04-20-06	< 10.0	< 50.0
PE22-20',29'11",40'	04-20-06	< 10.0	< 50.0
PE23-3'	04-19-06	< 10.0	< 50.0
PE23-5',10',13'11"	04-19-06	< 10.0	< 50.0
PE23-20',29'5",40',49'10",60'	04-19-06	< 10.0	< 50.0
PE24-3'	04-26-06	< 10.0	< 50.0
PE24-5',9',13'8"	04-26-06	< 10.0	< 50.0
PE24-20',29'6",40',44'10"	04-26-06	< 10.0	< 50.0
PE25-3'	04-14-06	< 10.0	< 50.0
PE25-5',10',14'4"	04-14-06	< 10.0	< 50.0
PE25-20',29'7",40',48'7",60'	04-14-06	< 10.0	< 50.0
PE26-3'	04-26-06	< 10.0	< 50.0
PE26-5',10'4",14'	04-26-06	< 10.0	< 50.0
PE26-20',29'6",40',45'11"	04-26-06	< 10.0	< 50.0
PE27-3'	04-13-06	< 10.0	< 50.0
PE27-5',10',14'1"	04-13-06	< 10.0	< 50.0
PE27-20',29'11",40',48',60'	04-13-06	< 10.0	< 50.0
PE28-3'	04-12-06	< 10.0	< 50.0
PE28-5',10',13'11"	04-12-06	< 10.0	< 50.0
PE28-20',29'5",40'	04-12-06	< 10.0	< 50.0
PE29-3'	04-12-06	< 10.0	< 50.0
PE29-5',10',14'1"	04-12-06	< 10.0	< 50.0
PE29-20',29'7",40',49',60'	04-12-06	< 10.0	< 50.0
PE30-3'	04-12-06	< 10.0	< 50.0
PE30-5',10',14'3"	04-12-06	< 10.0	< 50.0
PE30-20',29'8",40'	04-13-06	< 10.0	< 50.0
PE31-3'	04-26-06	< 10.0	< 50.0
PE31-5',10',13'10"	04-26-06	< 10.0	< 50.0
PE31-20',29'4",40',50',60'	04-26-06	< 10.0	< 50.0
PE32-3'	04-28-06	< 10.0	< 50.0
PE32-5',10',16'	04-28-06	< 10.0	< 50.0

Table 3 - TPH as Diesel and Oil Soil Quality Summary (mg/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	*TPH-Diesel*	*TPH-Oil*
PE32-20',29'1",40',45'10"	04-28-06	< 10.0	< 50.0
PE33-3'	04-25-06	< 10.0	< 50.0
PE33-5',10',14'1"	04-25-06	< 10.0	< 50.0
PE33-20',28'11",40',46'	04-25-06	< 10.0	< 50.0
PE34-3'	04-25-06	< 10.0	< 50.0
PE34-5',10',16'	04-25-06	< 10.0	< 50.0
PE34-20',29'7",40',49'7"	04-25-06	< 10.0	< 50.0
PE35-3'	04-17-06	< 10.0	< 50.0
PE35-5',10',14'8"	04-17-06	< 10.0	< 50.0
PE35-20',29'2",40',49'5",60'	04-17-06	< 10.0	< 50.0
PE36-3'	04-17-06	< 10.0	< 50.0
PE36-5',9',14'3"	04-17-06	**105.0**	< 50.0
PE36-20',29'8",40',48'9"	04-17-06	< 10.0	< 50.0
PE37-3'	04-18-06	< 10.0	< 50.0
PE37-5',10',14'6"	04-18-06	< 10.0	< 50.0
PE37-20',28'8",40',49'2"	04-18-06	< 10.0	< 50.0
PE38-3'	04-18-06	< 10.0	< 50.0
PE38-5',9'8",14'4"	04-18-06	< 10.0	< 50.0
PE38-20',29'4",40',49'6",60'	04-18-06	< 10.0	< 50.0
PE39-3'	04-21-06	< 10.0	< 50.0
PE39-5',10',14'	04-21-06	< 10.0	< 50.0
PE39-21',29'8",37'6",49'5"	04-21-06	**10.0**	< 50.0
PE40-3'	04-21-06	< 10.0	< 50.0
PE40-5',10',14'11"	04-21-06	**44.0**	**140.0**
PE40-20',29'8",36',40',48'8",60'	04-21-06	< 10.0	< 50.0
PE41-3'	04-21-06	< 10.0	< 50.0
PE41-5',10'2",14'4"	04-21-06	< 10.0	**50.0**
PE41-20',29'10",40',49'4"	04-21-06	< 10.0	< 50.0
PE42-3'	05-01-06	< 10.0	< 50.0
PE42-5',9'10",13'7"	05-01-06	< 10.0	< 50.0
PE42-20',29'7",40',49'7"	05-01-06	< 10.0	< 50.0
PE43-3'	04-25-06	< 10.0	< 50.0
PE43-5',9'11",13'11"	04-25-06	< 10.0	< 50.0
PE43-20',29'1",40',49'10"	04-25-06	< 10.0	< 50.0
PE44-3'	04-24-06	< 10.0	< 50.0
PE44-5',9'8",16'	04-24-06	< 10.0	< 50.0
PE44-21'9",29'6",40',50'	04-24-06	< 10.0	< 50.0
PE45-3'	04-24-06	< 10.0	< 50.0
PE45-5',9'8",13'9"	04-24-06	< 10.0	< 50.0
PE45-21'11",29'10",40',49'11",60'	04-24-06	< 10.0	< 50.0
Piers D - E			
PE1-45 Drum Comp.	07-05-06	< 10.0	< 50.0

Table 3A - TPH as Diesel Elutriate Quality Summary (ug/L)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	*TPH-Diesel*
Pier D		
PE3-Comp	06-12-06	**140.**
Pier E		
PE20-Comp	06-12-06	< 47.
PE27-Comp	06-12-06	< 47.
PE40-Comp	06-12-06	< 47.
Pier E, Slip 3		
Seawater blank	06-12-06	< 47.

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Between Pier D and E																	
PE16-3'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE16-5',10'5",16'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
Pier D																	
PE1-3'	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE1-5',10'1",16'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**5.36**	< 10.0	< 5.0	< 50.0	< 4.0	**10.0**
PE1-20',28'4"	05-01-06	< 100.0	< 50.0	< 2.0	**26.3**	**37.8**	**34.3**	**8.81**	**13.3**	< 5.0	< 17.0	**22.2**	< 10.0	**18.2**	< 50.0	< 4.0	**35.5**
PE2-3'	04-04-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE2-5',9'6",16'	04-04-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE2-20',29'6",40'6",49'	04-04-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE3-3'	04-06-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE3-5',10',15'	04-06-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE3-20',29'3"	04-06-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE4-3'	04-06-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE4-5',10',16'	04-06-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE4-20',30',40',49'4",60'	04-06-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE5-3'	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE5-5',10'2",14'6"	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE5-20',29'6"	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE6-3'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE6-5',10',14'9"	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
PE6-20',30'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE7-3'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE7-5',10',14'4"	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE7-20',30',40',49'11",60'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**13.7**	< 10.0	< 5.0	< 50.0	< 4.0	**17.4**
PE8-3'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE8-5',10',14'8"	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE8-20',30'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE9-3'	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE9-5',10',14'6"	04-07-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE9-20',30',40',49'11",60'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	**24.9**	**34.5**	< 7.0	**25.2**	< 5.0	< 17.0	**22.9**	< 10.0	< 5.0	< 50.0	**18.0**	**47.7**
PE10-3'	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE10-5',10',14'6"	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE11-3'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE11-5',10',15'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE11-20',29'10",40',50'1",60'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE12-3'	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE12-5',9'9",14'	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE12-20',29'4"	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE13-3'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE13-5',10',15'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE13-20',30',40',50',60'	04-10-06	< 100.0	< 50.0	< 2.0	< 5.0	**11.5**	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**30.0**	< 10.0	< 5.0	< 50.0	< 4.0	**46.7**

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
PE14-3'	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE14-5',10',16'	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE14-20',29'7"	04-11-06	< 100.0	< 50.0	< 2.0	< 5.0	**6.68**	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**19.3**	< 10.0	< 5.0	< 50.0	< 4.0	**29.9**
PE15-3'	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE15-5',9'7",14'	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE15-20'	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**9.94**	< 10.0	< 5.0	< 50.0	< 4.0	**13.9**
Pier E																	
PE17-3'	04-27-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE17-5',10',13'11"	04-27-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE17-20',28'9",40',49'10"	04-27-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE18-3'	04-27-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE18-5',9'8",14'1"	04-27-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE18-20',29'2",40',48'8",60'	04-27-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE19-3'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE19-5',10',16'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE19-20',28'10",40',46'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE20-3'	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE20-5',10',15'3"	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE20-20',29'1",40',49'1",56'	05-02-06	< 100.0	< 50.0	**36.9**	**122.0**	**98.4**	**88.0**	**47.6**	**38.8**	**115.0**	< 17.0	**284.0**	< 10.0	**39.4**	< 50.0	**162.0**	**366.0**
PE21-3'	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE21-5',9',14'2"	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
PE21-20',30'4",40'	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE22-3'	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE22-5',10'5",13'10"	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE22-20',29'11",40'	04-20-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE23-3'	04-19-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE23-5',10',13'11"	04-19-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE23-20',29'5",40',49'10",60'	04-19-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE24-3'	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE24-5',9',13'8"	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE24-20',29'6",40',44'10"	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE25-3'	04-14-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE25-5',10',14'4"	04-14-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE25-20',29'7",40',48'7",60'	04-14-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE26-3'	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE26-5',10'4",14'	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE26-20',29'6",40',45'11"	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**6.77**	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE27-3'	04-13-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**23.4**	< 10.0	< 5.0	< 50.0	< 4.0	**27.8**
PE27-5',10',14'1"	04-13-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**95.7**	< 10.0	< 5.0	< 50.0	< 4.0	**90.3**
PE27-20',29'11",40',48',60'	04-13-06	< 100.0	**154.0**	**203.0**	**298.0**	***638.0***	**462.0**	**173.0**	**78.5**	**321.0**	< 17.0	**766.0**	**111.0**	< 5.0	< 50.0	**810.0**	**912.0**
PE28-3'	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE28-5',10',13'11"	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
PE28-20',29'5",40'	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE29-3'	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE29-5',10',14'1"	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE29-20',29'7",40',49',60'	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE30-3'	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE30-5',10',14'3"	04-12-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE30-20',29'8",40'	04-13-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE31-3'	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE31-5',10',13'10"	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE31-20',29'4",40',50',60'	04-26-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE32-3'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE32-5',10',16'	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE32-20',29'1",40',45'10"	04-28-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE33-3'	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE33-5',10',14'1"	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE33-20',28'11",40',46'	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE34-3'	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE34-5',10',16'	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE34-20',29'7",40',49'7"	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**31.0**	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE35-3'	04-17-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE35-5',10',14'8"	04-17-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
PE35-20',29'2",40',49'5",60'	04-17-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE36-3'	04-17-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE36-5',9',14'3"	04-17-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE36-20',29'8",40',48'9"	04-17-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE37-3'	04-18-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**11.7**	< 10.0	< 5.0	< 50.0	< 4.0	**17.1**
PE37-5',10',14'6"	04-18-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE37-20',28'8",40',49'2"	04-18-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE38-3'	04-18-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE38-5',9'8",14'4"	04-18-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE38-20',29'4",40',49'6",60'	04-18-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE39-3'	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE39-5',10',14'	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE39-21',29'8",37'6",49'5"	04-21-06	< 200.0	< 100.0	< 4.0	< 10.0	< 10.0	< 4.0	< 14.0	< 4.0	< 10.0	< 34.0	< 10.0	< 20.0	< 10.0	**274.0**	< 8.0	< 20.0
PE40-3'	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE40-5',10',14'11"	04-21-06	< 200.0	< 100.0	< 4.0	< 10.0	< 10.0	< 4.0	< 14.0	< 4.0	< 10.0	< 34.0	< 10.0	< 20.0	< 10.0	< 100.0	< 8.0	< 20.0
PE40-20',29'8",36',40',48'8",60'	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE41-3'	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE41-5',10'2",14'4"	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE41-20',29'10",40',49'4"	04-21-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**42.6**	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE42-3'	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE42-5',9'10",13'7"	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0

Table 4 - Polynuclear Aromatic Hydrocarbon (PAH) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
PE42-20',29'7",40',49'7"	05-01-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE43-3'	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE43-5',9'11",13'11"	04-25-06	< 100.0	< 50.0	< 2.0	**16.2**	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**25.3**	< 10.0	< 5.0	< 50.0	**15.9**	< 10.0
PE43-20',29'1",40',49'10"	04-25-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE44-3'	04-24-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE44-5',9'8",16'	04-24-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0
PE44-21'9",29'6",40',50'	04-24-06	< 100.0	< 50.0	< 2.0	< 5.0	**19.8**	< 2.0	< 7.0	**30.9**	< 5.0	< 17.0	**23.8**	< 10.0	< 5.0	< 50.0	< 4.0	**55.1**
PE45-3'	04-24-06	< 200.0	< 100.0	**27.9**	< 10.0	< 10.0	< 4.0	< 14.0	< 4.0	< 10.0	< 34.0	**158.0**	< 20.0	< 10.0	< 100.0	**59.0**	**146.0**
PE45-5',9'8",13'9"	04-24-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	**11.0**	< 10.0	< 5.0	< 50.0	< 4.0	**10.0**
PE45-21'11",29'10",40',49'11",60'	04-24-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	**61.1**
Piers D - E																	
PE1-45 Drum Comp.	07-05-06	< 100.0	< 50.0	< 2.0	< 5.0	< 5.0	< 2.0	< 7.0	< 2.0	< 5.0	< 17.0	< 5.0	< 10.0	< 5.0	< 50.0	< 4.0	< 10.0

Table 4A - Polynuclear Aromatic Hydrocarbon (PAH) Elutriate Quality Summary (ug/L)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
Pier D																	
PE3-Comp	06-12-06	< 0.46	< 1.1	< 0.04	< 0.079	< 0.06	< 0.11	< 0.14	< 0.061	< 0.046	< 0.15	< 0.085	< 0.11	< 0.051	< 0.63	< 0.057	< 0.082
Pier E																	
PE20-Comp	06-12-06	< 0.46	< 1.1	< 0.04	< 0.079	< 0.06	< 0.11	< 0.14	< 0.061	< 0.046	< 0.15	< 0.085	< 0.11	< 0.051	< 0.63	< 0.057	< 0.082
PE27-Comp	06-12-06	< 0.46	< 1.1	< 0.04	< 0.079	< 0.06	< 0.11	< 0.14	< 0.061	< 0.046	< 0.15	< 0.085	< 0.11	< 0.051	< 0.63	< 0.057	< 0.082
PE40-Comp	06-12-06	< 0.46	< 1.1	< 0.04	< 0.079	< 0.06	< 0.11	< 0.14	< 0.061	< 0.046	< 0.15	< 0.085	< 0.11	< 0.051	< 0.63	< 0.057	< 0.082
Pier E, Slip 3																	
Seawater blank	06-12-06	< 0.46	< 1.1	< 0.04	< 0.079	< 0.06	< 0.11	< 0.14	< 0.061	< 0.046	< 0.15	< 0.085	< 0.11	< 0.051	< 0.63	< 0.057	< 0.082

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE1-3'	PE1-16'	PE2-3'	PE2-5',9'6",16'	PE2-14'11"	PE3-3'	PE3-15'	PE4-3'	PE4-14'10"	PE5-3'	PE5-14'6"	PE6-3'	PE6-14'9"	PE7-3'	PE7-14'4"	PE8-3'	PE8-14'8"	PE9-3'
Date Sampled:	5/1/06	5/1/06	4/6/06	4/6/06	4/6/06	4/6/06	4/6/06	4/6/06	4/6/06	5/1/06	5/1/06	4/7/06	4/7/06	4/7/06	4/7/06	4/7/06	4/7/06	4/10/06
1,1,1,2-Tetrachloroethane	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28
1,1,1-Trichloroethane	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03
1,1,2,2-Tetrachloroethane	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25
1,1,2-Trichloroethane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,1-Dichloroethane	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
1,1-Dichloroethene	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
1,1-Dichloropropene	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12
1,2,3-Trichlorobenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,2,3-Trichloropropane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,2,4-Trichlorobenzene	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82
1,2,4-Trimethylbenzene	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19
1,2-Dichlorobenzene	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03
1,2-Dichloroethane	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57
1,2-Dichloropropane	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66
1,3,5-Trimethylbenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,3-Dichlorobenzene	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
1,3-Dichloropropane	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
1,4-Dichlorobenzene	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23
2,2-Dichloropropane	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36
2-Chloroethyl vinyl ether	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
2-Chlorotoluene	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35
2-Hexanone	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18
4-Chlorotoluene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
4-Methyl-2-pentanone (MIBK)	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14
Acetone	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7
Benzene	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02
Bromobenzene	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Bromochloromethane	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Bromodichloromethane	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Bromoform	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Carbon disulfide	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
Carbon tetrachloride	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48
Chlorobenzene	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89
Chloroethane	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15
Chloroform	8.0 J	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	2.0 J	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24
cis-1,2-Dichloroethene	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE1-3'	PE1-16'	PE2-3'	PE2-5',9'6",16'	PE2-14'11"	PE3-3'	PE3-15'	PE4-3'	PE4-14'10"	PE5-3'	PE5-14'6"	PE6-3'	PE6-14'9"	PE7-3'	PE7-14'4"	PE8-3'	PE8-14'8"	PE9-3'
Date Sampled:	5/1/06	5/1/06	4/6/06	4/6/06	4/6/06	4/6/06	4/6/06	4/6/06	4/6/06	5/1/06	5/1/06	4/7/06	4/7/06	4/7/06	4/7/06	4/7/06	4/7/06	4/10/06
cis-1,3-Dichloropropene	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
DBCP	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69
Dibromochloromethane	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Dibromomethane	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Dichlorodifluoromethane	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
EDB	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Ethylbenzene	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37
Hexachlorobutadiene	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77
Isopropylbenzene	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42
m- & p-Xylenes	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
MEK	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83
Methyl bromide	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Methyl chloride	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
Methylene chloride	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31
MTBE	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Naphthalene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
n-Butylbenzene	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
n-Propylbenzene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
o-Xylene	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01
p-Isopropyltoluene	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86
sec-Butylbenzene	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04
Styrene	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
tert-Butylbenzene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
Tetrachloroethene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
Toluene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
trans-1,2-Dichloroethene	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16
trans-1,3-Dichloropropene	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96
Trichloroethene	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15
Trichlorofluoromethane	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15
Vinyl acetate	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8
Vinyl chloride	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE9-14'6"	PE10-3'	PE10-14'6"	PE11-3'	PE11-14'7"	PE12-3'	PE12-14'6"	PE13-3'	PE13-14'4"	PE14-3'	PE14-16'	PE15-3'	PE15-14'	PE16-3'	PE16-16'	PE17-3'	PE17-13'11"	PE18-3'
Date Sampled:	4/10/06	4/11/06	4/11/06	4/10/06	4/10/06	4/11/06	4/11/06	4/11/06	4/11/06	4/11/06	4/11/06	5/1/06	5/1/06	4/28/06	4/28/06	4/27/06	4/27/06	4/27/06
1,1,1,2-Tetrachloroethane	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28
1,1,1-Trichloroethane	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03
1,1,2,2-Tetrachloroethane	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25
1,1,2-Trichloroethane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,1-Dichloroethane	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
1,1-Dichloroethene	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
1,1-Dichloropropene	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12
1,2,3-Trichlorobenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,2,3-Trichloropropane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,2,4-Trichlorobenzene	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82
1,2,4-Trimethylbenzene	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19
1,2-Dichlorobenzene	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03
1,2-Dichloroethane	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57
1,2-Dichloropropane	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66
1,3,5-Trimethylbenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,3-Dichlorobenzene	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
1,3-Dichloropropane	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
1,4-Dichlorobenzene	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23
2,2-Dichloropropane	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36
2-Chloroethyl vinyl ether	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
2-Chlorotoluene	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35
2-Hexanone	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18
4-Chlorotoluene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
4-Methyl-2-pentanone (MIBK)	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14
Acetone	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7
Benzene	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02
Bromobenzene	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Bromochloromethane	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Bromodichloromethane	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Bromoform	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Carbon disulfide	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
Carbon tetrachloride	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48
Chlorobenzene	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89
Chloroethane	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15
Chloroform	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24
cis-1,2-Dichloroethene	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE9-14'6"	PE10-3'	PE10-14'6"	PE11-3'	PE11-14'7"	PE12-3'	PE12-14'6"	PE13-3'	PE13-14'4"	PE14-3'	PE14-16'	PE15-3'	PE15-14'	PE16-3'	PE16-16'	PE17-3'	PE17-13'11"	PE18-3'
Date Sampled:	4/10/06	4/11/06	4/11/06	4/10/06	4/10/06	4/11/06	4/11/06	4/11/06	4/11/06	4/11/06	4/11/06	5/1/06	5/1/06	4/28/06	4/28/06	4/27/06	4/27/06	4/27/06
cis-1,3-Dichloropropene	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
DBCP	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69
Dibromochloromethane	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Dibromomethane	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Dichlorodifluoromethane	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
EDB	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Ethylbenzene	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37
Hexachlorobutadiene	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77
Isopropylbenzene	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42
m- & p-Xylenes	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
MEK	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83
Methyl bromide	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Methyl chloride	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
Methylene chloride	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31
MTBE	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Naphthalene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
n-Butylbenzene	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
n-Propylbenzene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
o-Xylene	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01
p-Isopropyltoluene	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86
sec-Butylbenzene	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04
Styrene	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
tert-Butylbenzene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
Tetrachloroethene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
Toluene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
trans-1,2-Dichloroethene	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16
trans-1,3-Dichloropropene	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96
Trichloroethene	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15
Trichlorofluoromethane	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15
Vinyl acetate	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8
Vinyl chloride	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE18-14'1"	PE19-3'	PE19-16'	PE20-3'	PE20-15'3"	PE21-3'	PE21-9'	PE21-10'	PE22-3'	PE22-10'5"	PE23-3'	PE23-13'11"	PE24-3'	PE24-9'	PE24-13'8"	PE25-3'	PE25-14'4"	PE26-3'
Date Sampled:	4/27/06	4/28/06	4/28/06	5/2/06	5/2/06	4/20/06	4/20/06	4/20/06	4/20/06	4/20/06	4/20/06	4/20/06	4/26/06	4/26/06	4/26/06	4/14/06	4/14/06	4/26/06
1,1,1,2-Tetrachloroethane	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28
1,1,1-Trichloroethane	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03
1,1,2,2-Tetrachloroethane	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25
1,1,2-Trichloroethane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,1-Dichloroethane	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
1,1-Dichloroethene	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
1,1-Dichloropropene	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12
1,2,3-Trichlorobenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,2,3-Trichloropropane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,2,4-Trichlorobenzene	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82
1,2,4-Trimethylbenzene	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19
1,2-Dichlorobenzene	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03
1,2-Dichloroethane	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57
1,2-Dichloropropane	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66
1,3,5-Trimethylbenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,3-Dichlorobenzene	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
1,3-Dichloropropane	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
1,4-Dichlorobenzene	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23
2,2-Dichloropropane	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36
2-Chloroethyl vinyl ether	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
2-Chlorotoluene	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35
2-Hexanone	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18
4-Chlorotoluene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
4-Methyl-2-pentanone (MIBK)	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14
Acetone	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	27.0 J	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7
Benzene	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02
Bromobenzene	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Bromochloromethane	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Bromodichloromethane	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Bromoform	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Carbon disulfide	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
Carbon tetrachloride	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48
Chlorobenzene	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89
Chloroethane	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15
Chloroform	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24
cis-1,2-Dichloroethene	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE18-14'1"	PE19-3'	PE19-16'	PE20-3'	PE20-15'3"	PE21-3'	PE21-9'	PE21-10'	PE22-3'	PE22-10'5"	PE23-3'	PE23-13'11"	PE24-3'	PE24-9'	PE24-13'8"	PE25-3'	PE25-14'4"	PE26-3'
Date Sampled:	4/27/06	4/28/06	4/28/06	5/2/06	5/2/06	4/20/06	4/20/06	4/20/06	4/20/06	4/20/06	4/20/06	4/20/06	4/26/06	4/26/06	4/26/06	4/14/06	4/14/06	4/26/06
cis-1,3-Dichloropropene	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
DBCP	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69
Dibromochloromethane	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Dibromomethane	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Dichlorodifluoromethane	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
EDB	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Ethylbenzene	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37
Hexachlorobutadiene	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77
Isopropylbenzene	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42
m- & p-Xylenes	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
MEK	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83
Methyl bromide	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Methyl chloride	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
Methylene chloride	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31
MTBE	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Naphthalene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
n-Butylbenzene	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
n-Propylbenzene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
o-Xylene	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01
p-Isopropyltoluene	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86
sec-Butylbenzene	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04
Styrene	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
tert-Butylbenzene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
Tetrachloroethene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
Toluene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
trans-1,2-Dichloroethene	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16
trans-1,3-Dichloropropene	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96
Trichloroethene	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15
Trichlorofluoromethane	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15
Vinyl acetate	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8
Vinyl chloride	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE26-14'	PE27-3'	PE27-14'1"	PE28-3'	PE28-13'11"	PE29-3'	PE29-14'1"	PE30-3'	PE30-14'3"	PE31-3'	PE31-13'10"	PE32-3'	PE32-16'	PE33-3'	PE33-14'1"	PE34-3'	PE34-10'	PE35-3'
Date Sampled:	4/26/06	4/13/06	4/13/06	4/12/06	4/12/06	4/12/06	4/12/06	4/13/06	4/13/06	4/26/06	4/26/06	4/28/06	4/28/06	4/25/06	4/25/06	4/25/06	4/25/06	4/17/06
1,1,1,2-Tetrachloroethane	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28
1,1,1-Trichloroethane	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03
1,1,2,2-Tetrachloroethane	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25
1,1,2-Trichloroethane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,1-Dichloroethane	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
1,1-Dichloroethene	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
1,1-Dichloropropene	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12
1,2,3-Trichlorobenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,2,3-Trichloropropane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,2,4-Trichlorobenzene	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82
1,2,4-Trimethylbenzene	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19
1,2-Dichlorobenzene	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03
1,2-Dichloroethane	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57
1,2-Dichloropropane	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66
1,3,5-Trimethylbenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,3-Dichlorobenzene	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
1,3-Dichloropropane	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
1,4-Dichlorobenzene	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23
2,2-Dichloropropane	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36
2-Chloroethyl vinyl ether	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
2-Chlorotoluene	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35
2-Hexanone	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18
4-Chlorotoluene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
4-Methyl-2-pentanone (MIBK)	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14
Acetone	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	19.0 J	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7
Benzene	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02
Bromobenzene	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Bromochloromethane	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Bromodichloromethane	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Bromoform	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Carbon disulfide	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
Carbon tetrachloride	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48
Chlorobenzene	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89
Chloroethane	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15
Chloroform	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24
cis-1,2-Dichloroethene	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE26-14'	PE27-3'	PE27-14'1"	PE28-3'	PE28-13'11"	PE29-3'	PE29-14'1"	PE30-3'	PE30-14'3"	PE31-3'	PE31-13'10"	PE32-3'	PE32-16'	PE33-3'	PE33-14'1"	PE34-3'	PE34-10'	PE35-3'
Date Sampled:	4/26/06	4/13/06	4/13/06	4/12/06	4/12/06	4/12/06	4/12/06	4/13/06	4/13/06	4/26/06	4/26/06	4/28/06	4/28/06	4/25/06	4/25/06	4/25/06	4/25/06	4/17/06
cis-1,3-Dichloropropene	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
DBCP	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69
Dibromochloromethane	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Dibromomethane	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Dichlorodifluoromethane	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
EDB	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Ethylbenzene	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37
Hexachlorobutadiene	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77
Isopropylbenzene	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42
m- & p-Xylenes	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
MEK	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83
Methyl bromide	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Methyl chloride	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
Methylene chloride	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31
MTBE	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Naphthalene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
n-Butylbenzene	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
n-Propylbenzene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
o-Xylene	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01
p-Isopropyltoluene	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86
sec-Butylbenzene	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04
Styrene	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
tert-Butylbenzene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
Tetrachloroethene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
Toluene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
trans-1,2-Dichloroethene	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16
trans-1,3-Dichloropropene	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96
Trichloroethene	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15
Trichlorofluoromethane	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15
Vinyl acetate	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8
Vinyl chloride	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE35-14'8"	PE36-3'	PE36-14'3"	PE37-3'	PE37-14'6"	PE38-3'	PE38-14'4"	PE39-3'	PE39-10'	PE40-3'	PE40-14'11"	PE41-3'	PE41-14'4"	PE42-3'	PE42-13'7"	PE43-3'	PE43-13'11"	PE44-3'
Date Sampled:	4/17/06	4/17/06	4/17/06	4/18/06	4/18/06	4/18/06	4/18/06	4/21/06	4/21/06	4/21/06	4/21/06	4/24/06	4/24/06	5/1/06	5/1/06	4/25/06	4/25/06	4/24/06
1,1,1,2-Tetrachloroethane	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28
1,1,1-Trichloroethane	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03	< 2.03
1,1,2,2-Tetrachloroethane	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25	< 3.25
1,1,2-Trichloroethane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,1-Dichloroethane	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
1,1-Dichloroethene	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6	< 2.6
1,1-Dichloropropene	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12	< 1.12
1,2,3-Trichlorobenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,2,3-Trichloropropane	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
1,2,4-Trichlorobenzene	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82	< 2.82
1,2,4-Trimethylbenzene	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19
1,2-Dichlorobenzene	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03	< 1.03
1,2-Dichloroethane	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57	< 1.57
1,2-Dichloropropane	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66	< 0.66
1,3,5-Trimethylbenzene	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23	< 1.23
1,3-Dichlorobenzene	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
1,3-Dichloropropane	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92	< 0.92
1,4-Dichlorobenzene	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23	< 2.23
2,2-Dichloropropane	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36
2-Chloroethyl vinyl ether	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
2-Chlorotoluene	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35	< 2.35
2-Hexanone	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18	< 3.18
4-Chlorotoluene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
4-Methyl-2-pentanone (MIBK)	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14	< 3.14
Acetone	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7	24.0 J	< 12.7	< 12.7	< 12.7	< 12.7	< 12.7
Benzene	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02	< 1.02
Bromobenzene	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Bromochloromethane	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38	< 0.38
Bromodichloromethane	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
Bromoform	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39	< 3.39
Carbon disulfide	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53	< 5.53
Carbon tetrachloride	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48	< 2.48
Chlorobenzene	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89	< 0.89
Chloroethane	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15	< 2.15
Chloroform	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24	< 1.24
cis-1,2-Dichloroethene	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	4.6 J	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE35-14'8"	PE36-3'	PE36-14'3"	PE37-3'	PE37-14'6"	PE38-3'	PE38-14'4"	PE39-3'	PE39-10'	PE40-3'	PE40-14'11"	PE41-3'	PE41-14'4"	PE42-3'	PE42-13'7"	PE43-3'	PE43-13'11"	PE44-3'
Date Sampled:	4/17/06	4/17/06	4/17/06	4/18/06	4/18/06	4/18/06	4/18/06	4/21/06	4/21/06	4/21/06	4/21/06	4/24/06	4/24/06	5/1/06	5/1/06	4/25/06	4/25/06	4/24/06
cis-1,3-Dichloropropene	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98	< 0.98
DBCP	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69	< 2.69
Dibromochloromethane	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65	< 0.65
Dibromomethane	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3
Dichlorodifluoromethane	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07	< 2.07
EDB	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Ethylbenzene	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37	< 1.37
Hexachlorobutadiene	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77	< 2.77
Isopropylbenzene	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42	< 1.42
m- & p-Xylenes	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
MEK	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83	< 5.83
Methyl bromide	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75	< 2.75
Methyl chloride	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74	< 1.74
Methylene chloride	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31	< 3.31
MTBE	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9	< 2.9
Naphthalene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
n-Butylbenzene	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05	< 2.05
n-Propylbenzene	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14	< 1.14
o-Xylene	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01	< 1.01
p-Isopropyltoluene	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86	< 3.86
sec-Butylbenzene	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04	< 3.04
Styrene	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8	< 0.8
tert-Butylbenzene	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34	< 1.34
Tetrachloroethene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
Toluene	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93	< 0.93
trans-1,2-Dichloroethene	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16	< 2.16
trans-1,3-Dichloropropene	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96	< 0.96
Trichloroethene	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15	< 1.15
Trichlorofluoromethane	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15	< 3.15
Vinyl acetate	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8	< 10.8
Vinyl chloride	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79	< 2.79

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE44-16'	PE45-3'	PE45-13'9'	PE1-45 Drum Comp.
Date Sampled:	4/24/06	4/24/06	4/24/06	7/5/06
1,1,1,2-Tetrachloroethane	< 1.28	< 1.28	< 1.28	< 10.0
1,1,1-Trichloroethane	< 2.03	< 2.03	< 2.03	< 10.0
1,1,2,2-Tetrachloroethane	< 3.25	< 3.25	< 3.25	< 10.0
1,1,2-Trichloroethane	< 1.74	< 1.74	< 1.74	< 10.0
1,1-Dichloroethane	< 1.3	< 1.3	< 1.3	< 10.0
1,1-Dichloroethene	< 2.6	< 2.6	< 2.6	< 10.0
1,1-Dichloropropene	< 1.12	< 1.12	< 1.12	< 10.0
1,2,3-Trichlorobenzene	< 1.23	< 1.23	< 1.23	< 10.0
1,2,3-Trichloropropane	< 1.74	< 1.74	< 1.74	< 10.0
1,2,4-Trichlorobenzene	< 2.82	< 2.82	< 2.82	< 10.0
1,2,4-Trimethylbenzene	< 3.19	< 3.19	< 3.19	< 10.0
1,2-Dichlorobenzene	< 1.03	< 1.03	< 1.03	< 10.0
1,2-Dichloroethane	< 1.57	< 1.57	< 1.57	< 10.0
1,2-Dichloropropane	< 0.66	< 0.66	< 0.66	< 10.0
1,3,5-Trimethylbenzene	< 1.23	< 1.23	< 1.23	< 10.0
1,3-Dichlorobenzene	< 1.65	< 1.65	< 1.65	< 10.0
1,3-Dichloropropane	< 0.92	< 0.92	< 0.92	< 10.0
1,4-Dichlorobenzene	< 2.23	< 2.23	< 2.23	< 10.0
2,2-Dichloropropane	< 1.36	< 1.36	< 1.36	< 10.0
2-Chloroethyl vinyl ether	< 5.53	< 5.53	< 5.53	< 50.0
2-Chlorotoluene	< 2.35	< 2.35	< 2.35	< 10.0
2-Hexanone	< 3.18	< 3.18	< 3.18	< 50.0
4-Chlorotoluene	< 1.34	< 1.34	< 1.34	< 10.0
4-Methyl-2-pentanone (MIBK)	< 3.14	< 3.14	< 3.14	< 50.0
Acetone	< 12.7	< 12.7	< 12.7	< 50.0
Benzene	< 1.02	< 1.02	< 1.02	< 2.0
Bromobenzene	< 3.39	< 3.39	< 3.39	< 10.0
Bromochloromethane	< 0.38	< 0.38	< 0.38	< 10.0
Bromodichloromethane	< 0.63	< 0.63	< 0.63	< 10.0
Bromoform	< 3.39	< 3.39	< 3.39	< 50.0
Carbon disulfide	< 5.53	< 5.53	< 5.53	< 10.0
Carbon tetrachloride	< 2.48	< 2.48	< 2.48	< 10.0
Chlorobenzene	< 0.89	< 0.89	< 0.89	< 10.0
Chloroethane	< 2.15	< 2.15	< 2.15	< 30.0
Chloroform	< 1.24	< 1.24	< 1.24	< 10.0
cis-1,2-Dichloroethene	< 1.6	< 1.6	< 1.6	< 10.0

Table 5-8260B VOC Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

	PE44-16'	PE45-3'	PE45-13'9'	PE1-45 Drum Comp.
Date Sampled:	**4/24/06**	**4/24/06**	**4/24/06**	**7/5/06**
cis-1,3-Dichloropropene	< 0.98	< 0.98	< 0.98	< 10.0
DBCP	< 2.69	< 2.69	< 2.69	< 50.0
Dibromochloromethane	< 0.65	< 0.65	< 0.65	< 10.0
Dibromomethane	< 2.3	< 2.3	< 2.3	< 10.0
Dichlorodifluoromethane	< 2.07	< 2.07	< 2.07	< 30.0
EDB	< 2.75	< 2.75	< 2.75	< 10.0
Ethylbenzene	< 1.37	< 1.37	< 1.37	< 2.0
Hexachlorobutadiene	< 2.77	< 2.77	< 2.77	< 30.0
Isopropylbenzene	< 1.42	< 1.42	< 1.42	< 10.0
m- & p-Xylenes	< 1.8	< 1.8	< 1.8	< 4.0
MEK	< 5.83	< 5.83	< 5.83	< 50.0
Methyl bromide	< 2.75	< 2.75	< 2.75	< 30.0
Methyl chloride	< 1.74	< 1.74	< 1.74	< 30.0
Methylene chloride	< 3.31	< 3.31	< 3.31	< 50.0
MTBE	< 2.9	< 2.9	< 2.9	< 5.0
Naphthalene	< 1.14	< 1.14	< 1.14	< 10.0
n-Butylbenzene	< 2.05	< 2.05	< 2.05	< 10.0
n-Propylbenzene	< 1.14	< 1.14	< 1.14	< 10.0
o-Xylene	< 1.01	< 1.01	< 1.01	< 2.0
p-Isopropyltoluene	< 3.86	< 3.86	< 3.86	< 10.0
sec-Butylbenzene	< 3.04	< 3.04	< 3.04	< 10.0
Styrene	< 0.8	< 0.8	< 0.8	< 10.0
tert-Butylbenzene	< 1.34	< 1.34	< 1.34	< 10.0
Tetrachloroethene	< 0.93	< 0.93	< 0.93	< 10.0
Toluene	< 0.93	< 0.93	< 0.93	< 2.0
trans-1,2-Dichloroethene	< 2.16	< 2.16	< 2.16	< 10.0
trans-1,3-Dichloropropene	< 0.96	< 0.96	< 0.96	< 10.0
Trichloroethene	7.0 J	< 1.15	< 1.15	< 10.0
Trichlorofluoromethane	< 3.15	< 3.15	< 3.15	< 10.0
Vinyl acetate	< 10.8	< 10.8	< 10.8	< 50.0
Vinyl chloride	< 2.79	< 2.79	< 2.79	< 30.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
Between Pier D and E																						
PE16-3'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE16-5',10'5",16'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
Pier D																						
PE1-3'	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE1-5',10'1",16'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE1-20',28'4"	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE2-3'	04-04-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE2-5',9'6",16'	04-04-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE2-20',29'6",40'6",49'	04-04-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE3-3'	04-06-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE3-5',10',15'	04-06-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE3-20',29'3"	04-06-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE4-3'	04-06-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE4-5',10',16'	04-06-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE4-20',30',40',49'4",60'	04-06-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE5-3'	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE5-5',10'2",14'6"	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE5-20',29'6"	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE6-3'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE6-5',10',14'9"	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
PE6-20',30'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE7-3'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE7-5',10',14'4"	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE7-20',30',40',49'11",60'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE8-3'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE8-5',10',14'8"	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE8-20',30'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE9-3'	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE9-5',10',14'6"	04-07-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE9-20',30',40',49'11",60'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE10-3'	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE10-5',10',14'6"	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE11-3'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE11-5',10',15'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE11-20',29'10",40',50'1",60'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE12-3'	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE12-5',9'9",14'	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE12-20',29'4"	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE13-3'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE13-5',10',15'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE13-20',30',40',50',60'	04-10-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
PE14-3'	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE14-5',10',16'	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE14-20',29'7"	04-11-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE15-3'	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE15-5',9'7",14'	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE15-20'	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
Pier E																						
PE17-3'	04-27-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE17-5',10',13'11"	04-27-06	< 0.27	0.42 J	1.71 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE17-20',28'9",40',49'10"	04-27-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE18-3'	04-27-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE18-5',9'8",14'1"	04-27-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE18-20',29'2",40',48'8",60'	04-27-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE19-3'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE19-5',10',16'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE19-20',28'10",40',46'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE20-3'	04-20-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE20-5',10',15'3"	04-20-06	< 0.27	< 0.22	0.43 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE20-20',29'1",40',49'1",56'	05-02-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE21-3'	04-20-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE21-5',9',14'2"	04-20-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
PE21-20',30'4",40'	04-20-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE22-3'	04-20-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE22-5',10'5",13'10"	04-20-06	< 0.27	< 0.22	0.35 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE22-20',29'11",40'	04-20-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE23-3'	04-19-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE23-5',10',13'11"	04-19-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE23-20',29'5",40',49'10",60'	04-19-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE24-3'	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE24-5',9',13'8"	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE24-20',29'6",40',44'10"	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE25-3'	04-14-06	< 0.27	0.24 J	1.64 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE25-5',10',14'4"	04-14-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE25-20',29'7",40',48'7",60'	04-14-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE26-3'	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE26-5',10'4",14'	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE26-20',29'6",40',45'11"	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE27-3'	04-13-06	1.27 J	3.22 J	**15.4**	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE27-5',10',14'1"	04-13-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE27-20',29'11",40',48',60'	04-13-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE28-3'	04-12-06	0.74 J	1.59 J	**11.8**	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE28-5',10',13'11"	04-12-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
PE28-20',29'5",40'	04-12-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE29-3'	04-12-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE29-5',10',14'1"	04-12-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE29-20',29'7",40',49',60'	04-12-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE30-3'	04-12-06	< 0.27	< 0.22	0.74 J	< 0.23	< 0.27	< 0.37	0.53 J	0.62 J	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE30-5',10',14'3"	04-12-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE30-20',29'8",40'	04-13-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE31-3'	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE31-5',10',13'10"	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE31-20',29'4",40',50',60'	04-26-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE32-3'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE32-5',10',16'	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE32-20',29'1",40',45'10"	04-28-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE33-3'	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE33-5',10',14'1"	04-25-06	< 0.27	0.28 J	1.14 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE33-20',28'11",40',46'	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE34-3'	04-25-06	< 0.27	< 0.22	0.64 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE34-5',10',16'	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE34-20',29'7",40',49'7"	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE35-3'	04-17-06	0.53 J	0.91 J	2.91 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE35-5',10',14'8"	04-17-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
PE35-20',29'2",40',49'5",60'	04-17-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE36-3'	04-17-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE36-5',9',14'3"	04-17-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE36-20',29'8",40',48'9"	04-17-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE37-3'	04-18-06	< 0.27	0.22 J	1.45 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE37-5',10',14'6"	04-18-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE37-20',28'8",40',49'2"	04-18-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE38-3'	04-18-06	< 0.27	0.22 J	0.56 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE38-5',9'8",14'4"	04-18-06	< 0.27	0.22 J	0.45 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE38-20',29'4",40',49'6",60'	04-18-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE39-3'	04-21-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE39-5',10',14'	04-21-06	< 0.27	0.22 J	0.25 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE39-21',29'8",37'6",49'5"	04-21-06	0.28 J	1.78 J	1.14 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE40-3'	04-21-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE40-5',10',14'11"	04-21-06	1.94 J	**4.48**	**36.1**	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE40-20',29'8",36',40',48'8",60'	04-21-06	< 0.27	0.26 J	0.22 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE41-3'	04-21-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE41-5',10'2",14'4"	04-21-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE41-20',29'10",40',49'4"	04-21-06	< 0.27	0.72 J	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE42-3'	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE42-5',9'10",13'7"	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0

Table 6 - Organochlorine Pesticide Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	Alpha BHC	Beta BHC	a-Chlordane	g-Chlordane	Delta BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin Ketone	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
PE42-20',29'7",40',49'7"	05-01-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE43-3'	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE43-5',9'11",13'11"	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE43-20',29'1",40',49'10"	04-25-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE44-3'	04-24-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE44-5',9'8",16'	04-24-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE44-21'9",29'6",40',50'	04-24-06	0.5 J	1.66 J	0.91 J	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE45-3'	04-24-06	0.86 J	1.26 J	**14.6**	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	0.75 J	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE45-5',9'8",13'9"	04-24-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
PE45-21'11",29'10",40',49'11",60'	04-24-06	< 0.27	< 0.22	< 0.22	< 0.23	< 0.27	< 0.37	< 0.2	< 0.19	< 0.15	< 0.2	< 0.2	< 0.24	< 0.27	< 0.25	< 0.44	< 0.3	< 0.23	< 0.23	< 0.21	< 0.39	< 17.0
Piers D - E																						
PE1-45 Drum Comp.	07-05-06	< 4.0	< 4.0	**17.5**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 2.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 2.0	< 2.0	< 2.0	< 17.0	< 170.0

Table 6A - Organochlorine Pesticide Elutriate Quality Summary (ug/L)
Pier E Redevelopment, Long Beach, California

Boring/ Well ID	Sample ID	Date Sampled	Parameter	Value
Pier D				
PE3	PE3-Comp	06-12-06	2,4'-DDD	< 0.058
		06-12-06	2,4'-DDE	< 0.049
		06-12-06	2,4'-DDT	< 0.045
		06-12-06	4,4'-DDD (DDD)	< 0.026
		06-12-06	4,4'-DDE (DDE)	< 0.026
		06-12-06	4,4'-DDT (DDT)	< 0.019
		06-12-06	Aldrin	< 0.023
		06-12-06	alpha-Hexachlorocyclohexane (Alpha-BHC)	< 0.028
		06-12-06	Beta-Hexachlorocyclohexane (Beta-BHC)	< 0.02
		06-12-06	Chlordane	< 0.19
		06-12-06	delta-Hexachlorocyclohexane (Delta-BHC)	< 0.035
		06-12-06	Dieldrin	< 0.027
		06-12-06	Endosulfan 1	< 0.011
		06-12-06	Endosulfan 11	< 0.024
		06-12-06	Endosulfan sulfate	< 0.016
		06-12-06	Endrin	< 0.018
		06-12-06	Endrin aldehyde	< 0.01
		06-12-06	Endrin ketone	< 0.012
		06-12-06	gamma-Hexachlorocyclohexane (Gamma-BHC,	< 0.029
		06-12-06	Heptachlor	< 0.011
		06-12-06	Heptachlor epoxide	< 0.019
		06-12-06	Methoxychlor	< 0.031
		06-12-06	Toxaphene	< 0.67
Pier E				
PE20	PE20-Comp	06-12-06	2,4'-DDD	< 0.058
		06-12-06	2,4'-DDE	< 0.049
		06-12-06	2,4'-DDT	< 0.045
		06-12-06	4,4'-DDD (DDD)	< 0.026
		06-12-06	4,4'-DDE (DDE)	< 0.026
		06-12-06	4,4'-DDT (DDT)	< 0.019
		06-12-06	Aldrin	< 0.023
		06-12-06	alpha-Hexachlorocyclohexane (Alpha-BHC)	< 0.028
		06-12-06	Beta-Hexachlorocyclohexane (Beta-BHC)	< 0.02
		06-12-06	Chlordane	< 0.19
		06-12-06	delta-Hexachlorocyclohexane (Delta-BHC)	< 0.035
		06-12-06	Dieldrin	< 0.027
		06-12-06	Endosulfan 1	< 0.011
		06-12-06	Endosulfan 11	< 0.024
		06-12-06	Endosulfan sulfate	< 0.016
		06-12-06	Endrin	< 0.018
		06-12-06	Endrin aldehyde	< 0.01
		06-12-06	Endrin ketone	< 0.012
		06-12-06	gamma-Hexachlorocyclohexane (Gamma-BHC,	< 0.029
		06-12-06	Heptachlor	< 0.011
		06-12-06	Heptachlor epoxide	< 0.019

Boring/ Well ID	Sample ID	Date Sampled	Parameter	Value
PE20	PE20-Comp	06-12-06	Methoxychlor	< 0.031
		06-12-06	Toxaphene	< 0.67
PE27	PE27-Comp	06-12-06	2,4'-DDD	< 0.058
		06-12-06	2,4'-DDE	< 0.049
		06-12-06	2,4'-DDT	< 0.045
		06-12-06	4,4'-DDD (DDD)	< 0.026
		06-12-06	4,4'-DDE (DDE)	< 0.026
		06-12-06	4,4'-DDT (DDT)	< 0.019
		06-12-06	Aldrin	< 0.023
		06-12-06	alpha-Hexachlorocyclohexane (Alpha-BHC)	< 0.028
		06-12-06	Beta-Hexachlorocyclohexane (Beta-BHC)	< 0.02
		06-12-06	Chlordane	< 0.19
		06-12-06	delta-Hexachlorocyclohexane (Delta-BHC)	< 0.035
		06-12-06	Dieldrin	< 0.027
		06-12-06	Endosulfan 1	< 0.011
		06-12-06	Endosulfan 11	< 0.024
		06-12-06	Endosulfan sulfate	< 0.016
		06-12-06	Endrin	< 0.018
		06-12-06	Endrin aldehyde	< 0.01
		06-12-06	Endrin ketone	< 0.012
		06-12-06	gamma-Hexachlorocyclohexane (Gamma-BHC,	< 0.029
		06-12-06	Heptachlor	< 0.011
		06-12-06	Heptachlor epoxide	< 0.019
		06-12-06	Methoxychlor	< 0.031
		06-12-06	Toxaphene	< 0.67
PE40	PE40-Comp	06-12-06	2,4'-DDD	< 0.058
		06-12-06	2,4'-DDE	< 0.049
		06-12-06	2,4'-DDT	< 0.045
		06-12-06	4,4'-DDD (DDD)	< 0.026
		06-12-06	4,4'-DDE (DDE)	< 0.026
		06-12-06	4,4'-DDT (DDT)	< 0.019
		06-12-06	Aldrin	< 0.023
		06-12-06	alpha-Hexachlorocyclohexane (Alpha-BHC)	< 0.028
		06-12-06	Beta-Hexachlorocyclohexane (Beta-BHC)	< 0.02
		06-12-06	Chlordane	< 0.19
		06-12-06	delta-Hexachlorocyclohexane (Delta-BHC)	< 0.035
		06-12-06	Dieldrin	< 0.027
		06-12-06	Endosulfan 1	< 0.011
		06-12-06	Endosulfan 11	< 0.024
		06-12-06	Endosulfan sulfate	< 0.016
		06-12-06	Endrin	< 0.018
		06-12-06	Endrin aldehyde	< 0.01
		06-12-06	Endrin ketone	< 0.012
		06-12-06	gamma-Hexachlorocyclohexane (Gamma-BHC,	< 0.029
		06-12-06	Heptachlor	< 0.011
		06-12-06	Heptachlor epoxide	< 0.019
		06-12-06	Methoxychlor	< 0.031
		06-12-06	Toxaphene	< 0.67
Pier E, Slip 3				
Seawater blank	Seawater blank	06-12-06	2,4'-DDD	< 0.053
		06-12-06	2,4'-DDE	< 0.044
		06-12-06	2,4'-DDT	< 0.041

Boring/ Well ID	Sample ID	Date Sampled	Parameter	Value
Seawater blank	Seawater blank	06-12-06	4,4'-DDD (DDD)	< 0.024
		06-12-06	4,4'-DDE (DDE)	< 0.023
		06-12-06	4,4'-DDT (DDT)	< 0.017
		06-12-06	Aldrin	< 0.021
		06-12-06	alpha-Hexachlorocyclohexane (Alpha-BHC)	< 0.025
		06-12-06	Beta-Hexachlorocyclohexane (Beta-BHC)	< 0.018
		06-12-06	Chlordane	< 0.17
		06-12-06	delta-Hexachlorocyclohexane (Delta-BHC)	< 0.032
		06-12-06	Dieldrin	< 0.024
		06-12-06	Endosulfan 1	< 0.01
		06-12-06	Endosulfan 11	< 0.022
		06-12-06	Endosulfan sulfate	< 0.015
		06-12-06	Endrin	< 0.016
		06-12-06	Endrin aldehyde	< 0.009
		06-12-06	Endrin ketone	< 0.011
		06-12-06	gamma-Hexachlorocyclohexane (Gamma-BHC,	< 0.026
		06-12-06	Heptachlor	< 0.01
		06-12-06	Heptachlor epoxide	< 0.017
		06-12-06	Methoxychlor	< 0.028
		06-12-06	Toxaphene	< 0.61

Table 7 - Polychlorinated Biphenyls (PCBs) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
Between Pier D and E								
PE16-3'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE16-5',10'5",16'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
Pier D								
PE1-3'	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE1-5',10'1",16'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE1-20',28'4"	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE2-3'	04-04-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE2-5',9'6",16'	04-04-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE2-20',29'6",40'6",49'	04-04-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE3-3'	04-06-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE3-5',10',15'	04-06-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE3-20',29'3"	04-06-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE4-3'	04-06-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE4-5',10',16'	04-06-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE4-20',30',40',49'4",60'	04-06-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE5-3'	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE5-5',10'2",14'6"	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE5-20',29'6"	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE6-3'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE6-5',10',14'9"	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE6-20',30'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE7-3'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE7-5',10',14'4"	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE7-20',30',40',49'11",60'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE8-3'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE8-5',10',14'8"	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE8-20',30'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE9-3'	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1

Table 7 - Polychlorinated Biphenyls (PCBs) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
PE9-5',10',14'6"	04-07-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE9-20',30',40',49'11",60'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE10-3'	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE10-5',10',14'6"	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE11-3'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE11-5',10',15'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE11-20',29'10",40',50'1",60'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE12-3'	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE12-5',9'9",14'	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE12-20',29'4"	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE13-3'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE13-5',10',15'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE13-20',30',40',50',60'	04-10-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE14-3'	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE14-5',10',16'	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE14-20',29'7"	04-11-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE15-3'	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE15-5',9'7",14'	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE15-20'	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
Pier E								
PE17-3'	04-27-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE17-5',10',13'11"	04-27-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE17-20',28'9",40',49'10"	04-27-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE18-3'	04-27-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE18-5',9'8",14'1"	04-27-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE18-20',29'2",40',48'8",60'	04-27-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE19-3'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE19-5',10',16'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE19-20',28'10",40',46'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1

Table 7 - Polychlorinated Biphenyls (PCBs) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
PE20-3'	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE20-5',10',15'3"	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE20-20',29'1",40',49'1",56'	05-02-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE21-3'	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE21-5',9',14'2"	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE21-20',30'4",40'	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE22-3'	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE22-5',10'5",13'10"	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE22-20',29'11",40'	04-20-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE23-3'	04-19-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE23-5',10',13'11"	04-19-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE23-20',29'5",40',49'10",60'	04-19-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE24-3'	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE24-5',9',13'8"	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE24-20',29'6",40',44'10"	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE25-3'	04-14-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE25-5',10',14'4"	04-14-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE25-20',29'7",40',48'7",60'	04-14-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE26-3'	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE26-5',10'4",14'	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE26-20',29'6",40',45'11"	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE27-3'	04-13-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE27-5',10',14'1"	04-13-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE27-20',29'11",40',48',60'	04-13-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE28-3'	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE28-5',10',13'11"	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE28-20',29'5",40'	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE29-3'	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE29-5',10',14'1"	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1

Table 7 - Polychlorinated Biphenyls (PCBs) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
PE29-20',29'7",40',49',60'	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE30-3'	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE30-5',10',14'3"	04-12-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE30-20',29'8",40'	04-13-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE31-3'	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE31-5',10',13'10"	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE31-20',29'4",40',50',60'	04-26-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE32-3'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE32-5',10',16'	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE32-20',29'1",40',45'10"	04-28-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE33-3'	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE33-5',10',14'1"	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE33-20',28'11",40',46'	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE34-3'	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE34-5',10',16'	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE34-20',29'7",40',49'7"	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE35-3'	04-17-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE35-5',10',14'8"	04-17-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE35-20',29'2",40',49'5",60'	04-17-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE36-3'	04-17-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE36-5',9',14'3"	04-17-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE36-20',29'8",40',48'9"	04-17-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE37-3'	04-18-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE37-5',10',14'6"	04-18-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE37-20',28'8",40',49'2"	04-18-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE38-3'	04-18-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE38-5',9'8",14'4"	04-18-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE38-20',29'4",40',49'6",60'	04-18-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE39-3'	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1

Table 7 - Polychlorinated Biphenyls (PCBs) Soil Quality Summary (ug/kg)
Pier E Redevelopment, Long Beach, California

Sample ID	Date Sampled	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
PE39-5',10',14'	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE39-21',29'8",37'6",49'5"	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE40-3'	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE40-5',10',14'11"	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE40-20',29'8",36',40',48'8",60'	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE41-3'	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE41-5',10'2",14'4"	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE41-20',29'10",40',49'4"	04-21-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE42-3'	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE42-5',9'10",13'7"	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE42-20',29'7",40',49'7"	05-01-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE43-3'	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE43-5',9'11",13'11"	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE43-20',29'1",40',49'10"	04-25-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE44-3'	04-24-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE44-5',9'8",16'	04-24-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE44-21'9",29'6",40',50'	04-24-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE45-3'	04-24-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE45-5',9'8",13'9"	04-24-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
PE45-21'11",29'10",40',49'11",60'	04-24-06	< 3.6	< 4.2	< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
Piers D - E								
PE1-45 Drum Comp.	07-05-06	< 33.0	< 67.0	< 33.0	< 33.0	< 33.0	< 33.0	< 33.0

Table 7A - Polychlorinated Biphenyls (PCBs)
Elutriate Quality Summary (ug/L)
Pier E Redevelopment, Long Beach, California

Boring/ Well ID	Sample ID	Date Sampled	Parameter	Value
Pier D				
PE3	PE3-Comp	06-12-06	Aroclor-1016 (PCB-1016)	< 0.17
		06-12-06	Aroclor-1221 (PCB-1221)	< 0.11
		06-12-06	Aroclor-1232 (PCB-1232)	< 0.11
		06-12-06	Aroclor-1242 (PCB-1242)	< 0.11
		06-12-06	Aroclor-1248 (PCB-1248)	< 0.11
		06-12-06	Aroclor-1254 (PCB-1254)	< 0.11
		06-12-06	Aroclor-1260 (PCB-1260)	< 0.27
		06-12-06	Aroclor-1262	< 0.11
Pier E				
PE20	PE20-Comp	06-12-06	Aroclor-1016 (PCB-1016)	< 0.17
		06-12-06	Aroclor-1221 (PCB-1221)	< 0.11
		06-12-06	Aroclor-1232 (PCB-1232)	< 0.11
		06-12-06	Aroclor-1242 (PCB-1242)	< 0.11
		06-12-06	Aroclor-1248 (PCB-1248)	< 0.11
		06-12-06	Aroclor-1254 (PCB-1254)	< 0.11
		06-12-06	Aroclor-1260 (PCB-1260)	< 0.27
		06-12-06	Aroclor-1262	< 0.11
PE27	PE27-Comp	06-12-06	Aroclor-1016 (PCB-1016)	< 0.17
		06-12-06	Aroclor-1221 (PCB-1221)	< 0.11
		06-12-06	Aroclor-1232 (PCB-1232)	< 0.11
		06-12-06	Aroclor-1242 (PCB-1242)	< 0.11
		06-12-06	Aroclor-1248 (PCB-1248)	< 0.11
		06-12-06	Aroclor-1254 (PCB-1254)	< 0.11
		06-12-06	Aroclor-1260 (PCB-1260)	< 0.27
		06-12-06	Aroclor-1262	< 0.11
PE40	PE40-Comp	06-12-06	Aroclor-1016 (PCB-1016)	< 0.17
		06-12-06	Aroclor-1221 (PCB-1221)	< 0.11
		06-12-06	Aroclor-1232 (PCB-1232)	< 0.11
		06-12-06	Aroclor-1242 (PCB-1242)	< 0.11
		06-12-06	Aroclor-1248 (PCB-1248)	< 0.11
		06-12-06	Aroclor-1254 (PCB-1254)	< 0.11
		06-12-06	Aroclor-1260 (PCB-1260)	< 0.27
		06-12-06	Aroclor-1262	< 0.11
Pier E, Slip 3				
Seawater blank	Seawater blank	06-12-06	Aroclor-1016 (PCB-1016)	< 0.15
		06-12-06	Aroclor-1221 (PCB-1221)	< 0.1
		06-12-06	Aroclor-1232 (PCB-1232)	< 0.1
		06-12-06	Aroclor-1242 (PCB-1242)	< 0.1
		06-12-06	Aroclor-1248 (PCB-1248)	< 0.1
		06-12-06	Aroclor-1254 (PCB-1254)	< 0.1
		06-12-06	Aroclor-1260 (PCB-1260)	< 0.25
		06-12-06	Aroclor-1262	< 0.1

Table 8
Calculation of Benzo(a)Pyrene Equivalent Concentrations for Samples with Detected Carcinogenic PAHs

Carcinogenic PAH [Note 1]	PEF	PE1-20',28'4" (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	**26.3**	2.6
Benzo(a)pyrene	1	**37.8**	37.8
Benzo(b)fluoranthene	0.1	**34.3**	3.4
Benzo(k)fluoranthene	0.1	**13.3**	1.3
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	2.5	0.0
Indeno(1,2,3-c,d)pyrene	0.1	18.2	1.8

Benzo(a)pyrene equivalent concentration: 55.5

Carcinogenic PAH [Note 1]	PEF	PE9-20',30', 40',49'11",60' (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	2.5	0.3
Benzo(a)pyrene	1	**24.9**	24.9
Benzo(b)fluoranthene	0.1	**34.5**	3.5
Benzo(k)fluoranthene	0.1	**25.2**	2.5
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	2.5	0.0
Indeno(1,2,3-c,d)pyrene	0.1	2.5	0.3

Benzo(a)pyrene equivalent concentration: 39.9

Carcinogenic PAH [Note 1]	PEF	PE13-20',30', 40',50',60' (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	2.5	0.3
Benzo(a)pyrene	1	**11.5**	11.5
Benzo(b)fluoranthene	0.1	1.0	0.1
Benzo(k)fluoranthene	0.1	1.0	0.1
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	2.5	0.0
Indeno(1,2,3-c,d)pyrene	0.1	2.5	0.3

Benzo(a)pyrene equivalent concentration: 20.7

Table 8
Calculation of Benzo(a)Pyrene Equivalent Concentrations for Samples with Detected Carcinogenic PAHs

Carcinogenic PAH [Note 1]	PEF	PE14-20', 29'7" (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	2.5	0.3
Benzo(a)pyrene	1	**6.68**	6.7
Benzo(b)fluoranthene	0.1	1.0	0.1
Benzo(k)fluoranthene	0.1	1.0	0.1
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	2.5	0.0
Indeno(1,2,3-c,d)pyrene	0.1	2.5	0.3

Benzo(a)pyrene equivalent concentration: 15.9

Carcinogenic PAH [Note 1]	PEF	PE20-20',29'1", 40',49'1",56' (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	**122.0**	12.2
Benzo(a)pyrene	1	**98.4**	98.4
Benzo(b)fluoranthene	0.1	**88.0**	8.8
Benzo(k)fluoranthene	0.1	**38.8**	3.9
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	**115.0**	1.2
Indeno(1,2,3-c,d)pyrene	0.1	**39.4**	3.9

Benzo(a)pyrene equivalent concentration: 136.9

Carcinogenic PAH [Note 1]	PEF	PE27-20',29'11", 40',48',60' (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	**298.0**	29.8
Benzo(a)pyrene	1	**638.0**	638.0
Benzo(b)fluoranthene	0.1	**462.0**	46.2
Benzo(k)fluoranthene	0.1	**78.5**	7.9
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	**321.0**	3.2
Indeno(1,2,3-c,d)pyrene	0.1	2.5	0.3

Benzo(a)pyrene equivalent concentration: 733.8

Table 8
Calculation of Benzo(a)Pyrene Equivalent Concentrations for Samples with Detected Carcinogenic PAHs

Carcinogenic PAH [Note 1]	PEF	PE43-5',9'11", 13'11" (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	**16.2**	1.6
Benzo(a)pyrene	1	2.5	2.5
Benzo(b)fluoranthene	0.1	1.0	0.1
Benzo(k)fluoranthene	0.1	1.0	0.1
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	2.5	0.0
Indeno(1,2,3-c,d)pyrene	0.1	2.5	0.3

Benzo(a)pyrene equivalent concentration: 13.1

Carcinogenic PAH [Note 1]	PEF	PE44-21'9",29'6", 40',50' (ug/kg)	**Equivalent concentration in soil** (ug/kg)
Benz(a)anthracene	0.1	2.5	0.3
Benzo(a)pyrene	1	**19.8**	19.8
Benzo(b)fluoranthene	0.1	1.0	0.1
Benzo(k)fluoranthene	0.1	**30.9**	3.1
Dibenz(a,h)anthracene	1	8.5	8.5
Chrysene	0.01	2.5	0.0
Indeno(1,2,3-c,d)pyrene	0.1	2.5	0.3

Benzo(a)pyrene equivalent concentration: 32.0

Note 1: Used is 1/2 the detection limit for non-detected concentrations.

TABLE 9
COMPARISON OF SITE DATA TO NOAA ERL/ERM SOIL SCREENING GUIDANCE
PIER E/MIDDLE HARBOR REDEVELOPMENT PROJECT
PORT OF LONG BEACH, CALIFORNIA

Parameter	Total # of Samples	Total # of Detections	Method Detection Limit - ug/kg	Max Soil Conc. - ug/kg	Effects Range-Low (ERL) - ug/kg	# of Samples Above ERL [1]	Effects Range-Median (ERM) - ug/kg	# of Samples Above ERM	95% UCL Soil Conc. [2] ug/kg	95% UCL > ERL/ERM?
Inorganic - USEPA 6000/7000 (Metals)										
Arsenic (As)	133	39	<100	5,530	8,200	0	70,000	0	1,128	No/No
Cadmium (Cd)	133	0	<50	<50	1,200	0	9,600	0	NA	No/No
Chromium (Cr)	133	133	<250	34,800	81,000	0	370,000	0	14,343	No/No
Copper (Cu)	133	133	<250	1,600,000	34,000	**3** [7]	270,000	**1** [7A]	72,646	**Yes**/No
Lead (Pb)	133	131	<100	41,800	46,700	0	218,000	0	5,680	No/No
Mercury (Hg)	133	4	<100	300	150	**4** [7]	710	0	61	No/No
Nickel (Ni)	133	133	<50	21,400	20,900	**1** [7]	51,600	0	9,498	No/No
Silver (Ag)	133	6	<400	730	1,000	0	3,700	0	234	No/No
Zinc (Zn)	133	133	<50	102,000	150,000	0	410,000	0	33,168	No/No
Organic - USEPA 8081A (Organochlorine Pesticides)										
Chlordane	133	0	<0.2 [3]	0.62 [3]	0.5	**1** [8]	6	0	NA	NA
p,p-DDD (TDE)	133	7	<0.27	1.94	2	0	20	0	0.25	No/No
p,p-DDE	133	16	<0.22	4.48	2.2	**2** [8]	27	0	0.43	No/No
p,p-DDT	133	19	<0.22	36.1	1	**10** [8]	7	**4** [8A]	2.20	**Yes**/No
DDT, Total	133	20	<0.27 [5]	42.52 [6]	1.58	**10** [8]	46.1	0	NA	NA
Dieldrin	133	1	<0.2	0.75	0.02	**1** [8]	8	0	NA	NA
Organic - EPA 8270C (Polynuclear Aromatic Hydrocarbons) [4]										
Acenaphthene	133	0	<100	<100	16	0	500	0	NA	NA
Acenaphthylene	133	1	<50	154	44	**1** [9]	640	0	NA	NA
Anthracene	133	3	<2	203	85.3	**1** [9]	1,100	0	9.8	No/No
Benz(a)Anthracene	133	4	<5	298	261	**1** [9]	1,600	0	16.4	No/No
Benzo(a)Pyrene	133	7	<5	638	430	**1** [9]	1,600	0	29.8	No/No
Chrysene	133	2	<5	321	384	0	2,800	0	NA	NA
Dibenz(a,h)Anthracene	133	0	<17	<17	63.4	0	260	0	NA	NA
Fluoranthene	133	19	<5	766	600	**1** [9]	5,100	0	41.4	No/No
Fluorene	133	1	<10	111	19	**1** [9]	540	0	NA	NA
Naphthalene	133	1	<50	274	160	**1** [10]	2,100	0	NA	NA
Phenanthrene	133	5	<4	810	240	**1** [9]	1,500	0	37.0	No/No
Pyrene	133	16	<10	912	665	**1** [9]	2,600	0	51.0	No/No
Organic - EPA 8082 (Polychlorinated Biphenyls)										
Polychlorinated Biphenyls	133	0	<4.2 [11]	<4.2 [11]	22.7	0	180	0	NA	NA

NA - Not Applicable

TABLE 9
COMPARISON OF SITE DATA TO NOAA ERL/ERM SOIL SCREENING GUIDANCE
PIER E/MIDDLE HARBOR REDEVELOPMENT PROJECT
PORT OF LONG BEACH, CALIFORNIA

Footnotes:

[1] Samples with detected concentrations above ERLs are the only samples counted in this column. Method detection limits (MDLs) for acenapthene, acenapthylene, and dieldrin exceeded the ERL but are not counted in this column. MDLs for fluorene exceed the ERL in three samples (see note 4).

[2] 95% UCL Calculated using EPAs software ProUCL Version 3.0. All data distributed non-parametric except Cobalt (gamma distribution) and Vanadium (lognormal distribution). UCLs not calculated for parameters with less than 3 detections. One-half the MDL utilized for non-detect values.

[3] Reported value for gamma-chlordane

[4] Reported MDL is for 130 of the 133 samples analyzed. MDL is 2x the reported value in three (3) samples due to dilution.

[5] Reported value for p,p-DDD (TDE)

[6] Includes sum of p,p-DDD (TDE), p,p-DDE, and p,p-DDT in sample PE40-5',10',14'11"

[7] Includes samples PE2-20', 29'6", 40'6", 49' (Hg), PE4-20', 30', 40', 49'4", 60' (Cu, Hg, Ni), PE9-20', 30', 40', 49'11", 60' (Hg), PE18-20', 29'2", 40', 48'8", 60' (Hg), PE40-5', 10', 14'11" (Cu), and PE45-3' (Cu)

[7A] Includes sample PE40-5', 10', 14'11"

[8] Includes samples PE17-5', 10', 13'11" (DDT), PE25-3' (DDT), PE27-3' (DDE, DDT), PE28-3' (DDT), PE30-3' (chlordane), PE33-5', 10', 14'1" (p,p-DDT), PE35-3' (DDT) PE37-3' (DDT), PE39-21', 29'8", 37'6", 49'5" (DDT), PE40-5', 10', 14'11" (DDE, DDT), PE44-21'9", 29'6", 40', 50' (DDT, Total), PE45-3' (dieldrin, DDT)

[8A] Includes samples PE27-3', PE28-3', PE40-5', 10', 14'11", and PE45-3'

[9] Includes sample PE27-20', 29'11", 40', 48', 60'

[10] Includes sample PE39-21', 29'8", 37'6", 49'5"

[11] Reported value for Aroclor-1221

TABLE 10
COMPARISON OF SITE DATA TO CALIFORNIA TOXICS RULE SCREENING GUIDANCE
PIER E/MIDDLE HARBOR REDEVELOPMENT PROJECT
PORT OF LONG BEACH, CALIFORNIA

Parameter	Total # of Samples	Total # of Detections	Max Elutriate Concentration - ug/l	Criterion Maximum Concentration (CMC) - ug/l	# of Samples Above CMC [1]	Criterion Continuous Concentration (CCC) - ug/l	# of Samples Above CCC [2]
Inorganic							
Arsenic (As)	5	0	<3.08	69	0	36	0
Cadmium (Cd)	5	1	0.96 J	42	0	9.3	0
Chromium (Cr)	5	0	<0.35	1,100	0	50	0
Copper (Cu)	5	0	<1.34	4.8	0	3.1	0
Lead (Pb)	5	0	<2.36	210	0	8.1	0
Nickel (Ni)	5	5	**15.9**	74	0	8.2	**1** [4]
Selenium (Se)	5	0	<2.95	290	0	71	0
Silver (Ag)	5	5	1.85 J	1.9	0		
Zinc (Zn)	5	5	34	90	0	81	0
Organic - EPA 8081A (Organochlorine Pesticides)							
Aldrin	5	0	<0.023	1.3	0		
Chlordane	5	0	<0.19	0.09	0	0.004	0
4,4-DDT	5	0	<0.019	0.13	0	0.001	0
Dieldrin	5	0	<0.027	0.71	0	0.0019	0
alpha-Endosulfan	5	0	<0.011	0.034	0	0.0087	0
beta-Endosulfan	5	0	<0.024	0.034	0	0.0087	0
Endrin	5	0	<0.018	0.037	0	0.0023	0
Heptachlor	5	0	<0.011	0.053	0	0.0036	0
Heptachlor Epoxide	5	0	<0.019	0.053	0	0.0036	0
gama-BHC	5	0	<0.029	0.16	0		
Toxaphene	5	0	<0.67	0.21	0	0.0002	0
PCBs	5	0	<0.27 [3]			0.03	0

Footnotes:

[1] Samples with detected concentrations above CMCs are the only samples counted in this column. Method detection limits (MDLs) for chlordane and toxaphene exceeded the CMCs in all samples but are not counted in this column.

[2] Samples with detected concentrations above CCCs are the only samples counted in this column. Method detection limits (MDLs) for most organochlorine pesticides and PCBs exceeded the CCCs in all samples but are not counted in this column.

[3] Reported method detection limit for Aroclor-1260.

[4] Includes sample PE3-Comp.

Appendix A

Standard Operating Procedures - Geoprobe Soil Sampling

PACIFIC EDGE ENGINEERING, INC.
STANDARD OPERATING PROCEDURES
GEOPROBE SOIL SAMPLING

DRILLING PROCEDURES

A Geoprobe employs hydraulic power to push a probe unit into subsurface soil. The hydraulic mechanism is assisted by a drive hammer which provides additional force to penetrate dense or hard soil materials.

The probe unit consists of a 2-foot long, 1 3/4 inch diameter California-modified solid-spoon soil sampler and one to five-feet long threaded push rod. The sampler holds an acetate, brass, or stainless steel liner utilized to contain the soil sample. Acetate liners are generally used for collection of soil samples.

The Probe-Drive Sampler remains completely sealed while it is pushed or driven to the desired sampling depth. Once the target depth is reached, a retractable point which previously sealed the sampler is removed and the sampler is pushed an additional 28-inches. The rods and sampler are then retrieved, the sampler is disassembled, the sample tubes removed for identification and analysis, and the apparatus decontaminated prior to reuse. This method allows collection of discrete, relatively undisturbed soil samples from the Site.

SAMPLE COLLECTION

Upon retrieval of the sampler, the acetate sample liners from the desired sampling depths are capped with Teflon™ sheets and plastic end caps. The top and bottom of the sample tube is marked. The sample tubes are labeled, placed in a cooler chilled to approximately 4^0C and shipped to an analytic laboratory under chain-of-custody documentation.

A portion of the sample not wrapped for analysis is placed in a zip-loc bag and allowed to sit for a minimum of 5 minutes. Head space readings are collected with a portable photo-ionization detector by placing the tip of the detector inside the plastic bag. Head space readings are recorded on the boring log. This soil is also inspected for texture, color, moisture content, and other distinguishing characteristics. Soil sediment is described using the Unified Soil Classification System and recorded on a soil boring log. The drilling log includes the sample depth, geologic observations, head space readings, and other details as outlined in California EPA's "Drilling, Coring, Sampling and Logging at Hazardous Substance Release Sites, Interim Final, 1994". All sampling activities are performed by or under the oversight of a California Registered Geologist.

Since samples are obtained by driving the sampling equipment into the subsurface rather than drilling, minimal drill cuttings are generated; thus minimizing the waste resulting from this operation. The boreholes are backfilled with cement grout or hydrated bentonite.

Appendix B

Boring Logs

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/28/06 and 5/01/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE1

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 5"	Asphalt	
					5" - 1'6"	Base	
5			0.1	SMPL	5' - 5'6"	Sample - did not log	
	31"			SP	5'6" - 8'8"	2.5Y 5/6 (light olive brown), moist, VERY FINE TO FINE SAND (40,55), scattered silt (5%) @ 6'6" - abundant silt (10%) @ 7' - becomes 2.5Y 5/4 (light olive brown), trace shell fragments @ 7'7" - 8' - no recovery @ 8' - 8'8" - asphalt fill material and debris (gravel with green paint)	
				NR			
				SP			
			SM/ ML	SM	8'8" - 9'8"	2.5Y 5/4 (light olive brown), wet, SILTY VERY FINE TO FINE SAND (15,50,35)	
10	31"		0.3	SMPL	9'8" - 12'7"	Mottled 2.5Y 5/4 (light olive brown) and 5Y 6/1 (gray), wet, SILTY VERY FINE TO FINE SAND (20,40,30), intermixed with very fine silt @ 10'1" - 10'7" - sample - did not log @ 10'7" - 12' - no recovery	
				NR			
				SM/ML			
				SW	12'7" - 17'	5Y 4/1 (dark gray), wet, VERY FINE TO MEDIUM SAND (40,40,20), trace silt @ 13'1" - 16' - no recovery	
	13"			NR			
15			0.5				
				SMPL		@ 16' - 16'6" - sample - did not log	
	19"			SW			
				SM	17' - 17'7"	5Y 3/1 (very dark gray), wet, SILTY VERY FINE TO FINE SAND (15,40,35) Note: Refusal at 17'7" on 4/28/06 - redrilled 5/01/06	
20			0	SMPL	20' - 20'6"	Sample - did not log	
				SP	20'6" - 25'9"	5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (20,75), trace silt and medium sand (1-3%) @ 21' - becomes (40,55), trace silt (3-5%) @ 22' - becomes (20,75), trace silt (1-3%) and medium sand (3-5%) @ 22'6" - 24' - no recovery	
	30"			NR			
				SP		@ 24' - becomes FINE SAND, scattered very fine and medium sand (5-10%), trace silt (1-3%)	
25							
	23"		SM/ ML	NR	25'9" - 28'10"	5Y 3/2 (dark olive gray), wet, SILTY VERY FINE SAND/VERY FINE SANDY SILT @ 25'11" - 28' - no recovery @ 28' - 28'6" - sample - did not log @ 28'6" - 28'10" - sample mostly wood	
				SMPL			
			SM/ ML	NR		@ 28'10" - 32' - no recovery	
30	10"				T.D. - 28'10"		

PACIFIC EDGE ENGINEERING, INC.

PROJECT NAME:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	G.Dickinson / S. Miles	MONITORING EQUIPMENT:	PID
DATE:	04/04/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG PE2

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	
					0 - 6"	Asphalt
					6" - 1'6"	Base
				SP	1'6" - 10'	2.5Y 5/6 (light olive brown), moist, FINE SAND, scattered silt (5-10%), trace medium sand and gravel (<5%)
5			0			
	28"					
				NR		@ 7' - 8' - no recovery
				SP		@ 8' - becomes 2.5Y 5/4 (light olive brown), saturated
10	31"			SM	10 - 12'6"	2.5Y 4/4 (olive brown), saturated, SILTY VERY FINE TO FINE SAND
				NR		@ 10'7"- 12' - no recovery
				SM		
				SW	12'6" - 16'	2.5Y 6/2 (light brownish gray), saturated, FINE TO MEDIUM SAND, scattered coarse sand (5-10%)
	35"					
15			0	NR		@ 14'11" - 16' - no recovery
				SW		@16' - becomes 2.5Y 5/2 (grayish brown), FINE TO COARSE SAND, (30,60,10)
	27"					
				NR		@ 18' - becomes FINE TO MEDIUM SAND @ 18'3" - 20' - no recovery
20			0	SW		
				ML	21' - 29'3"	10YR 3/1 (very dark gray), saturated, VERY FINE SANDY SILT, 10 - 20% very fine sand
	27"					
				NR		@ 22'3" - 24' - no recovery
				ML		@ 24'6" - becomes SILT, trace very fine sand (<5%)
25	32"					
				NR		@ 26'8" - 28' - no recovery
				ML		@ 28' - becomes VERY FINE SANDY SILT (10 - 20% very fine sand)
30	34"		0	SP	29'3" - 32'	2.5Y 3/2 (very dark grayish brown), saturated, VERY FINE TO MEDIUM SAND (10,50,35), scattered silt (5%)

PROJECT NAME:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	G.Dickinson / S. Miles	MONITORING EQUIPMENT:	PID
DATE:	04/04/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG PE2

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	
	34"		0	SP		@ 30'10" - 32' - no recovery
				NR		
	37"			SM	32' - 37'6"	2.5Y 3/2 (very dark grayish brown), saturated, SILTY VERY FINE TO FINE SAND (60,40)
35				NR		@ 35' - becomes (50,50) @ 35'1" - 36' - no recovery
						@ 36' - becomes (40,55), trace (5%) medium sand
	40"			ML	37'6" - 39'4"	2.5Y 3/2 (very dark grayish brown), saturated, VERY FINE SANDY SILT (30,65), trace clay (5%) @ 38'11" - becomes CLAYEY SILT
			0	NR		@ 39'4" - 40' - no recovery
40				SP	40' - 45'4"	5G 4/1 (dark greenish gray), saturated, FINE TO MEDIUM SAND (60,40), trace silt (<5%) @ 41'6" - trace coarse sand (<5%)
	20"			NR		@ 41'8" - 44' - no recovery
				SP		@ 44' - increase in fine sand (80,20), scattered coarse sand to fine gravel sized wood fragments
45	16"			NR		@ 45'2" - becomes VERY FINE TO FINE SAND, trace silt and medium sand (<5%) @ 45'4" - 48' - no recovery
				ML	48' - 53'6"	5Y 4/1 (dark gray), saturated, CLAYEY SILT, scattered fine to medium sand (<3%) @ 49' - scattered shells
				SMPL		
50	18"		0	NR		@ 49' - 49'6" - sample - did not log @ 49'6" - 52' - no recovery
				ML		@ 53' - abundant shells
	18"			NR		@ 53'6" - 56' - no recovery
55					T.D. - 53'6"	Note: Driller noted refusal at 57'. Lost sampler - no recovery from 56' to 57'.
60						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/6/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE3

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 9"	Asphalt	
					9" - 1'6"	Base	
				SP	1'6" - 18'7"	2.5Y 6/4 (light yellowish brown), moist, FINE SAND, scattered medium sand (5-10%)	
5			0	SMPL		@ 5' - 5'6" - sample	
				SP			
	33"					@ 6'6" - becomes 10YR 6/3 (pale brown), FINE TO MEDIUM SAND (40,60), trace coarse sand (1%)	
			NR			@ 7'6" - becomes wet (50,50)	
						@ 7'9" - 8' - no recovery	
				SP		@ 8' - becomes VERY FINE TO FINE SAND, abundant silt (15-20%)	
						@ 8'6" - becomes FINE TO MEDIUM SAND (60,40), scattered silt (5%)	
10	45"		0	SMPL		@ 9'6" - becomes 5Y 4/2 (olive gray)	
						@ 10' - 10'6" - sample	
						@ 10'6" - becomes FINE SAND, scattered medium sand (5-10%)	
			NR				
						@ 11'9" - 12' - no recovery	
				SP		@ 12' - becomes 5/3 (olive), VERY FINE TO FINE SAND, scattered silt (5-10%)	
						@ 12'6" - becomes 5Y 5/1 (gray)	
	45"					@ 13' - trace silt (1-3%), scattered medium sand (5%)	
			0			@ 14'6" - scattered silt and medium sand (5%)	
15						@ 15'3" - no medium sand, abundant silt (10-15%)	
			NR	SMPL		@ 15'3" - 15'9" - sample	
						@ 15'9" - 16' - no recovery	
				SP		@ 16' - scattered silt (5%), trace medium sand (1%)	
	31"					@ 18' - increase in silt (5-10%), very fine sand	
						@ 18'7" - 20' - no recovery	
				NR			
20			SW/ML	SMPL		@ 20' - 20'6" - sample - did not log	
			ML		20'6" - 20'9"	mottled 10YR 5/8 (yellowish brown) and 5Y 4/1 (dark gray), FINE TO COARSE SANDY SILT (40 sand,60 silt), scattered fine gravel	
				SM			
	28"				20'9" - 21'	5Y 4/1 (dark gray), wet, SILT, abundant clay (10-15%), scattered very fine sand (5%), trace coarse sand (1%)	
				NR			
					21' - 24'6"	5Y 4/1 (dark gray), wet, SILTY FINE TO COARSE SAND (30 silt, 60 sand), scattered gravel (5 - 10%), shards of glass, slight petroleum odor	
				SM			
25				SP		@ 22'4" - 24' - no recovery	
	29"				24'6" - 29'9"	5Y 4/1 (dark gray), VERY FINE TO MEDIUM SAND, trace silt and coarse sand (<5%), slight petroleum odor	
				NR		@ 25' - becomes VERY FINE TO FINE SAND, scattered medium sand (10%), trace silt (1-3%)	
						@ 25'6" - becomes 5Y 5/1 (gray)	
				SP		@ 26'5" - 28' - no recovery	
						@ 28' - trace medium sand (1-3%)	
						@ 29'3 - 29'9" - sample	
				SMPL			
30	21"			NR	T.D. - 29'9"	@ 29'9 - 32' - no recovery	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/6/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE4

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 8"	Asphalt	
					8" - 1'4"	Gravel	
				CL	1'4" - 3'	7.5 YR 4/6 (strong brown), moist, SILTY CLAY, scattered fine sand (~20%)	
			0	SP	3' - 8'	2.5Y 7/4 (pale yellow), damp, FINE SAND, scattered very fine sand (5%) @ 5' becomes 2.5Y 6/4 (light yellowish brown), scattered medium sand (5-10%) @ 6' becomes 2.5Y 5/2 (grayish brown), wet, FINE TO MEDIUM SAND (50,50) @ 6.5' becomes (30,70), trace coarse sand (<5%) @ 7.5' becomes VERY FINE TO MEDIUM SAND (10,30,50), scattered coarse sand (5-10%), trace shell fragments @ 7'9" - 8' - no recovery	
5			0	SMPL			
				SP			
	33"						
			NR				
				SM	8' - 9'	5Y 4/2 (olive gray), wet, SILTY FINE TO MEDIUM SAND (25,60,15) @ 8'5" becomes (15,40,45), trace coarse sand (5%) and shell fragments	
			0	SW			
10	46"		SP	SMPL	9' - 9'9"	5Y 4/2 (olive gray), wet, FINE TO COARSE SAND (10,40,45), trace fine gravel and shell fragments @ 9'6" becomes FINE TO MEDIUM SAND (30,60), scattered coarse sand (10%)	
				SP			
			NR				
			SM	SP	9'9" - 12'	5Y 4/2 (olive gray), wet, FINE SAND, scattered medium sand (10%) @ 10'6" - increase in medium sand (15-20%) @ 11' - decrease in medium sand (10%) @ 11'10" - 12' - no recovery	
	34"						
15			0	NR	12' - 12'3"	5Y 4/2 (olive gray), wet, SILTY FINE SAND (30,70), trace medium sand (1-3%)	
				SMPL	12'3" - 14'10"	5Y 4/3 (olive), wet, FINE TO MEDIUM SAND (40,55), trace coarse sand (5%) @ 13' becomes (30,65) with trace coarse sand (5%) @ 14'10" - 16' - no recovery	
				SM			
				SP			
	32"						
					16' - 17'	5Y 3/2 (dark olive gray), wet, SILTY FINE SAND	
				NR	17' - 21'10"	5GY 5/1 (greenish gray), wet, FINE TO MEDIUM SAND (60,40), trace silt (1%) @ 17'6" - trace shell fragments @ 18'3" - trace coarse sand (1-3%) @ 18'8" - 20' - no recovery @20'6" - becomes 5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, abundant silt (10-15%) @ 21'10" - 24' - no recovery	
20			0	SMPL			
				SP			
	22"						
				NR			
				SM	24' - 25'6"	5GY 5/1 (greenish gray), wet, SILTY VERY FINE SAND (25,75)	
25							
	42"			ML	25'6" - 32'3"	5GY 5/1 (greenish gray), wet, SILT, slightly plastic, scattered very fine sand (5-10%), trace clay (<5%) @ 26'6" - increase in very fine sand (10-15%), no clay @ 27'3" - decrease in very fine sand (<5%), scattered clay @ 27'6" - 28' - no recovery	
				NR			
				ML			
30	36"		0				

PACIFIC EDGE ENGINEERING, INC.

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SOIL BORING LOG - PE4

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				ML	@ 30'6" - increase in very fine sand (10-15%), no clay @ 31' - 32' - no recovery @ 32' becomes VERY FINE SANDY SILT	
	44"			SP	32'3" - 34'9" 5GY 4/1 (dark greenish gray), wet, VERY FINE TO FINE SAND, trace silt (<5%) @ 33' - scattered medium sand (5-10%) @ 33'6" - trace shell fragments	
35			NR	ML	34'9" - 36' 5GY 4/1 (dark greenish gray), wet, SILT, slight to medium plasticity, trace very fine sand (<5%), scattered clay (5-10%) @ 35' becomes VERY FINE SANDY SILT (30,70), very slightly plastic @ 35'8" - 36' - no recovery	
	25"		SP	ML	36' - 36'4" 5GY 5/1 (greenish gray), wet, FINE TO MEDIUM SAND (30,70), trace small (medium to coarse sand size) shell fragments	
				NR	36'4" - 38'1" 5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, abundant silt (10-15%) @ 37' becomes VERY FINE TO FINE SAND (70,30) @ 37'6" becomes (50,50) @ 38'1" - 40' - no recovery	
40			0	SP		
	26"				40' - 44'9" 5GY 4/1 (dark greenish gray), wet, VERY FINE TO FINE SAND (30,70)	
				NR	@ 42'2" - 44' - no recovery	
				SP	@ 44' - becomes (20,80), trace medium sand (1-3%)	
45	12"		CL	NR	44'9" - 53'6" 5Y 2.5/1 (black), wet, SILTY CLAY, slight to medium plasticity, sticky consistency @ 45' - 48' - no recovery	
				CL		
50	22"		0	NR	@ 49'10" - 52' - no recovery	
				CL		
	26"			ML	53'6" - 56'6" 5GY 4/1 (dark greenish gray), wet, VERY FINE SANDY SILT (30,70) @ 54' - noted some black streaks @ 54'2" - 56' - no recovery	
55				NR		
				ML	@ 56' - becomes (50,50)	
	34"			SM	56'6" - 60'3" 5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE SAND (20,80) @ 57' - 2" lens clayey silt @ 57'6" - becomes SILTY VERY FINE TO FINE SAND	
				NR	@ 58'10" - 60' - no recovery	
60			0			

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LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/6/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE4

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
	29"			ML	60'3" - 61'3" 5GY 4/1 (dark greenish gray), wet, SILT, scattered very fine sand (5-10%), trace clay (<5%) @ 60'9" - trace very fine sand (<5%)	
				SM	61'3" - 62'5" 5GY 4/1 (dark greenish gray), wet, SILTY FINE SAND @ 62' - abundant shell fragments	
				NR	T.D. - 62'5" @ 62'5" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

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LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	5/1/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE5

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 14'3"	2.5Y 6/4 (light yellowish brown), moist, VERY FINE TO FINE SAND (40,60), trace silt (1-3%)	
5			0	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 6'5" - becomes 2.5Y 5/4 (light olive brown)	
	33"					@ 6'9" - becomes 5Y 4/3 (olive), wet, scattered medium sands (5%)	
			NR			@ 7'9" - 8' - no recovery	
				SP		@ 8' - becomes VERY FINE TO MEDIUM SAND (30,40,20), scattered coarse sand (5%), trace silt (1-3%)	
						@ 8'6" - becomes VERY FINE TO FINE SAND (35,60), scattered medium sand (5%), trace silt (1%)	
10	32"		0	SMPL		@ 10'2" - 10'8" - sample - did not log	
				NR		@ 10'8" - 12' - no recovery	
						@ 12' - becomes VERY FINE SAND, abundant fine sand and silt (10%)	
						@ 13' - becomes VERY FINE TO FINE SAND (60,30), abundant silt (10%)	
	36"		SM			@ 14' - becomes FINE TO MEDIUM SAND (30,40,20), scattered silt (5%)	
				SMPL	14'3" - 16'6"	5Y 4/3 (olive), wet, SILTY VERY FINE SAND (15,75), abundant fine sand (10%)	
15			0.1	NR		@ 14'6" - 15' - sample - did not log	
				SM		@ 15' - 16' - no recovery	
				SP	16'6" - 18'6"	5Y 4/2 (olive gray), wet, VERY FINE TO FINE SAND (30,70), trace silt (1-3%)	
	36"					@ 18' - abundant silt	
				SM	18'6" - 20'10"	5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (25,75)	
			0	NR		@ 19' - 20' - no recovery	
20			SM	SMPL		@ 20' - 20'6" - sample - did not log	
				ML			
	23"			SP	20'10" - 21'6"	2.5Y 3/1 (very dark gray), wet, VERY FINE SANDY SILT (25,75)	
				NR	21'6" - 21'11"	2.5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (50,50), scattered silt (5%)	
						@ 21'11" - 24' - no recovery	
				ML	24' - 29'	2.5Y 3/1 (very dark gray), wet, VERY FINE SANDY SILT	
25						@ 25'6" - becomes SILT, scattered very fine sands	
	24"					@ 26' - 28' - no recovery	
				NR			
						@ 28'4" - becomes SILT	
				ML	29' - 29'6"	2.5Y 3/1 (very dark gray), wet, VERY FINE TO FINE SAND (30,60), scattered silt (5%), scattered medium sands	
				SP			
30	24"		0	SMPL	T.D. - 30'	@ 29'6" - 30' - sample - did not log	
				NR		@ 30' - 32' - no recovery	

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE6

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 5" Asphalt	
					5" - 1'6" Base	
5			0	SMPL	5' - 17'6" 2.5Y 7/4 (pale yellow), moist, FINE SAND	
				SP	@ 6' - scattered very fine sand (5-10%)	
	35"				@ 6'9" - becomes 2.5Y 5/2 (grayish brown), FINE TO MEDIUM SAND (50,50)	
					@ 7' - trace coarse sand (1-3%)	
			NR		@ 7'6" - becomes (30,70), saturated	
				SP	@ 7'11" - 8' - no recovery	
					@ 8' - becomes VERY FINE TO FINE SAND, scattered silt (5-10%)	
					@ 8'3" - becomes FINE TO MEDIUM SAND (20,80), trace coarse sand (1-3%)	
10	45"		0	SMPL	@ 9' - becomes MEDIUM SAND, scattered fine sand (5-10%), trace coarse sand (1-3%)	
				SP	@ 9'6" - becomes trace fine sand (3-5%), scattered coarse sand (5-10%)	
			NR			
				SP	@ 10'3" - becomes FINE TO MEDIUM SAND (70,30), trace coarse sand (1-3%)	
					@ 11' - becomes (50,50)	
	39"				@ 11'9" - 12' - no recovery	
					@ 12' - becomes VERY FINE TO FINE SAND, trace silt and medium sand (1-3%)	
15			0	SMPL	@ 12'6" - becomes FINE TO MEDIUM SAND (70,30)	
				NR	@ 13'6" - becomes (30,70)	
				SP	@ 14'6" - becomes VERY FINE TO FINE SAND, scattered medium sand (10-15%)	
					@ 14'9" - 15'3" - sample - did not log	
	41"			SP/ML	@ 15'3" - 16' - no recovery	
					@ 16'6" - becomes FINE TO MEDIUM SAND (50,45), scattered very fine sand (5%)	
				NR	17'6" - 28'6" 5Y 4/1 (dark gray), saturated, VERY FINE TO FINE SAND (75,20), scattered silt (5%)	
20			0	SMPL	@ 18'6" - becomes (50,50), trace silt (1-3%)	
				SP/ML	@ 19'3" - becomes (80,20)	
	37"				@ 19'5" - 20' - no recovery	
					@ 20' - 20'6" - sample - did not log	
					@ 20'6" - becomes (70,30)	
					@ 21' - becomes (30,70)	
				NR	@ 21'6" - becomes (50,50)	
					@ 22' - becomes (60,40)	
				SP/ML	@ 23'1" - 24' - no recovery	
25					@ 24' - becomes (70,30)	
					@ 24'6" - becomes SILT, scattered very fine sand (10%), slightly plastic, trace clay (1-3%)	
					@ 25'6" - becomes VERY FINE SANDY SILT (40,60)	
	33"			NR	@ 26'9" - 28' - no recovery	
				ML	@ 28' - becomes CLAYEY SILT, trace very fine sand (1-3%)	
				CL	28'6" - 29'6" 5Y 4/1 (dark gray), wet, SILTY CLAY	
30	34"		0			

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SOIL BORING LOG - PE6

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	SMPL SP NR	29'6" - 30'10" 5Y 2.5/1 (black), wet, FINE TO MEDIUM SAND (40,60), scattered coarse to very coarse sand (5%), subrounded @ 30' - 30'6" - sample - did not log @ 30'6" - abundant shells/shell fragments	
					T.D. - 30'10" @ 30'10 - 32' - no recovery	
35						
40						
45						
50						
55						
60						

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SOIL BORING LOG - PE7

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 5"	Asphalt	
					5" - 1'6"	Gravel	
5				SMPL	5' - 5'6"	Sample - did not log	
	33"		0	SP	5'6" - 11'9"	2.5Y 7/4 (pale yellow), moist, FINE SAND, trace very fine and medium sand (1-3%) @ 5'9" - becomes FINE TO MEDIUM SAND (70,30) @ 6'9" - becomes 2.5Y 5/2 (grayish brown), (40,60) trace small (medium to coarse size) shell fragments @ 7'6" - becomes MEDIUM SAND, scattered fine and coarse sand (5%), scattered to abundant shell fragments (pea size) @ 7'9" - 8' - no recovery @ 8' - becomes FINE TO MEDIUM SAND (25,75), trace coarse sand (1-3%), no shell fragments @ 8'6" - becomes (50,50) @ 9'6" - becomes (20,80) @ 10' - 10'6" - sample - did not log @ 11' - becomes (40,60) @ 11'6" - becomes (80,20) @ 11'9" - 12' - no recovery	
			NR	SP			
10	45"		0	SMPL			
			NR	SP			
				ML			
	34"			SP			
15			0	SMPL	12' - 12'6"	5Y 4/2 (olive gray), wet, VERY FINE SAND, scattered silt and fine sand (5-10%)	
				NR	12'6" - 23'3"	5Y 4/2 (olive gray), wet, MEDIUM SAND, scattered fine sand (10%), trace coarse sand (1-3%) @ 14' - becomes VERY FINE TO FINE SAND, scattered medium sand (5-10%) @ 14'4" - 14'10" - sample @ 14'10" - 16' - no recovery @ 16'6" - becomes FINE SAND, scattered medium sand (5-10%) @ 17'6" becomes 5Y 4/1 (dark gray), VERY FINE TO FINE SAND (30,65), trace medium sand (1-3%) @ 18'6" - becomes (50,50) @ 19'1" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes VERY FINE SAND, scattered silt (5-10%), trace fine sand (3-5%) @ 21'6" - becomes VERY FINE TO FINE SAND (70,25), scattered silt (5%) @ 23'3" - 24' - no recovery	
	37"			SP			
				NR			
20			0	SMPL			
				SP			
	39"						
				NR			
				SM	24' - 25'	5Y 2.5/2 (black), wet, SILTY VERY FINE SAND (40,60)	
25	44"			SP	25' - 27'	5Y 2.5/2 (black), wet, VERY FINE SAND, scattered silt and fine sand (10-15%)	
				SM	27' - 27'8"	5Y 2.5/2 (black), wet, SILTY VERY FINE SAND (30,70) @ 27'8" - 28' - no recovery	
			NR				
				ML	28' - 30'	5Y 2.5/2 (black), wet, VERY FINE SANDY SILT (30,70) @ 28'6" - becomes SILT, scattered very fine sand (5-10%) @ 29'6" - becomes VERY FINE SANDY SILT (25,75)	
30	33"		0				

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SOIL BORING LOG - PE7

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			SP/ SM	SMPL		@ 30' - 30'6" - sample - did not log	
				NR		@ 30'6" - 3" lens FINE TO MEDIUM SAND grading into SILTY VERY FINE SAND, trace shell fragments	
						@ 30'9" - 32' - no recovery	
				ML	32' - 33'6"	5Y 2.5/2 (black), wet, SILT, scattered very fine sand (5-10%), trace clay, slight plasticity	
	31"			SP		@ 32'6" - becomes very fine sandy silt (40,60)	
35				NR	33'6" - 34'7"	5Y 2.5/2 (black), wet, VERY FINE SAND, scattered silt and fine sand (10-15%)	
						@ 34'7" - 36' - no recovery	
				ML	36' - 37'6"	5Y 2.5/2 (black), wet, SILT, scattered very fine sand (5-10%), slight plasticity	
						@ 36'6" - becomes VERY FINE SAND SILT (40,60), trace medium sand and shell fragments (1-3%)	
	32"			SM	37'6" - 38'8"	5Y 2.5/2 (black), wet, SILTY VERY FINE SAND (40,60)	
				NR		@ 38' - becomes (30,70)	
						@ 38'8" - 40' - no recovery	
40			0	SMPL		@ 40' - 40'6" - sample - did not log	
				SM			
	36"			ML	41'6" - 42'6"	5Y 2.5/2 (black), wet, VERY FINE SANDY SILT (40,60)	
				CL	42'6" - 45'3"	5Y 3/2 (dark olive gray), wet, SILTY CLAY, scattered very fine sand (10-15%), slight plasticity	
				NR		@ 43' - 44' - no recovery	
				CL		@ 44' - becomes trace very fine sand (1-3%), medium plasticity	
45							
	30"			SP	45'3" - 52'6"	5Y 3/2 (dark olive gray), wet, FINE SAND, scattered very fine sand (10-15%)	
				NR		@ 46' - trace very fine sand (5%)	
						@ 46'6" - 48' - no recovery	
				SP		@ 48' - scattered very fine sand (10-15%), trace shell fragments	
						@ 49'6" - trace medium sand (1-3%)	
50	29"		0	SMPL		@ 49'11" - 50'5" - sample - did not log	
				NR		@ 50'5" - 52' - no recovery	
				SP		@ 52' - becomes VERY FINE TO MEDIUM SAND, trace silt (1-3%)	
				ML	52'6" - 56'6"	5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, abundant silt (15-20%)	
	17"			NR		@ 53'5" - 56' - no recovery	
55							
				ML		@ 56' - becomes CLAYEY SILT, scattered very fine sand (5%)	
				SM	56'6" - 58'4"	5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE SAND (30,70)	
	28"						
				NR		@ 58'4" - 60' - no recovery	
60							

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SOIL BORING LOG - PE7

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 60' - 60'6" - sample - did not log	
	32"			CL	60'6" - 62' 5Y 4/1 (dark gray), wet, SILTY CLAY, scattered very fine sand (5%)	
				SP	62' - 62'8" 5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (25,55), scattered medium sand (5%), abundant shell fragments (10-15%)	
				NR	T.D. - 62'8" @ 62'8" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

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SOIL BORING LOG - PE8

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	
					0 - 5"	Asphalt
					5" - 1'6"	Base
					5' - 5'6"	Sample - did not log
				SMPL	5'6" - 12'	2.5Y 6/4 (light yellowish brown), moist, FINE SAND, trace very fine sand (5%) @ 6' - trace medium sand (1-3%) @ 6'9" - becomes 5Y 4/2 (olive gray), wet, FINE TO MEDIUM SAND (40,55), trace very fine sand (5%) @ 7'10" - 8' - no recovery @ 8' - becomes 2.5Y 5/4 (light olive brown), VERY FINE TO FINE SAND (30,70) @ 8'3" - becomes 5Y 4/2 (olive gray), FINE TO MEDIUM SAND (30,60), scattered very fine sand (5-10%) @ 11'6" - becomes FINE SAND, scattered very fine and medium sand (10%) @ 11'9" - 12' - no recovery
5	34"		0	SP		
			NR			
				SP		
10	45"		0			
			NR		12' - 12'6"	5Y 4/2 (olive gray), wet, SILTY VERY FINE SAND (20,70), scattered fine sand (5-10%)
				ML	12'6" - 14'8"	5Y 4/2 (olive gray), wet, FINE TO MEDIUM SAND (40,55), scattered very fine sand (5%) @ 13'6" - becomes MEDIUM SAND, scattered fine sand (10%), trace very fine sand (1-3%) @ 14'6" - becomes VERY FINE TO FINE SAND (20,70), scattered medium sand (10%) @ 14'8" - 15'2" - sample - did not log @ 15'2" - 16' - no recovery
				SP		
	38"					
15			0	SMPL		
				NR	16' - 16'6"	5Y 4/2 (olive gray), wet, SILTY VERY FINE SAND (20,70), scattered fine sand (10%)
				ML		
				SP	16'6" - 17'9"	5GY 4/1 (dark greenish gray), wet, FINE TO MEDIUM SAND (60,40)
	40"			ML	17'9" - 24'6"	5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE SAND (25,70), scattered fine sand (5%) @ 18'6" - becomes VERY FINE SAND, scattered silt (10-15%), trace fine sand (3-5%) @ 19'4" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - scattered fine sand (10-15%), trace silt/medium sand (1-3%) @ 21' - scattered silt (5%) @ 23' - increase in silt (10%) @ 23'5" - 24' - no recovery
				NR		
20			0	SMPL		
				ML		
	41"					
					24'6" - 29'	5Y 2.5/1 (black), wet, FINE TO COARSE SAND (35,35,20), scattered gravel (5-10%), slight to moderate petroleum odor, trace silt (1-3%) @ 25'6" - scattered very fine sand (5-10%), mod. petroleum odor @ 26'6" - becomes VERY FINE TO MEDIUM SAND (35,30,30), scattered gravel, slight to moderate petroleum odor @ 26'10" - 28' - no recovery @ 28' - becomes FINE TO COARSE SAND (35,35,20), scattered gravel (5-10%), slight petroleum odor, trace very fine sand (1-3%)
				NR		
				ML		
25	34"			SW		
				NR	29' - 30'	5Y 2.5/1 (black), wet, FINE SAND, abundant very fine sand (15-20%), trace medium sand (3-5%) @ 29'3" - becomes 5GY 4/1 (dark greenish gray), scattered very fine sand (5%), and medium sand (10-15%), very slight petroleum odor
				SW		
				SP	T.D. - 30'6"	@ 30' - 30'6" - sample - did not log @ 30'6" - 32' - no recovery
30	30"		0	SMPL		

GRAPHIC LOG

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/7 and 4/10/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE9

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 5" Asphalt	
					5" - 1'6" Base	
					5' - 5'6" Sample - did not log	
					5'6" - 17'6" 2.5Y 6/6 (olive yellow), moist, FINE SAND, abundant medium sand (15-20%) @ 6' - becomes 2.5Y 5/4 (light olive brown), VERY FINE TO FINE SAND, (20,75), trace medium sand (3-5%) @ 6'3" - becomes 5Y 4/2 (olive gray), FINE TO MEDIUM SAND (30,70) @ 7'6" - becomes MEDIUM SAND, scattered fine sand (10%) and shell fragments @ 7'9" - 8' - no recovery @ 8' - becomes 2.5Y 5/4 (light olive brown), VERY FINE TO FINE SAND (20,75), trace medium sand (3-5%), no shell fragments @ 8'3" - becomes 5Y 4/2 (olive gray), FINE TO MEDIUM SAND (30,70), scattered shell fragments @ 9'6" - becomes MEDIUM SAND, scattered fine sand (10%), trace shell fragments @ 10' - 10'6" - sample - did not log @ 10'6" - becomes FINE TO MEDIUM SAND (40,60) @ 11' - becomes FINE SAND, scattered very fine and medium sand (5%) @ 11'9" - 12' - no recovery @ 12' - becomes MEDIUM SAND, scattered fine sand (5%) and coarse sand (5%) @ 12'6" - becomes VERY FINE TO FINE SAND (40,60) @ 13'6" - becomes FINE TO MEDIUM SAND (30,65), trace very fine and coarse sand (1-3%) @ 14'3" - becomes VERY FINE TO FINE SAND (40,60) @ 14'6" - 15' - sample - did not log @ 15' - 16' - no recovery @ 16' - becomes 5GY 4/1 (dark greenish gray), FINE SAND, scattered very fine and medium sand (5%) @ 16'6" - becomes VERY FINE TO FINE SAND (40,60), trace medium sand (1-3%)	
5	33"		0	SMPL SP		
			NR	SP		
10	45"		0	SMPL SP		
			NR	SP		
15	36"		0	SMPL NR SP		
	34"			ML SP NR		
					17'6" - 18'3" 5Y 4/1 (dark gray), wet, VERY FINE SAND, trace fine sand (3-5%) and silt (1-3%)	
20	42"		0	SMPL SP NR ML	18'3" - 24' 5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (75,20), trace silt (1-3%) @ 18'10" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes (50,50), trace medium sand (1%), scattered silt (5-10%) @ 21'6" - becomes (30,70) @ 21'9" becomes FINE SAND, scattered very fine sand (10%), trace silt (1%) and medium sand (1-3%), and shell fragments @ 23'6" - 24' - no recovery	
25	24"			NR ML	24' - 28'9" 5GY 4/1 (dark greenish gray), wet, VERY FINE TO FINE SAND (60,40), trace silt (3-5%) @ 24'6" - becomes (40,60) @ 25'6" - becomes VERY FINE SANDY SILT (20,80) @ 26' - 28' - no recovery @ 28' - becomes SILTY VERY FINE SAND (30,70)	
30	36"		0	SP	28'9" - 30' 5GY 4/1 (dark greenish gray), wet, FINE TO MEDIUM SAND (60,40), trace very fine sand (3-5%) @ 29'6" - becomes VERY FINE TO FINE SAND (20,75), scattered medium sand	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/7 - 4/10/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE9

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 30' - 30'6" - sample - did not log	
				ML	30'6" - 40' 5Y 3/2 (dark olive gray), wet, VERY FINE SANDY SILT (40,60)	
				NR	@ 31' - 32' - no recovery	
				ML	@ 32' - becomes SILT, scattered very fine sand (5-10%), non to slightly plastic	
	27"					
				NR	@ 34'3" - 36' - no recovery	
35						
				ML	@ 36' - increase in very fine sand (10-15%) @ 36'6" - decrease in very fine sand (5-10%)	
	28"				@ 38' - trace very fine sand (1-3%)	
				NR	@ 38'4" - 40' - no recovery	
40			0	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	40'6" - 48' 5Y 2.5/1 (black), wet, VERY FINE TO FINE SAND, abundant shell fragments @ 41' - becomes 5GY 4/1 (dark greenish gray) FINE SAND, scattered very fine sand (10%), trace medium sand (1-3%)	
	30"					
				NR	@ 42' - becomes FINE TO MEDIUM SAND (60,35), scattered very fine sand (5%) @ 42'6" - 44' - no recovery	
				SP		
45					@ 45'6" - becomes VERY FINE TO FINE SAND (20,80), trace medium sand and silt (1-3%)	
	25"					
				NR	@ 46'1" - 48' - no recovery	
				ML	48' - 48'6" 5Y 4/1 (dark gray), wet, VERY FINE SAND, scattered silt and fine sand (5%)	
				SP	48'6" - 52'6" 5GY 4/1 (dark greenish gray), wet, FINE TO MEDIUM SAND (55,40), scattered very fine sand (5%)	
50	29"		0	SMPL	@ 49'11" - 50'5" - sample - did not log	
				NR	@ 50'5" - 52' - no recovery	
				SP	@ 52' - becomes FINE SAND, abundant very fine sand (15-20%)	
				ML	52'6" - 62'4" 5GY 5/1 (greenish gray), wet, VERY FINE SAND, abundant fine sand (15-20%), trace silt (1-3%) @ 53'3" - trace fine sand (3-5%), scattered silt (5-10%) @ 54' - scattered fine sand (5-10%)	
	29"					
				NR	@ 54'5" - 56' - no recovery	
55						
				ML	@ 56' - trace fine sand (3-5%), abundant silt (10-15%) @ 57'6" - becomes SILTY VERY FINE SAND (30,65), trace fine sand (3-5%) @ 58'3" - becomes (20,75)	
	32"			NR	@ 58'8" - 60' - no recovery	
60						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/7 - 4/10/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE9

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	SMPL	@ 60' - 60'6" - sample - did not log	
				ML	@ 60'6" - becomes CLAYEY SILT	
	28"				@ 60'9" - becomes VERY FINE SAND, trace fine sand (1-3%), scattered silt (5%)	
				NR	@ 62' - becomes SILTY VERY FINE SAND (30,70)	
					T.D. - 62'4" @ 62'4" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/11/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE10

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
5			0	SMPL	5' - 5'6"	Sample - did not log	
				SP	5'6" - 17'6"	10YR 4/4 (dark yellowish brown), moist, VERY FINE TO FINE SAND @ 5'6" - scattered silt (10%), scattered mustard gray clay nodules, trace medium sand (1-3%) @ 6'8" - becomes 5GY 4/1 (dark greenish gray), very moist, FINE TO MEDIUM SAND (60,30), scattered very fine sand (5-10%) @ 6'8" - 8' - no recovery @ 8' - becomes mixed 10YR 4/4 (dark yellowish brown) and 2.5Y 5/4 (light olive brown), VERY FINE TO FINE SAND, scattered silt, medium sand and gravel, trace coarse sand @ 8'3" - becomes 5GY 4/1 (dark greenish gray), very moist, FINE TO MEDIUM SAND (60,35), trace very fine sand (3-5%) @ 11'6" - becomes 5Y 4/2 (olive gray), VERY FINE TO FINE SAND, scattered medium sand (5%) @ 11'9" - 12' - no recovery @ 12' - becomes FINE TO MEDIUM SAND (40,55), trace very fine sand (1-3%) @ 12'6" - becomes (50,45) @ 14'6" - 15' - sample - did not log @ 15' - 16' - no recovery @ 16' - becomes VERY FINE SAND, scattered fine sand (10%) @ 16'9" - becomes 5GY 4/1 (dark greenish gray), VERY FINE TO FINE SAND (30,70)	
	22"			NR			
				SP			
10	45"		0				
			NR				
				SP			
	36"						
				SMPL			
15			0	NR			
				SP			
	32"			SP/ ML	17'6" - 18'8"	5Y 2.5/1 (black), wet, VERY FINE SAND, abundant silt (10-15%), scattered very fine sand (5-10%)	
				NR		@18'8" - 20' - no recovery	
20	8"		0	SP	20' - 20'8"	5GY 4/1 (dark greenish gray), wet, FINE SAND, scattered very fine sand (5-10%) and shell fragments	
					T.D. - 20'8"	Refusal at 20'8"	
25							
30							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/10/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE11

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 5"	Asphalt	
					5" - 1'6"	Base	
					5' - 5'6"	Sample - did not log	
5			0	SMPL	5'6" - 14'7"	2.5Y 4/4 (olive brown), moist, FINE TO MEDIUM SAND (70,30) @ 6' - becomes 5Y 4/3 (olive), (50,50), trace coarse sand and shell fragments (1-3%) @ 7' - becomes 5Y 4/2 (olive gray), wet, VERY FINE TO FINE SAND (30,60), scattered medium sand (1-3%) @ 7'8" - 8' - no recovery @ 8' - becomes 5Y 4/3 (olive), MEDIUM SAND, scattered fine sand (10%) @ 8'6" - becomes 5Y 4/2 (olive gray), FINE TO MEDIUM SAND (40,60) @ 9'3" - becomes (60,40) @ 10' - 10'6" - sample - did not log @ 10'6" - trace shell fragments @ 10'9" - becomes VERY FINE TO FINE SAND (30,65), trace medium sand (<5%) @ 11'6" - becomes 2.5Y 4/4 (olive brown) (60,40) @ 11'9" - 12' - no recovery @ 12' - becomes (50,50), scattered medium sand (5-10%) @ 12'6" - becomes MEDIUM SAND, scattered coarse sand (5-10%), trace fine sand (1-3%) @ 13'6" - becomes FINE TO MEDIUM SAND (50,50) @ 14'7" - 15'1" - sample - did not log @ 15'1" - 16' - no recovery	
	32"			SP			
			NR				
10	45"		0	SMPL			
			NR				
	37"						
15			0	SMPL NR			
				ML SP	16' - 16'6"	5Y 4/2 (olive gray), wet, VERY FINE SAND, scattered silt and fine sand (5%)	
	40"			ML	16'6" - 17'3"	5GY 4/1 (dark greenish gray), wet, VERY FINE TO MEDIUM SAND (20,40,40) @ 17' - becomes VERY FINE TO FINE SAND (50,50)	
				SP	17'3" - 18'6"	5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, trace silt (1-3%), scattered fine sand (10%)	
20			0	NR SMPL SP	18'6" - 25'6"	5GY 4/1 (dark greenish gray), wet, FINE TO MEDIUM SAND (65,20) abundant very fine sand (10-15%) @ 19'4" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes VERY FINE TO FINE SAND (50,50), trace silt (1-3%) @ 21' - becomes FINE TO MEDIUM SAND (30,70) @ 22' - becomes (45,45), scattered very fine sand (10%) @ 22'5" - 24' - no recovery @ 24' - becomes FINE SAND, abundant very fine sand (10-15%), trace medium sand (3-5%) and small shell fragments	
	29"			NR			
25				SP			
	29"			ML NR	25'6" - 26'5"	5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, scattered fine sand, trace silt (1-3%) @ 26' - becomes SILTY VERY FINE SAND (30,70), trace fine sand(1-3%) @ 26'5" - 28' - no recovery	
				SP	28' - 29'10"	5GY 4/1 (dark greenish gray), wet, VERY FINE TO FINE SAND (25,75), trace medium sand (1%) @ 28'6" - becomes FINE TO MEDIUM SAND (70,30), trace small shell fragments @ 29'6" - becomes VERY FINE TO FINE SAND (40,60)	
30	28"		0				

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
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DATE:	4/10/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE11

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				SMPL		@ 29'10" - 30'4" - sample - did not log	
				NR		@ 30'4" - 32' - no recovery	
				ML	32' - 36'3"	5Y 2.5/2 (black), wet, VERY FINE SAND, scattered fine sand (10-15%) and silt (5-10%) @ 33'6" - becomes CLAYEY SILT, trace very fine sand (5%) @ 34' - becomes VERY FINE SAND, scattered fine sand (10-15%) and silt (5-10%)	
	28"			NR		@ 34'4" - 36' - no recovery	
35			ML				
				SP		@ 36' - becomes 5GY 4/1 (dark greenish gray), VERY FINE TO FINE SAND (60,40), trace silt (1-3%)	
					36'3" - 44'9"	5GY 5/1 (greenish gray), FINE SAND, scattered very fine sand (5-10%), trace shell fragments @ 37'6" - trace medium sand (3-5%) and very fine sand (1-3%)	
	25"			NR		@ 38'1" - 40' - no recovery	
40			0	SMPL		@ 40' - 40'6" - sample - did not log	
				SP			
	16"			NR		@ 41'4" - 44' - no recovery	
				SP		@ 44' - becomes FINE TO MEDIUM SAND (50,50), trace very fine sand (1-3%)	
45				ML	44'9" - 45'11"	5GY 4/1 (dark greenish gray), wet, VERY FINE TO FINE SAND (60,40) @ 45'9" - becomes SILT, scattered very fine sand (5%), trace clay (1-3%), slight plasticity	
	23"			NR		@ 45'11" - 48' - no recovery	
				SP	48' - 50'1"	5GY 5/1 (greenish gray), wet, VERY FINE TO FINE SAND (25,75) @ 48'6" - becomes FINE SAND, scattered very fine sand (10%) @ 49'6" - becomes VERY FINE TO FINE SAND (30,70)	
50	31"		0	SMPL		@ 50'1" - 50'7" - sample - did not log	
				NR		@ 50'7" - 52' - no recovery	
				ML	52' - 62'4"	5GY 5/1 (greenish gray), wet, VERY FINE TO FINE SAND (60,40) @ 52'6" - becomes VERY FINE SAND, scattered fine sand (5%) @ 53'6" - increase in fine sand (10-15%)	
	24"			NR		@ 54' - 56' - no recovery	
55							
				ML		@ 56' - becomes VERY FINE TO FINE SAND (60,40) @ 56'9" - becomes VERY FINE SAND, trace fine sand (3-5%) and silt (1-3%) @ 57'6" - becomes VERY FINE SANDY SILT (30,70)	
	26"			NR		@ 58'2" - 60' - no recovery	
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/10/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE11

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	SMPL	@ 60' - 60'6" - sample - did not log	
				ML	@ 60'6" - becomes VERY FINE TO FINE SAND (70, 25), trace medium sand (1-3%) and shell fragments, some black mottling	
	28"				@ 61' - becomes VERY FINE SANDY SILT (30,70), scattered to abundant shell/shell fragments	
				NR	@ 61'9" - becomes SILT, trace very fine sand (1-3%), non plastic	
					T.D. - 62'4" @ 62'4" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/11/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE12

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
5				SMPL	5' - 5'6"	Sample - did not log	
	25"			SP	5'6" - 8'6"	10YR 5/8 (yellowish brown), moist, FINE TO MEDIUM SAND (70,25), scattered very fine sand (5%), trace shell fragments @ 6'9" - 7' - scattered gravel @ 7' - becomes 5GY 5/1 (greenish gray), VERY FINE TO FINE SAND, (70,30), trace silt (1-3%) @ 7'1" - 8' - no recovery	
				NR			
				SM			
				SP	8' - 8'6"	10YR 5/4 (yellowish brown), wet, SILTY FINE SAND (30,65), trace medium sand (1-3%)	
10	27"			SMPL			
				NR	8'6" - 16'10"	5GY 5/1 (greenish gray), wet, VERY FINE TO FINE SAND (30,65), scattered medium sand (3-5%) @ 9'6" - becomes 5Y 5/2 (olive gray), FINE SAND, scattered medium sand (10%) and very fine sand (5%) @ 9'9" - 10'3" - sample - did not log @ 10'3" - 12' - no recovery @ 12' - becomes 2.5Y 4/4 (olive brown) @ 14' - 14'6" - sample - did not log @ 14'6" - 16' - no recovery	
				SP			
	30"			SMPL			
15				NR			
				SP		@ 16' - becomes 5Y 4/4 (olive) with some orange tinting, VERY FINE SAND, scattered fine sand (5-10%)	
				SW/GW	16'10" - 17'3"	10YR 4/6 (dark yellowish brown), MEDIUM TO COARSE SANDY GRAVEL, (sandstone fragments), scattered silt and fine sand (5-10%)	
	35"			SP	17'3" - 29'4"	5GY 5/1 (greenish gray), wet, VERY FINE TO FINE SAND (50,50) @ 18'3" - becomes (30,70) @ 18'11" - 20' - no recovery	
				NR			
20				SMPL		@ 20' - 20'6" - sample - did not log	
				SP		@ 21' - becomes VERY FINE SAND, scattered fine sand (10%)	
	26"			NR		@ 22'2" - 24' - no recovery	
				SP		@ 24' - becomes 5GY 4/1 (dark greenish gray), FINE TO MEDIUM SAND (60,35), scattered very fine sand (5%) @ 24'6" - becomes (30,70)	
25	27"			NR		@ 26'3" - 28' - no recovery	
				SP		@ 28'9" - abundant nodules orangish siltstone and gravel (sandstone) @ 29'4" - 29'10" - sample - did not log	
				SMPL			
30	22"			NR	T.D. - 29'10"	@ 29'10 - 32' - no recovery	

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/10 - 4/11/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE13

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					5' - 5'6" Sample - did not log	
					5'6" - 11'9" 2.5Y 4/4 (olive brown), moist, FINE TO MEDIUM SAND (50,50), trace shell fragments and very fine sand (1-3%) @ 6' - becomes (70,30) @ 7' - becomes 5Y 4/3 (olive), wet, VERY FINE TO FINE SAND (30,65), trace medium sand (3-5%) @ 7'9" - 8' - no recovery @ 8' - becomes 2.5Y 4/4 (olive brown) with some orange mottling @ 8'6" - becomes 5Y 4/3 (olive), FINE SAND, abundant very fine sand (15%) @ 9'6" - becomes FINE TO MEDIUM SAND (40,55), trace very fine sand (3-5%) @ 10' - 10'6" - sample - did not log @ 10'6" - becomes FINE SAND, scattered very fine sand and medium sand (5%) @ 11' - becomes 2.5Y 5/4 (light olive brown), MEDIUM SAND, scattered fine sand (10%) @ 11'9" - 12' - no recovery	
5	33"		0	SMPL SP		
			NR	SP		
10	45"		0	SMPL SP		
			NR			
			ML	SP	12' - 12'3" 2.5Y 5/4 (light olive brown), wet, VERY FINE SAND, trace silt and fine sand (1-3%)	
					12'3" - 16'9" 2.5Y 5/2 (grayish brown), wet, FINE TO MEDIUM SAND (30,70) @ 13' - becomes MEDIUM SAND, scattered fine sand (10%) @ 13'9" - becomes 5Y 4/2 (olive gray), FINE TO MEDIUM SAND (50,50) @ 14'4" - 14'10" - sample - did not log @ 14'10" - 16' - no recovery	
15	34"		0	SMPL NR SP		
				ML	16'9" - 17'9" 5Y 4/2 (olive gray), wet, VERY FINE SAND, scattered silt (5%)	
	32"			SP NR	17'9" - 22' 5Y 4/2 (olive gray), wet, FINE SAND, scattered very fine sand and medium sand (5%) @ 18'6" - becomes VERY FINE TO FINE SAND (40,60), trace silt (1-3%) @ 18'8" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes FINE SAND, scattered very fine sand (10%), trace silt (1-3%)	
20			0	SMPL SP		
	28"		ML	NR	22' - 26' 5Y 2.5/1 (black), wet, VERY FINE SANDY SILT (25,75), non plastic @ 22'4" - 24' - no recovery	
25				ML	@ 24' - becomes VERY FINE SAND, trace silt (3-5%) @ 24'6" - becomes scattered silt (5-10%)	
	28"		SP	NR	26' - 28'6" 5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (40,60), trace silt (1-3%) @ 26'4" - 28' - no recovery @ 28' - scattered shell fragments	
				SP ML	28'6" - 33'6" 5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (30,65), scattered fine sand (5%) @ 29'6" - becomes VERY FINE SAND, scattered silt (5-10%) and fine sand (5%)	
30	30"		0			

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/10 - 4/11/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE13

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				SMPL		@ 30' - 30'6" - sample - did not log	
				NR		@ 30'6" - 32' - no recovery	
						@ 32' - becomes VERY FINE SANDY SILT (30,70), non plastic	
	37"			SP	33'6" - 50'	5Y 2.5/1 (black), wet, VERY FINE TO FINE SAND (40,55), trace silt and medium sand (1-3%)	
35				NR		@ 35'1" - 36' - no recovery	
				SP		@ 36' - becomes 5GY 4/1 (dark greenish gray), FINE SAND, scattered very fine sand (5-10%) @ 36'6" - trace very fine sand (1-3%)	
	24"			NR		@ 38' - 40' - no recovery	
40			0	SMPL		@ 40' - 40'6" - sample - did not log	
				SP		@ 40'6" - becomes FINE TO MEDIUM SAND (70,30), trace petroleum odor @ 41' - scattered very fine sand (5-10%), some black mottling, slight petroleum odor	
	29"			NR		@ 42' - becomes VERY FINE TO FINE SAND (40,60), trace silt (1-3%) @ 42'5" - 44' - no recovery	
				SP		@ 44' - trace large shell fragments @ 44'6" - becomes 5GY 4/1 (dark greenish gray) (25,75)	
45	33"						
				NR		@ 46'9" - 48' - no recovery	
				SP		@ 48' - becomes FINE SAND, scattered very fine sand (5-10%)	
50	30"		0	SMPL		@ 49'6" - trace medium sand @ 50' - 50'6" - sample - did not log	
				NR		@ 50'6" 52' - no recovery	
				ML	52' - 62'4"	5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, scattered fine sand (5-10%), trace silt (1-3%)	
	28"					@ 52'6" - trace shell fragments @ 54' - 54'2" - scattered dark gray to black clay nodules	
55				NR		@ 54'4" - 56' - no recovery	
				ML		@ 56' - becomes SILTY VERY FINE SAND (30,70) @ 56'6" - becomes VERY FINE SAND, scattered fine sand (5%) and silt (1-3%)	
	30"					@ 57'9" - becomes CLAYEY SILT, slight to moderate plasticity @ 58'3" - becomes SILT, scattered very fine sand (10%)	
				NR		@ 58'6" - 60' - no recovery	
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/10 - 4/11/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE13

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	SMPL	@ 60' - 60'6" - sample - did not log	
				ML	@ 60'6" - becomes VERY FINE SAND, scattered fine sand (5-10%), trace silt (1-3%) @ 62' - scattered silty clay nodules	
	28"			NR	T.D. - 62'4" @ 62'4" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/11/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE14

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
5			0	SMPL	5' - 5'6"	Sample - did not log	
				SP	5'6" - 13'5"	2.5Y 6/4 (light yellowish brown), damp to moist, FINE SAND, scattered very fine and medium sand (5%)	
	24"			NR		@ 6' - becomes 2.5Y 5/4 (light olive brown), FINE TO MEDIUM SAND (70,30), trace very fine sand (1-3%)	
				SP		@ 7' - 8' - no recovery	
						@ 8' - becomes FINE SAND, scattered medium sand (10%)	
						@ 8'6" - becomes wet, FINE TO MEDIUM SAND (70,30)	
						@ 9'6" - becomes (50,50), trace coarse sand (1-3%)	
10	36"		0	SMPL		@ 10' - 10'6" - sample - did not log	
				SP		@ 10'6" - becomes (70,30), trace very fine sand (3-5%)	
				NR		@ 11' - 12' - no recovery	
				SP			
	17"			NR		@ 13'5" - 16' - no recovery	
15			0				
				SMPL		@ 16' - 16'6" - sample - did not log	
				SW	16'6" - 17'	10YR 4/4 (dark yellowish brown), wet, VERY FINE TO COARSE SAND, scattered gravel (sandstone fragments)	
	32"			SP	17' - 29'7"	5YR 4/1 (dark gray), wet, FINE SAND, abundant medium sand (15-20%), scattered shell fragments	
				NR		@ 17'9" - becomes VERY FINE SAND, scattered fine sand (5%), trace silt (1-3%)	
20			0	SMPL		@ 18'3" - becomes VERY FINE TO FINE SAND (70,30)	
				SP		@ 18'8" - 20' - no recovery	
						@ 20' - 20'6" - sample - did not log	
	34"					@ 20'6" - becomes FINE TO MEDIUM SAND (60,40), trace very fine sand (1-3%)	
				NR		@ 22'10" - 24' - no recovery	
				SP		@ 24'6" - becomes 5G 4/1 (dark greenish gray), FINE SAND, scattered very fine sand (10-15%), trace medium sand (1-3%)	
25	25"					@ 25'6" - abundant very fine sand (15-20%)	
				NR		@ 26'1" - 28' - no recovery	
						@ 28' - scattered medium sand (5%), slight organic odor	
				SP		@ 28'6" - becomes VERY FINE TO FINE SAND (30,70), trace medium sand and silt (1-3%)	
						@ 29'7" - 30'1" - sample - did not log	
30	25"		0	SMPL	T.D. - 30'1"	@ 30'1" - 32' - no recovery	
				NR			

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier D Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	5/01/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE15

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				ML	3' - 5'6"	10YR 5/4 (yellowish brown), moist, SILT, scattered very fine sand (5-10%), trace medium and coarse sand (1-3%)	
5			0	SMPL		@ 5' - 5'6" - sample - did not log	
	25"			SP	5'6" - 12'	2.5Y 5/4 (light olive brown with slight orange tint), very moist, FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt (1-3%)	
				NR		@ 6' - scattered coarse sand (5-10%)	
				SP		@ 6'9" - becomes VERY FINE TO FINE SAND (20,70), scattered medium sand (5-10%)	
						@ 7'1" - 8' - no recovery	
						@ 8' - becomes (35,60), wet, trace silt and medium sand (1-3%)	
10	25"		0	SMPL		@ 8'6" - scattered medium sand (5-10%)	
				NR		@ 9'3" - becomes (15,75)	
						@ 9'7" - 10'1" - sample - did not log	
						@ 10'1" - 12' - no recovery	
				SM	12' - 12'6"	2.5Y 5/6 (light olive brown), wet, SILTY VERY FINE TO FINE SAND (25,30,45)	
				SP	12'6" - 14'	2.5Y 5/6 (light olive brown), wet, VERY FINE TO FINE SAND (30,60), scattered silt (5-10%), trace medium sand (3-5%)	
	30"			SMPL		@ 13'6" - becomes FINE SAND, scattered very fine sand (5-10%)	
15			0	NR		@ 14' - 14'6" - sample - did not log	
						@ 14'6" - 16' - no recovery	
				GW	16' - 16'5"	Black, very moist, FINE TO COARSE SANDY GRAVEL (asphalt?)	
				SP	16'5" - 26'3"	5Y 5/2 (olive gray), very moist, VERY FINE TO FINE SAND (20,70), scattered medium sand (5-10%)	
	28"					@16'10" - becomes 5Y 3/2 (dark olive gray), trace silt and medium sand (5%)	
				NR		@ 18'4" - 20' - no recovery	
20			0	SMPL		@ 20' - 20'6" - sample - did not log	
				SP			
	28"						
				NR		@ 22'4" - 24' - no recovery	
				SP			
25							
	27"						
				NR	T.D. - 26'3"	@ 26'3" - 28' - no recovery	
30							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - North End of Slip 3	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/28/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE16

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 9'	2.5Y 4/6 (olive brown with orange tint), slightly moist, VERY FINE TO FINE SAND (30,60), scattered silt and medium to coarse sand (5%)	
5			1.1	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 5'6" - becomes 2.5Y 5/6 (light olive brown)	
	33"						
			NR			@ 7'9" - 8' - no recovery	
				SP		@ 8' - becomes FINE SAND, trace very fine sand and silt (1-3%)	
						@ 8'6" - becomes 5Y 5/4 (olive), wet	
				SM	9' - 9'6"	2.5Y 5/4 (light olive brown), wet, SILTY VERY FINE TO FINE SAND (20,30,50)	
10	35"		0.8		9'6" - 16'6"	5Y 5/3 (olive), wet, VERY FINE TO FINE SAND (50,50), trace silt (3%)	
				SMPL		@ 10'5" - trace silt (1%)	
				NR		@ 10'5" - 10'11" - sample - did not log	
						@ 10'11" - 12' - no recovery	
						@ 12' - becomes 2.5Y 5/4 (light olive brown)	
						@ 13'9" - becomes (30,70)	
	21"			NR		@ 13'9" - 16' - no recovery	
15			1.2				
				SMPL		@ 16' - 16'6" - sample - did not log	
				SM	16'6" - 17'11"	2.5Y 5/4 (light olive brown), wet, SILTY VERY FINE TO FINE SAND (20,50,30), trace shells (1%)	
	23"					@ 17' - becomes VERY FINE TO MEDIUM SAND (20,40,20), scattered silt (5-10%), trace coarse sand (3%) and shell fragments	
				NR		@ 17'6" - becomes 2.5Y 4/4 (olive brown), SILTY VERY FINE TO MEDIUM SAND (15,30,30,15), trace coarse sand, gravel, and clay (3-5% each)	
20			0.7	SMPL			
				GW/SW		@ 17'11" - 20' - no recovery	
			SC			@ 20' - 20'6" - sample - did not log	
	19"			NR	20'6" - 21'3"	2.5Y 3/2 (very dark grayish brown), wet, GRAVELLY SILTY FINE TO COARSE SAND, abundant clay (10%)	
					21'3" - 21'7"	2.5Y 3/2 (very dark grayish brown), wet, CLAYEY VERY FINE TO MEDIUM SAND (15,35,30,15), abundant silt (10%), scattered coarse sand and gravel (3-5%)	
				SW/ CL		@ 21'7" - 24' - no recovery	
25	18"			NR	24' - 25'6"	mixture of 2.5Y 5/4 (light olive brown) and 10YR 5/6 (yellowish brown), wet, GRAVELLY CLAYEY VERY FINE TO MEDIUM SAND (15,25,50), abundant silt (10%), scattered coarse sand	
			SW/ CL			@ 24'6" - becomes 5Y 3/2 (dark olive gray), wet, GRAVELLY SILTY SAND (20,25,45), abundant clay (10-15%), intermixed with cores of black colored angular fractured rock	
				GC		@ 25' - becomes 5Y 4/3 (olive), GRAVELLY CLAYEY SAND (25,20,50), scattered silt (10%), intermixed with black colored angular fractured rock	
				SMPL			
30	14"			NR		@ 25'6" - 28' - no recovery	

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - North End of Slip 3	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/28/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE16

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.6	NR	28'4" - 32'6" 5GY 5/1 (greenish gray), intermixed with black, wet, CLAYEY SANDY GRAVEL (20,30,50,), intermixed with black colored angular fractured rock @ 28'8" - 29'2" - sample - did not log @ 29'2" - 32' - no recovery	
			SC	GC		
	9"			NR	32'6" - 32'9" 5Y 5/1 (green) intermixed with 10YR 6/6 (brownish yellow), wet, FINE TO MEDIUM SANDY CLAY (40,40), scattered silt, abundant coarse sand and gravel (10-15%)	
35					T.D. - 32'9" @ 32'9" - 36' - no recovery	
40						
45						
50						
55						
60						

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/27/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE17

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 6" Asphalt	
					6" - 1'6" Base	
				SP	3' - 8'6" 2.5Y 5/4 (light olive brown), damp, VERY FINE TO FINE SAND (20,75), trace silt and medium sand (1-3%)	
5			0.6	SMPL	@ 5' - 5'6" - sample - did not log	
				SP	@ 5'6" - trace shell fragments	
	34"				@ 6'6" - becomes 5Y 5/3 (olive), moist, scattered silt (5%)	
					@ 7'6" - becomes 2.5Y 5/4 (light olive brown), (40,55), scattered silt (5%)	
			NR		@ 7'10" - 8' - no recovery	
				SP	@ 8' - becomes 5Y 5/3 (olive), moist, scattered silts (5%)	
				SM	8'6" - 9'5" 10YR 5/6 (yellowish brown), moist, SILTY VERY FINE TO FINE SAND (20,30,50)	
				SP		
10	41"		0.4	SMPL	9'5" - 12' 5Y 5/3 (olive), moist, VERY FINE TO FINE SAND (60,35), trace silt (1-3%)	
				SP	@ 10' - 10'6" - sample - did not log	
					@ 10'6" - becomes 2.5Y 5/6 (light olive brown), moist	
				NR	@ 11'5" - becomes 5Y 5/6 (olive), wet	
				SP/ SW	@ 11'5" - 12' - no recovery	
					12' - 17'6" 5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (20,45,25), trace silt (1-3%) and shell fragments	
	29"			SMPL	@ 12'6" - becomes FINE TO COARSE SAND (20,60,15), scattered very fine sand (5%), abundant shell fragments	
15			0.4	NR	@ 13'6" - scattered gravels (5%)	
					@ 13'11" - 14'5" - sample - did not log	
					@ 14'5" - 16' - no recovery	
					@ 16' - becomes VERY FINE TO MEDIUM SAND (20,60,20), trace silt (1%)	
	29"			SM	@ 17' - becomes (20,20,55), scattered silts (5%)	
			SW			
				NR	17'6" - 18'3" 5Y 5/3 (olive), wet, SILTY VERY FINE TO FINE SAND (15,60,20), scattered medium sand (5%)	
20			0.5	SMPL	18'3" - 28' 5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (30,40,30), trace silt (1-3%)	
				SW	@ 18'5" - 20' - no recovery	
					@ 20' - 20'6" - sample - did not log	
	24"				@ 20'6" - becomes FINE TO COARSE SAND (25,35,45), trace very fine sand (1-3%) and shell fragments	
				NR	@ 21' - becomes 5Y 4/3 (olive), (30,50,20)	
					@ 22' - 24' - no recovery	
				SW	@ 24' - becomes 5Y 5/1 (gray), trace very coarse sand and silt (1-3%)	
25					@ 25' - becomes VERY FINE TO MEDIUM SAND (35,40,20), scattered silt (5%)	
	21"				@ 25'6" - becomes (20,40,40)	
				NR	@ 25'9" - 28' - no recovery	
			SP		28' - 28'4" 5Y 5/3 (olive), wet, FINE SAND, scattered silt and very fine sand (10%)	
				SW	28'4" - 36' 5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (30,30,40), trace silt (1-3%)	
				SMPL	@ 28'9"- 29'3" - sample - did not log	
30	15"			NR	@ 29'3" - 32' - no recovery	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/27/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE17

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.2	NR			
	23"			SW		@ 32' - becomes FINE TO COARSE SAND (20,40,40), trace very fine sand (1-3%) @ 33' - becomes VERY FINE TO MEDIUM SAND (40,40,20), trace silt (1-3%) @ 33'11" - becomes (20,35,45), trace very fine sand (1-3%)	
35				NR		@ 33'11" - 36' - no recovery	
	25"			SP	36' - 44'	5Y 4/3 (olive), wet, VERY FINE SAND, scattered silt and fine sand (5-10%) @ 37' - becomes 5Y 5/3 (olive)	
				NR		@ 38'1" - 40' - no recovery	
40			0.7	SMPL		@ 40' - 40'6" - sample - did not log @ 40'6" - becomes VERY FINE TO FINE SAND (70,25), scattered silt (5%)	
	25"			NR		@ 42'1" - 44' - no recovery	
45	23"			SM/ SP	44' - 48'	5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE TO FINE SAND (15,30,55) @ 45' - becomes VERY FINE TO FINE SAND, abundant silt (10%) @ 45'8" - becomes SILTY VERY FINE TO FINE SAND (15,30,55)	
				NR		@ 45'11" - 48' - no recovery	
				SM	48' - 49'2"	5Y 3/2 (dark olive gray), wet, SILTY VERY FINE SAND (25,70), scattered fine sand (5%) @ 49' - becomes 5Y 4/1 (dark gray)	
50	28"		0.1	SP	49'2" - 49'10"	5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (40,55), scattered silts (5%)	
				NR		@ 49'10" - 50'4" - sample - did not log @ 50'4" - 52' - no recovery	
				SM	52' - 53'3"	5Y 4/1 (dark gray), wet, SILTY VERY FINE TO FINE SAND (25,75)	
55	15"			NR	T.D. - 53'3"	@ 53'3" - 56' - no recovery	
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/27/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE18

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	
					0 - 6"	Asphalt
					6" - 1'6"	Base
					3' - 4'3"	5Y 5/3 (olive), damp, VERY FINE TO FINE SAND (30,60), trace silt, medium and coarse sand (1-3%)
				SP	4'3" - 4'6"	5Y 5/3 (olive), dry to damp, SILTY VERY FINE SAND (40,55), trace medium to coarse sand (1-3%)
			SM		4'6" - 8'	5Y 5/3 (olive), damp, VERY FINE TO FINE SAND, trace silt and medium sand (1-3%) @ 5'9" - becomes (15,80), slight orange staining @ 6'9" - becomes mottled 2.5Y 6/8 (olive yellow) and 10YR 6/8 (brownish yellow) @ 7'6"' - becomes VERY FINE SAND, scattered silt (5-10%)
5	45"		0	SP		
				ML	8' - 8'9"	2.5Y 5/4 (light olive brown), moist, SILT TO CLAYEY SILT, scattered very fine sand (5-10%), trace coarse to very coarse sand (1-3%) (siltstone fragments?)
				SP/SW	8'9" - 18'4"	2.5Y 4/4 (olive brown), damp to moist, VERY FINE TO COARSE SAND, scattered silt and gravel (5-10%) @ 9' trace clayey silt nodules @ 9'6" - becomes VERY FINE TO MEDIUM SAND (20,45,25), trace coarse sand and fine gravel (3-5%) @ 9'8" - 10'2" - sample - did not log @ 10'2" - 12' - no recovery @ 12' - becomes 5Y 4/3 (olive) @ 12'6" - becomes 5Y 5/3 (olive), wet, MEDIUM TO COARSE SAND (70,20), scattered fine sand (5-10%), trace shell fragments @ 13'6" - becomes FINE TO MEDIUM SAND (30,65), trace coarse sand (1-3%), and shell fragments @ 14'1" - 14'7" - sample - did not log @ 14'7" - 16' - no recovery @ 16' - becomes MEDIUM TO COARSE SAND (70,20), scattered fine sand (5-10%) and shell fragments @ 16'6" - becomes MEDIUM SAND, scattered fine and coarse sand (5-10%), trace shell fragments @ 17'6" - becomes FINE TO COARSE SAND (20,40,30), scattered very fine sand and very coarse sand (5-10%), trace silt (1-3%)
10	26"		0	SMPL		
				NR		
				SP/SW		
	31"			SMPL		
15			0	NR		
				SP/SW		
	30"		CL/ ML	NR		
20			0	SMPL	18'4" - 18'6"	2.5Y 5/4 (light olive brown), very moist to wet, CLAYEY SILT, moderate plasticity, trace medium to coarse sand (1-3%) @ 18'6" - 20' - no recovery @ 20' - 20'6" - sample - did not log
			SW	SP		
	23"			SW		
				NR	20'6" - 20'9"	5Y 5/3 (olive), wet, FINE TO COARSE SAND (20,45,25), scattered very fine sand (5-10%) and shell fragments
					20'9" - 21'3"	5Y 5/3 (olive), wet, VERY FINE SAND, trace silt and fine sand (3-5%)
				SM		
25				SP	21'3" - 21'11"	5Y 5/3 (olive), wet, FINE TO COARSE SAND (20,45,25), scattered very fine sand (5-10%) and shell fragments @ 21'11" - 24' - no recovery
	24"			SW		
				NR	24' - 24'6"	5Y 4/2 (olive gray), wet, SILTY VERY FINE SAND (25,70), trace fine sand (3-5%)
					24'6" - 25'6"	5Y 5/3 (olive), wet, VERY FINE TO FINE SAND (45,45), trace silt and medium sand (3-5%)
				SP	25'6" - 26'	5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (15,30,50), trace coarse sand (3-5%) @ 26' - 28' - no recovery
30	20"			SMPL		
				NR		

GRAPHIC LOG

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/27/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE18

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0	NR	28' - 37'11"	5Y 5/3 (olive), wet, VERY FINE SAND, scattered silt and fine sand (5-10%) @ 29'2" - 29'8" - sample - did not log @ 29'8" - 32' - no recovery	
				SP		@ 32' - becomes 5Y 5/2 (olive gray) @ 32'6" - becomes VERY FINE TO FINE SAND (20,70), scattered medium sand (5-10%), trace coarse to very coarse sand (1-3%)	
	22"			NR		@ 33'6" - becomes (40,55), trace silt and medium sand (3-5%) @ 33'10" - 36' - no recovery	
35						@ 36' - becomes (50,40), scattered medium sand (5-10%), trace silt (3-5%) @ 36'6" - trace medium sand (1-3%), scattered silt (5-10%)	
				SP		@ 37'6" - becomes (40,50), scattered silt (5-10%)	
	23"			NR		@ 37'11" - 40' - no recovery	
40			0.4	SMPL		@ 40' - 40'6" - sample - did not log	
				SP/ SM	40'6" - 45'9"	5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (40,60) @ 41' - becomes (15,75), scattered fine sand (5-10%)	
	24"			NR		@ 42' - 44' - no recovery	
				SP/ SM		@ 44' - becomes SILTY VERY FINE TO FINE SAND (15,65,20) @ 44'6" - becomes SILTY VERY FINE SAND (30,70) @ 45'6" - becomes SILTY VERY FINE TO FINE SAND (15,65,20)	
45	21"			NR		@ 45'9" - 48' - no recovery	
			ML	SP/SM	48' - 48'4"	5Y 3/1 (very dark gray), wet, CLAYEY SILT, slight plasticity	
				SMPL	48'4" - 57'6"	5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (30,70) @ 48'8" - 49'2" - sample - did not log	
50	14"		0.1	NR		@ 49'2" - 52' - no recovery	
				SP/SM		@ 52' - becomes SILTY VERY FINE TO FINE SAND/VERY FINE TO FINE SAND (15,55,30)	
	16"			NR		@ 52'6" - becomes VERY FINE TO FINE SAND (30,60), scattered silt (5-10%) @ 53' - becomes SILTY VERY FINE TO FINE SAND/VERY FINE TO FINE SAND (15,55,30)	
55						@ 53'4" - 56' - no recovery	
				SP/SM		@ 56'6" - becomes VERY FINE TO FINE SAND (30,60), scattered silt (5-10%)	
	34"			ML	57'6" - 58'6"	5Y 3/2 (dark olive gray), wet, SILT, scattered very fine sand (5-10%), non plastic	
			SM/SP	NR	58'6" - 58'10"	5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND/VERY FINE SAND, scattered fine sand (5-10%) @ 58'10" - 60' - no recovery	
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/27/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE18

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0	SMPL		@ 60' - 60'6" - sample - did not log	
				CL	60'6" - 61'9"	5Y 3/2 (dark olive gray), wet, SILTY CLAY, moderate plasticity, strong "rotten egg" odor	
	31"			ML	61'9" - 62'7"	5GY 5/1 (greenish gray), wet, SILT, trace clay (3-5%), none to slightly plastic, strong "rotten egg" odor @ 62'3" - becomes VERY FINE SANDY SILT (40,60), strong "rotten egg" odor	
				NR			
					T.D. - 62'7"	@ 62'7" - 64' - no recovery	
65							
70							
75							
80							
85							
90							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/28/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE19

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 4'	2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (40,60), trace silt and medium sand (1-3%)	
				SM	4' - 8'11"	2.5Y 5/6 (light olive brown), moist, SILTY VERY FINE TO FINE SAND (15,35,50), @ 5' - 5'6" - sample - did not log @ 7'5" - becomes 2.5Y 5/4 (light olive brown) @ 7'7" - 8' - no recovery	
5	31"		0	SMPL			
				SM			
				NR			
				SM			
				CL	8'11" - 10'4"	2.5Y 5/4 (light olive brown), wet, VERY FINE TO FINE SANDY CLAY (20,70), scattered silts and medium sand @ 9'6" - becomes 2.5Y 4/4 (olive brown) @ 10' - 10'6" - sample (logged)	
10	45"		0	SMPL			
			GM/				
			GC	SP			
			SW		10'4" - 10'8"	2.5Y 6/2 (light brownish gray), moist to wet, GRAVEL, abundant silts and clays (10-15%)	
			NR	SW	10'8" - 11'5"	5Y 4/3 (olive), wet, VERY FINE TO FINE SAND (45,45), scattered silt (5%)	
	19"			NR	11'5" - 21'6"	5Y 5/4 (olive), wet, FINE TO COARSE SAND (20,30,40), scattered very fine and very coarse sand and gravel (5-10%) @ 11'9" - 12' - no recovery @ 13' - becomes VERY FINE TO MEDIUM SAND (30,30,30), scattered coarse sand (5%), trace silt (1-3%) @ 13'5" - becomes 5Y 4/3 (olive) (30,40,20), scattered silt (1-3%) @ 13'7" - 16' - no recovery @ 16' - becomes 5Y 5/4 (olive), FINE TO COARSE SAND (20,20,50), scattered very fine sand (5%) and shell fragments @ 17' - becomes VERY FINE TO MEDIUM SAND (30,40,20), scattered silt (5%) and coarse sand (5%) @ 17'6" - becomes 2.5Y 4/4 (olive brown), wet, VERY FINE TO COARSE SAND (20,20,30,20), abundant silt (5-10%) @ 17'8" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes 2.5Y 4/3 (olive brown), wet, VERY FINE TO MEDIUM SAND (30,40,30), trace silt (1-3%) @ 21' - becomes FINE TO COARSE SAND (30,40,30), scattered silt (1-3%) and very fine sand (1-3%)	
15			0	SW			
	20"			NR			
20			0	SMPL			
				SW			
	22"		SP	NR			
				SP	21'6" - 25'6"	2.5Y 4/3 (olive brown), wet, VERY FINE TO FINE SAND (45,45), trace silt (1-3%) @ 21'10" - 24' - no recovery @ 24' - scattered medium sand	
25	23"			ML	25'6" - 25'11"	2.5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (30,70) @ 25'11" - 28' - no recovery	
				NR			
				SP/SW	28' - 28'10"	2.5Y 4/3 (olive brown), wet, VERY FINE TO MEDIUM SAND (30,30,30), scattered silt (5%) @ 28'10" - becomes (20,30,40), trace coarse sands (1-3%) @ 28'10" - 29'4" - sample - did not log @ 29'4" - 32' - no recovery	
				SMPL			
30	16"			NR			

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/28/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE19

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.1	NR			
				SP	32' - 41'8"	2.5Y 4/3 (olive brown), wet, VERY FINE TO FINE SAND (50,50), trace silt (1-3%) @ 33'5" - becomes (40,40), abundant medium sand (10%), trace silts (1-3%) @ 33'5" - 36' - no recovery	
	17"			NR			
35							
				SP		@ 36' - becomes (50,50), trace silt (1-3%) @ 37' - becomes VERY FINE TO MEDIUM SAND (30,30,30), abundant coarse sand (10%)	
	19"			NR		@ 37'4" - becomes (50,50), trace silt (1-3%) @ 37'7" - 40' - no recovery	
40			0	SMPL		@ 40' - becomes 5Y 4/2 (olive gray), wet, VERY FINE SAND, scattered silt (5%) @ 40' - 40'6" - sample - did not log	
				SP		@ 41' - becomes 5Y 4/3 (olive)	
	20"			NR		@ 41'4" - becomes VERY FINE TO FINE SAND (60,40), trace silt @ 41'8" - 44' - no recovery	
				SM	44' - 45'6"	2.5Y 4/1 (dark gray), wet, SILTY VERY FINE TO FINE SAND (15,40,35) @ 45' - becomes SILTY VERY FINE SAND (20,70), scattered fine sand (10%)	
45				ML	45'6" - 46'	2.5Y 3/1 (very dark gray), wet, SILT, scattered very fine and fine sand (10%)	
	24"			NR	T.D. - 46'	@ 46' - 48" - no recovery	
50							
55							
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/20 and 5/2/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE20

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 7'8"	2.5Y 5/4 (light olive brown), damp, VERY FINE TO FINE SAND (20,75), trace silt and medium sand @ 5' - 5'6" - sample - did not log @ 5'6" - becomes 2.5Y5/6 (light olive brown with orange tint), (65,30), trace silt and medium sand (1-3%) @ 5'9" - becomes 10YR 5/6 (yellowish brown) with some mottling with 2.5Y 5/6 (light olive brown), (30,65), trace silt and medium sand (1-3%) @ 6'9" - becomes 2.5Y 5/6 (light olive brown) with some orange mottling, (70,25), trace silt (3-5%) @ 7'6" - becomes 2.5Y 5/4 (light olive brown), (15,75), scattered medium sand (5-10%), and silt nodules @ 7'8" - 8' - no recovery	
5	32"		0	SMPL			
				SP			
			NR				
				SM/ CL			
				SP	8' - 9'6"	2.5Y 5/4 (light olive brown), moist, MIXED SILTY FINE SAND AND SILTY CLAY	
10	45"		0	SMPL			
				SP	9'6" - 12'6"	5Y 5/3 (olive), damp, VERY FINE TO FINE SAND (30,65), trace silt (1%), scattered medium sand (5-10%) @ 10 - 10'6" - sample - did not log @ 11'9" - becomes wet, (35,60), trace silt and medium sand (3-5%) @ 11'9" - 12' - no recovery	
			NR				
				SP			
				SC			
					12'6" - 13'6"	5Y 5/3 (olive), wet, CLAYEY FINE SAND (30,60), scattered silt (5-10%)	
	45"			SW	13'6" - 16'3"	5Y 5/3 (olive), wet, MEDIUM TO VERY COARSE SAND (50,30,15), scattered fine sand (5%) and shell fragments @ 13'10" - 2" lens of clayey silt @ 15'3" - 15'9" - sample - did not log @ 15'9" - 16' - no recovery @ 16' - becomes FINE TO COARSE SAND (25,50,20), scattered silt and very fine sand (5%)	
15			NR	SMPL			
			SW				
				SP			
					16'3" - 17'3"	5Y 5/3 (olive), wet, FINE TO MEDIUM SAND (30,55), abundant very fine sand (10-15%), trace silt (1-3%), scattered shell fragments	
	30"			SW			
					17'3" - 18'6"	5Y 5/3 (olive), wet, MEDIUM TO VERY COARSE SAND (15,45,30), scattered fine sand (5%), approximately 30-50% shell fragments @ 18' - becomes FINE TO COARSE SAND (15,50,30), scattered very fine and very coarse sand (5%), trace shell fragments @ 18'6" - 20' - no recovery @ 20 - 20'6" - sample - did not log	
				NR			
20				SMPL			
				SP	20'6" - 25'3"	5Y 5/3 (olive), wet, MEDIUM SAND, scattered fine (5-10%) and coarse sand (10%) and shell fragments @ 21'8" - becomes VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace silt (3-5%) @ 22' - scattered nodules silty clay @ 22'2"- 24' - no recovery Note: Refusal at 24' on 4/20/06 - redrilled on 5/02/06 @ 24' - becomes FINE TO MEDIUM SAND (20,70), scattered very fine and coarse sand (5-10%), trace shell fragments @ 24'8" - becomes VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace shell fragments	
	26"			NR			
				SP			
25				SW			
	25"			NR	25'3" - 26'1"	2.5Y 5/4 (light olive brown), very moist, VERY FINE TO COARSE SAND (30,15,20,35) @ 25'10" - becomes FINE TO COARSE SAND (15,60,25) @ 26'1"- 28' - no recovery	
			SP				
					28' - 28'4"	2.5Y 4/4 (olive brown), very moist, VERY FINE TO FINE SAND (70,25), trace silt (3-5%)	
				SW			
				SMPL	28'4" - 29'1"	2.5Y 5/4 (light olive brown), very moist, VERY FINE TO MEDIUM SAND (15,40,45), trace silt and coarse sand (1-3%) @ 29'1" - 29'7" - sample - did not log	
30	19"			NR			

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/20/06 and 5/02/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE20

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.2	NR	@ 29'7" - 32' - no recovery	
				SP	32' - 49'1" 2.5Y 4/2 (dark grayish brown), very moist, VERY FINE TO FINE SAND (40,50), scattered silt (5%), trace medium sand (1-3%) @ 32'8" - becomes (25,65), scattered medium sand (5-10%), trace silt (1-3%)	
	25"			NR	@ 33' - becomes (80,15), trace silt (1-3%) @ 34'1" - 36' - no recovery	
35						
				SP	@ 36' - trace silt (3-5%)	
	19"			NR	@ 37'7" - 40' - no recovery	
40			0.4	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 40'6" - becomes scattered silt (5-10%)	
	21"			NR	@ 41'9" - 44' - no recovery	
				SP		
45						
	24"			NR	@ 46' - 48' - no recovery	
				SP	@ 48' - becomes (45,45), scattered silt (5-10%) @ 48'4" - becomes 5Y 4/1 (dark gray)	
				SMPL	@ 48'9" - becomes (30,60), scattered silt (5-10)	
50	19"		0.2	NR	@ 49'1" - 49'7" - sample - did not log @ 49'7" - 52' - no recovery	
				ML	52' - 52'11" 2.5Y 3/2 (very dark grayish brown), very moist, VERY FINE SANDY SILT (40,60), trace wood fragments	
				NR	@ 52'6" - becomes SILT, scattered very fine sand (5-10%), trace clay (1-3%), sample is predominantly wood fragments	
	11"				T.D. - 56'7" @ 52'11" - 56' - no recovery	
55						
	7"			SMPL	@ 56' - 56'7" - sample - did not log	
				NR	@ 57' - refusal	
60						

PACIFIC EDGE ENGINEERING, INC.

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/20/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE21

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				SP	3' - 6'6"	2.5Y 5/4 (light olive brown), moist, FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace coarse sand (1-3%) and shell fragments @ 5' - 5'6" - sample - did not log @ 5'6" - becomes VERY FINE TO FINE SAND (25,65), scattered medium sand (5-10%)	
5			1.9	SMPL			
				SP			
	36"			SM	6'6" - 8'3"	2.5Y 5/6 (light olive brown), moist, SILTY VERY FINE TO FINE SAND (20,35,40), trace medium sand (3-5%)	
			SW/CL				
				SMPL	8'3" - 9'6"	mottled 10YR 4/4 (dark yellowish brown) and 5Y 4/3 (olive), moist, MIXED SILTY FINE TO COARSE SAND AND SILTY CLAY @ 8'6" - 9' - sample - did not log @ 9' - slight petroleum odor	
				SW/CL			
10	36"		2.2	SW			
				SP	9'6" - 10'3"	VERY FINE TO COARSE SAND (20,20,20,20), abundant gravel (10-15%), scattered silt (5%)	
				NR	10'3" - 11'	5Y 4/3 (olive), moist, FINE TO MEDIUM SAND (40,45), scattered very fine sand (5-10%), trace coarse sand (1-3%) @ 10'9" - becomes MEDIUM SAND, abundant fine sand (10-15%), trace coarse sand (1-3%) and shell fragments @ 11' - 12' - no recovery	
				SW			
				SP			
	32"				12' - 12'6"	5Y 4/3 (olive), wet, VERY FINE TO MEDIUM SAND, scattered silt and coarse sand (5%), abundant shell fragments	
				SMPL			
15			1.2	NR	12'6" - 14'2"	5Y 4/3 (olive), wet, MEDIUM SAND, scattered fine and coarse sand (5-10%), trace shell fragments @ 13'6" - becomes FINE TO MEDIUM SAND (30,60), scattered very fine sand (5-10%), trace coarse sand (1-3%) and shell fragments @ 14'2" - 14'8" - sample - did not log @ 14'8" - 16' - no recovery	
				SW			
	30"				16' - 18'6"	5Y 5/3 (olive), VERY FINE TO MEDIUM SAND (15,45,45), trace coarse sand (1-3%) @ 16'6" - becomes FINE TO COARSE SAND (20,55,20), trace very fine sand (1-3%) and shell fragments @ 17'6" - scattered shell fragments @ 18'6" - 20' - no recovery @ 20' - 20'6" - sample - did not log	
				NR			
20			2.5	SMPL			
				SP	20'6" - 26'4"	5Y 5/3 (olive), wet, FINE TO MEDIUM SAND (45,45), scattered very fine and coarse sand (5-10%), trace shell fragments @ 21' - scattered very fine sand (10%), trace coarse sand (3-5%) and shell fragments @ 22' - becomes VERY FINE TO FINE SAND (60,35), scattered medium sand (5%) @ 22'6" - becomes FINE TO MEDIUM SAND (30,55), scattered very fine sand (10%), trace coarse sand (1-3%) and shell fragments @ 22'8" - 24' - no recovery @ 24' - trace silt (3-5%) @ 25'6" - becomes 5GY 5/1 (greenish gray), VERY FINE TO FINE SAND (20,65), abundant medium sand (10-15%), trace silt (1-3%) @ 26' - becomes FINE TO MEDIUM SAND (30,60), trace very fine sand (3-5%) and coarse sand (1-3%) @ 26'4" - 28' - no recovery	
	32"						
				NR			
				SP			
25							
	28"						
				NR			
					28' - 28'9"	5GY 4/1 (dark greenish gray), very moist, SILTY VERY FINE SAND (30,60), scattered fine sand (5-10%) @ 28'6" - becomes (15,65), scattered fine sand (10%)	
				SM			
					28'9" - 29'6"	5Y 3/2 (dark olive gray), very moist, VERY FINE SANDY SILT (40,55), trace fine sand (1-3%)	
				ML			
30	34"		2.7	SP	29'6" - 30'	5GY 4/1 (dark greenish gray), very moist to wet, VERY FINE TO FINE SAND (40,55), scattered silt (5%)	

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
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DATE:	4/20/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE21

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			SM	SMPL	30' - 30'4"	5GY 4/1 (dark greenish gray), very moist, SILTY VERY FINE SAND (30,60), scattered fine sand (5-10%)	
				NR		@ 30'4" - 30'10" - sample - did not log @ 30'10" - 32' - no recovery	
				SP	32' - 41'	5Y 5/2 (olive gray), very moist, VERY FINE TO FINE SAND (30,60), scattered silt and medium sand (5-10%)	
	18"			NR		@ 33'3" - becomes VERY FINE SAND, abundant fine sand (10-15%), trace silt (3-5%) @ 33'6" - 36' - no recovery	
35						@ 36' - becomes VERY FINE TO FINE SAND (40,55), trace silt (3-5%)	
				SP		@ 36'6" - becomes VERY FINE SAND, abundant fine sand (10-15%), trace silt (1-3%)	
	24"			NR		@ 38' - 40' - no recovery	
40			3.2	SMPL		@ 40' - 40'6" - sample - did not log	
				SP		@ 40'6" - scattered silt (5%)	
				SM	41' - 41'8"	5Y 4/2 (olive gray) slight blue tint, SILTY VERY FINE SAND (20,80)	
	20"			NR		@ 41'8" - 44' - no recovery	
				SP	44' - 44'6"	5Y 4/2 (olive gray), very moist to wet, VERY FINE TO FINE SAND (15,80), scattered medium sand (5-10%), trace silt (1-3%)	
45				SM			
	20"			NR	44'6" - 45'8"	5Y 4/2 (olive gray), very moist to wet, SILTY VERY FINE SAND (20,75), trace fine sand (3-5%) @ 45'6" - becomes (35,60), trace fine sand (3-5%)	
					T.D. - 45'8"	@ 45'8" - 48' - no recovery	
50							
55							
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/20/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE22

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
5			0.3	SMPL	5' - 5'6"	Sample - did not log	
				SP	5'6" - 10'3"	5Y 5/3 (olive), moist, VERY FINE TO FINE SAND (30,65), trace silt and medium sand @ 6' - becomes (40,55), trace gravel @ 7' - becomes 10YR 5/6 (yellowish brown) (30,65) @ 7'9" - becomes 2.5Y 5/4 (light olive brown), VERY FINE SAND, abundant silt (10-15%), scattered fine sand (5%) @ 8'6" - becomes (15,85) scattered medium sand (5%), trace silt (1-3%) and silty clay nodules @ 9'6" - becomes (30,60) scattered medium sand (5-10%), trace silt and coarse to very coarse sand (1-3%)	
	43"						
10	35"		2.3	SW			
				SMPL			
				NR	10'3" - 22'3"	5Y 5/3 (olive), damp, FINE TO COARSE SAND (20,50,25), trace gravel (3-5%) with shell fragments @ 10'5" - 10'11" - sample - did not log @ 10'11" - 12' - no recovery @ 12' - becomes MEDIUM TO COARSE SAND (30,60), scattered fine and very coarse sand (5-10%) and shell fragments @ 13'6" - becomes (15,75) @ 13'10" - 14'4" - sample - did not log @ 14'4" - 16' - no recovery @ 16' - becomes FINE TO COARSE SAND (25,40,30), trace silt and very fine sand (3-5%), scattered shell fragments @ 16' - 16'2" - noted silty clay nodules (slough?) @ 16'6" - becomes MEDIUM TO COARSE SAND (40,50), scattered very fine to fine sand (5-10%), trace silt (1-3%) and shell fragments @ 17'6" - becomes VERY FINE TO MEDIUM SAND (15,40,40), trace silt (1-3%) and silty clay nodules, scattered coarse sand (5%) and shell fragments @ 18'7" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes FINE TO COARSE SAND (15,40,40), trace very fine sand (3-5%), scattered shell fragments @ 21' - becomes VERY FINE TO MEDIUM SAND (15,30,45), trace silt and coarse sand (5-10%), scattered shells/shell fragments @ 21'6" - becomes (25,50,30), trace silt and coarse sand (1-3%)	
				SW			
	28"			SMPL			
				NR			
15			0.3				
				SW			
	31"						
				NR			
20			0.4	SMPL			
				SW			
	31"						
				SP			
				NR			
				SP	22'3" - 42'	5Y 5/3 (olive), wet, FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt and coarse sand (1-3%) and shell fragments @ 22'7" - 24' - no recovery @ 24' - becomes 5Y 4/3 (olive), VERY FINE TO FINE SAND (40,55), trace silt and medium sand (1-3%) @ 24'6" - becomes (20,70), scattered medium sand (5%), trace silt (1-3%) @ 26' - becomes (40,60), trace silt and medium sand (1-3%) @ 26'9" - 28' - no recovery @ 28' - becomes (70,20), scattered silt and medium sand (5-10%) @ 28'6" - becomes 5GY 4/1 (dark greenish gray), VERY FINE SAND, scattered silt (10%) @ 29'6" - becomes 5Y 4/3 (olive), VERY FINE TO FINE SAND (30,65), trace silt (1-3%)	
25	33"						
				NR			
				SP			
30	29"		0.3				

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/20/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE22

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 29'11" - 30'5" - sample - did not log	
				NR	@ 30'5" - 32' - no recovery	
				SP	@ 32' - becomes (15,75), scattered medium sand (5-10%), trace silt (1-3%) @ 32'6" - becomes VERY FINE SAND, scattered silt (5%) and fine sand (5-10%)	
	26"			NR	@ 33'6" - becomes VERY FINE TO FINE SAND (30,65), trace silt and medium sand (3-5%) @ 34' - becomes (15,80), trace silt and medium sand (1-3%) @ 34'2" - 36' - no recovery	
35				SP	@ 36' - becomes VERY FINE SAND, scattered fine sand (10%), trace silt (3-5%)	
	24"			NR	@ 38' - 40' - no recovery	
					@ 40' - 40'6" - sample - did not log	
40			0.4	SMPL	@ 40'6" - becomes VERY FINE TO FINE SAND (60,35), trace silt (3-5%)	
				SP	@ 41' - becomes VERY FINE SAND (60,35), trace silt and fine (3-5%)	
	29"			ML	42' - 42'5" 5GY 4/1 (dark greenish gray), very moist, VERY FINE SANDY SILT (40,45), scattered fine sand (5-10%), trace clay (3-5%)	
				NR		
					T.D. - 42'5" @ 42'5" - 44' - no recovery	
45						
50						
55						
60						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/19/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE23

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 6" Asphalt	
					6" - 1'6" Base	
					5' - 5'6" Sample - did not log	
5			0.9	SMPL	5'6" - 7'3" 2.5Y 5/6 (light olive brown), damp, VERY FINE TO FINE SAND (30,65), trace silt and medium sand (1-3%)	
				SP	@ 6' - becomes VERY FINE SAND, abundant fine sand (10-15%), trace silt (3%)	
	39"				@ 7' - becomes 2.5Y 4/4 (olive brown), scattered clayey silt nodules	
				SP/ CL	7'3" - 9'6" 2.5Y 4/4 (olive brown), moist, MIXED VERY FINE SAND WITH TRACE SILT AND FINE SAND (3-5%) AND SILTY CLAY	
					9'6" - 10' 5Y 6/3 (pale olive), moist, VERY FINE TO FINE SAND, scattered medium sand (5%), trace silt (1-3%), scattered silty clay nodules	
10	45"		1.0	SP		
				SMPL	@ 10' - 10'6" - sample - did not log	
				SW	10'6" - 16'6" 5Y 5/3 (olive), moist, VERY FINE TO MEDIUM SAND, (30,40,20), trace silt and coarse sand (3-5%), scattered gravel (10%)	
			NR		@ 11' - becomes 10YR 4/4 (dark yellowish brown), FINE TO COARSE SAND (20,40,20), abundant gravel (10-15%), scattered silt (5-10%)	
				SW	@ 11'9" - 12' - no recovery	
	29"				@ 12'3" - becomes 5Y 5/3 (olive), wet, MEDIUM TO COARSE SAND (50,40), scattered fine sand (10%) and shell fragments	
15			1.1	NR	@ 14'5" - 16' - no recovery	
				SW	@ 16' - becomes (15,80), trace silt and fine sand (3-5%)	
				SP	16'6" - 21' 5Y 5/3 (olive), wet, FINE TO MEDIUM SAND (30,55), scattered very fine and coarse sand (5-10%), trace silt (1-3%) and shell fragments	
	26"				@ 18'2" - 20' - no recovery	
				NR		
20			1.1	SMPL	@ 20' - 20'6" - sample - did not log	
				SP	@ 20'6" - scattered silty clay nodules	
				SW	21' - 24'6" 5Y 5/3 (olive), wet, MEDIUM TO COARSE SAND (40,50), scattered fine sand (10%) and shell fragments	
	28"			NR	@ 22' - becomes FINE TO COARSE SAND (20,35,40), trace silt (3-5%), scattered shell fragments	
					@ 22'4" - 24' - no recovery	
				SW	24'6" - 26' 5Y 4/3 (olive), wet, FINE SAND, scattered very fine and medium sand (5-10%), trace shell fragments	
25				SP	@ 25'6" - trace silt (1-3%)	
	27"				26' - 28'6" 5Y 4/3 (olive), wet, VERY FINE TO MEDIUM SAND (15,30,45), scattered coarse sand (5%), trace silt (1-3%), and shell fragments	
			SW	NR	@ 26'3" - 28' - no recovery	
					28'6" - 45'2" 5Y 4/3 (olive), wet, VERY FINE TO FINE SAND, scattered silt (5%), trace medium sand (1-3%)	
				SW		
				SP	@ 29' - becomes 5Y 3/2 (dark olive gray), VERY FINE SAND, scattered silt (5-10%)	
				SMPL	@ 29'5" - 29'11" - sample - did not log	
30	23"			NR	@ 29'11" - 32' - no recovery	

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE23

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			1.2	NR	@ 29'11" - 32' - no recovery	
				SP	@ 32' - becomes 5Y 4/2 (olive gray), VERY FINE TO FINE SAND (65,30), trace silt (1-3%) @ 32'6" - becomes (30,60), trace silt and medium sand	
	18"			NR	@ 33'3" - becomes (65,30), trace silt (1-3%) @ 33'6" - 36' - no recovery	
35						
				SP	@ 36' - becomes VERY FINE SAND , scattered silt (5%), and fine sand (5-10%) @ 36'6" - scattered silt (5-10%), trace fine sand (1-3%)	
	19"			NR	@ 37' - abundant silt (10-15%) @ 37'7" - 40' - no recovery	
40			1.4	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 40'6" - becomes VERY FINE TO FINE SAND (65,30), trace silt (1-3%)	
	15"			NR	@ 41' - becomes VERY FINE SAND, scattered silt (5%), trace fine sand (1-3%) @ 41'3" - 44' - no recovery	
				SP		
45					@ 44'6" - 2" layer silty very fine sand (30,70)	
	14"			NR	@ 45' - becomes VERY FINE TO FINE SAND (30,65), trace silt and medium sand (1-3%) @ 45'2" - 48' - no recovery	
				SM/ ML	48' - 49'10" 5Y 4/3 (olive), wet, SILTY VERY FINE SAND (30,70)	
					@ 49'6" - becomes (50,50), trace clay (1-3%)	
50	28"		0.4	SMPL	@ 49'10" - 50'4" - sample - did not log	
				NR	@ 50'4" - 52' - no recovery	
				ML/CL	52' - 52'6" 5Y 2.5/2 (black), wet, CLAYEY SILT, slight to moderate plasticity	
				ML/ SM	52'6" - 54' 5Y 2.5/2 (black), wet, VERY FINE SANDY SILT / SILTY VERY FINE SAND (30,70)	
	24"			NR	@ 54' - 56' - no recovery	
55						
				SP	56' - 57'9" 5Y 3/2 (dark olive gray), wet, VERY FINE TO FINE SAND (60,35), trace silt and medium sand (1-3%) @ 56'6" - becomes (20,70), trace silt (1-3%), scattered medium sand (5%)	
	34"			ML/ SM	57'9" - 60'8" 5Y 3/2 (dark olive gray), wet, VERY FINE SANDY SILT (40,55), trace fine sand (1-3%)	
				NR	@ 55'3" - becomes SILTY VERY FINE SAND (15,75), scattered fine sand (5-10%)	
60					@ 58'10" - 60' - no recovery	

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE23

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.4	SMPL	@ 60' - 60'6" - sample - did not log	
	8"		ML/ SM	NR	T.D. - 60'8" @ 60'8" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/26/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE24

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 8" Asphalt	
					8" - 1'8" Base	
				SP	3' - 4'6" 5Y 5/3 (olive), moist, VERY FINE TO FINE SAND (30,65), trace silt and medium sand (1-3%)	
			SM		4'6" - 4'10" mottled 5Y 5/3 (olive) and 10YR 4/2 (dark grayish brown), damp. SILTY VERY FINE SAND, trace medium to coarse sand (1-3%)	
5			0	SMPL		
			SP	SP	4'10" - 8'6" 5Y 5/2 (olive gray), damp to moist, VERY FINE TO FINE SAND (30,70) @ 5' - 5'6" - sample - did not log @ 5'6" - becomes mottled with orange-brown color, FINE SAND, scattered very fine and medium sand (5-10%) @ 6' - becomes 2.5Y 5/6 (light olive brown), VERY FINE TO FINE SAND (50,45), trace silt (1-3%) @ 7'1" - becomes 10YR 5/8 (yellowish brown), FINE SAND, trace very fine sand (1-3%), scattered medium sand (5-10%) @ 7'6" - becomes 2.5Y 5/4 (light olive brown), moist, VERY FINE SAND, scattered silt and fine sand (5%)	
	42"			ML/CL		
				SMPL		
10	33"		0	SW	8'6" - 9'6" 5Y 5/2 (olive gray), moist, CLAYEY SILT/SILTY CLAY, scattered very fine sand (5-10%), slight to moderate gas odor @ 9' - 9'8" - sample - logged	
				NR	9'6" - 10'9" 5Y 4/3 (olive) with some dark red tint, VERY FINE TO MEDIUM SAND (20,30,35), abundant coarse sand (10-15%), trace fine gravel (1-3%), no to very slight odor, trace shell fragments @ 10'3" - becomes 5Y 5/3 (olive), trace coarse sand (1-3%), no odor @ 10'6" - becomes FINE TO COARSE SAND (30,40,25), trace very fine sand (3-5%) and shell fragments @ 10'9" - 12' - no recovery	
				SP		
				SW		
	26"			SMPL		
				NR	12' - 12'6" 5Y 4/3 (olive), MEDIUM SAND, scattered fine and coarse sand (5-10%), trace shell fragments	
15			0		12'6" - 24'6" 5Y 4/3 (olive), MEDIUM TO COARSE SAND (20,70), scattered fine and very coarse sand (5-10%) and shell fragments @ 13'8" - 14'2" - sample - did not log @ 14'2" - 16' - no recovery @ 16' - becomes FINE TO MEDIUM SAND (30,60), abundant coarse sand (10-15%), trace very fine sand (1-3%), trace shell fragments @ 16'6" - becomes MEDIUM TO COARSE SAND (40,50), scattered very fine and fine sand (5-10%) @ 17' - becomes FINE TO MEDIUM SAND (30,60), abundant coarse sand (10-15%), trace very fine sand (1-3%), trace shell fragments @ 17'9" - becomes VERY FINE TO MEDIUM SAND (25,35,35), scattered coarse sand (5%) @ 18'1" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes MEDIUM TO COARSE SAND (40,50), scattered fine sand (5-10%), and shell fragments @ 21' - becomes FINE TO COARSE SAND (15,50,25), trace very fine sand and silt (1-3%), abundant shell fragments @ 21'7" - 2" lens 2.5Y 5/4 (light olive brown), CLAY @ 21'9" - becomes FINE TO MEDIUM SAND (30,60), trace very fine and coarse sand (3-5%) @ 22'7" - 24' - no recovery	
				SW		
	25"			NR		
20			0	SMPL		
				SW		
	26"			NR		
				SW		
25				SP	24'6" - 29'6" 5Y 4/3 (olive), VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace silt and coarse sand (1-3%) @ 25'6" - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand (5%), trace silt and coarse sand (1-3%) @ 26' - becomes VERY FINE TO FINE SAND (50,40), scattered medium sand (5%), trace silt (3-5%) @ 26' - 28' - no recovery @ 28' - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt and coarse sand (1-3%) and shell fragments @ 29'3" - becomes FINE SAND, abundant very fine sand (10-15%), scattered medium sand (5-10%) @ 29'6" - 30' - sample - did not log	
	28"			NR		
				SP		
30	24"			SMPL		

PACIFIC EDGE ENGINEERING, INC.

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE24

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	NR	@ 30' - 32' - no recovery	
				SM	32' - 33'6" 5Y 4/1 (dark gray), very moist, SILTY VERY FINE SAND (40,60), trace fine sand (3-5%) @ 32'6" - becomes 5GY 4/1 (dark greenish gray), (15,75), scattered fine sand (5-10%)	
	24"			SP		
				NR	33'6" - 44'6" 5Y 4/2 (olive gray), very moist to wet, VERY FINE TO FINE SAND (30,60), scattered silt and medium sand (5-10%) @ 34' - 36' - no recovery	
35						
				SP	@ 36'6" - becomes VERY FINE SAND, scattered silt and fine sand (5-10%) @ 37'6" - becomes VERY FINE TO FINE SAND (30,60), trace silt and medium sand (1-3%)	
	22"			NR	@ 37'10" - 40' - no recovery	
40			0.1	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 41' - becomes VERY FINE SAND, abundant silt (10-15%), scattered fine sand (5-10%)	
	26"			NR	@ 42'2" - 44' - no recovery	
				SP		
			SM			
45				NR	44'6" - 44'10" 5GY 4/1 (dark greenish gray), very moist, SILTY VERY FINE SAND (40,60)	
	10"				T.D. - 44'10" @ 44'10" - 48' - no recovery	
50						
55						
60						

PACIFIC EDGE ENGINEERING, INC.

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SOIL BORING LOG - PE25

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
5			0	SMPL	5' - 5'6"	Sample - did not log	
	37"			SP	5'6" - 7'5"	2.5Y 5/6 (light olive brown), moist, VERY FINE TO FINE SAND (70,30), trace medium sand (<3%), scattered silt (10%)	
				SM	7'5" - 8'1"	2.5Y 5/4 (light olive brown), moist, SILTY VERY FINE TO FINE SAND (30,70), trace fine gravel (3%)	
				SP			
				SW	8'1" - 9'1"	2.5Y 5/6 (light olive brown), moist, VERY FINE TO FINE SAND (70,30), scattered silt (10%), trace medium sand (3%)	
10	45"		0		9'1" - 12'6"	10YR 4/4 (dark yellowish brown), moist, FINE TO COARSE SAND (50,40,10), scattered gravel (10%), occasional reddish grains 2.5Y 4/6 (olive brown) @ 11'9" - 12' - no recovery @ 12' - becomes VERY FINE TO MEDIUM SAND (40,50,10), scattered silt (5-10%), trace coarse sand (3-5%)	
			NR				
				SW			
				SP			
	34"				12'6" - 14'	2.5Y 5/4 (light olive brown), saturated, FINE TO MEDIUM SAND (60,30), scattered very fine sand (10%), trace silt (1-3%)	
				SW			
15			0	NR	14' - 21'	2.5Y 5/4 (light olive brown), saturated, FINE TO COARSE SAND (20,60,15), some very fine sand (5%), common shell fragments @ 14'10" - 16' - no recovery @ 16' - becomes MEDIUM TO COARSE SAND (35,55), scattered fine sand (5-10%) @ 17' - becomes FINE TO COARSE SAND (20,60,15)	
				SW			
	33"						
				NR		@ 18'9" - 20' - no recovery @ 20' - 20'6" - sample - did not log	
20			0	SMPL		@ 20'6" - becomes FINE TO MEDIUM SAND (45,45), scattered very fine and coarse sand (5%), trace silt (1-3%)	
				SW			
				SP	21' - 21'6"	2.5Y 4/4 (olive brown), VERY FINE TO FINE SAND (40,60), trace silt (1-3%), trace medium sand (5%)	
	31"			SW			
				NR	21'6" - 22'5"	2.5Y 4/4 (olive brown), VERY FINE TO MEDIUM SAND (10,50,40), trace silt (1%), trace coarse sand (3-5%) @ 22'5" - 24' - no recovery	
				SP	24' - 24'8"	2.5Y 4/2 (dark grayish brown), VERY FINE TO FINE SAND (70,30), trace gravel (5%) and silt (3-5%)	
25				SW			
	28"				24'8" - 26'4"	2.5Y 4/4 (olive brown), saturated, FINE TO COARSE SAND (20,60,20), common shell fragments (5%) @ 26'4" - 28' - no recovery	
				NR			
				SP	28' - 36'6"	2.5Y 4/4 (olive brown), saturated, VERY FINE TO FINE SAND (25,65), scattered medium sand (10%), trace coarse sand (1-3%) @ 28'6" - becomes FINE SAND, scattered very fine and medium sand (5-10%) @ 29'7" - 30'1" - sample - did not log	
30	25"			SMPL			

PACIFIC EDGE ENGINEERING, INC.

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE25

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.1	NR	@ 30'1" - 32' - no recovery	
				SP	@ 32' - becomes 2.5Y 3/2 (very dark grayish brown), VERY FINE TO FINE SAND (40,60), trace silt (1-3%), trace medium sand (1%)	
	19"			NR	@ 33' - becomes 2.5Y 4/2 (dark grayish brown), VERY FINE SAND, scattered fine sand (5-10%), trace silt (3-5%)	
35					@ 36' - becomes VERY FINE TO FINE SAND (60,45), trace silt and medium sand (1-3%)	
				SP		
				ML	36'6" - 45'5" 2.5Y 4/2 (dark grayish brown), SILTY VERY FINE SAND (60,45), trace fine sand (1-3%)	
	12"			NR	@ 37' - 40' - no recovery	
40			0	SMPL	@ 40' - 40'6" - sample - did not log	
				ML	@ 40'6" - becomes VERY FINE SAND, scattered fine sand (5-10%), trace silt (3-5%)	
	21"			NR	@ 41'6" - becomes SILTY VERY FINE SAND (40,60)	
					@ 41'9" - becomes VERY FINE SAND, scattered fine sand (5-10%), trace silt (3-5%)	
					@ 41'9" - 44' - no recovery	
				ML	@ 44' - becomes 2.5Y 3/0 (black), saturated, SILT, scattered very fine sand (10-15%), trace clay (1-3%)	
45					@ 44'6" - becomes SILTY VERY FINE SAND (30,70)	
	17"			NR	@ 45' - becomes SILT, scattered very fine sand (10-15%), trace clay (1-3%)	
					@ 45'5" - 48' - no recovery	
				SP	48' - 62' 2.5Y 3/2 (very dark greenish brown), saturated, VERY FINE SAND, trace silt (1-3%)	
				SMPL	@ 48'7" - 49'1" - sample - did not log	
				NR	@ 49'1" - 52' - no recovery	
50	13"		0			
				SP	@ 52' - becomes 2.5Y 2/0 (black), scattered fine sand (5%), trace silt (1-3%)	
	22"			NR	@ 53'10" - 56' - no recovery	
55						
				Not Sampled	@ 56' - 60' - interval accidentally skipped by drillers	
60						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/14/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE25

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 60' - 60'6" - sample - did not log	
				SP	@ 60'6" - scattered fine sand (5-10%)	
	24"			NR	T.D. - 62' @ 62' - 64' - no recovery	
65						
70						
75						
80						
85						
90						

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/26/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE26

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 7"	Asphalt	
					7" - 1'6"	Base	
5			0	SMPL	5' - 5'6"	Sample - did not log	
	36"			SP	5'6" - 7'1"	5Y 5/6 (olive), VERY FINE TO FINE SAND (40,60), trace medium and coarse sand (1-3%)	
				SM	7'1" - 9'2"	2.5Y 5/4 (light olive brown) with orange tint, SILTY VERY FINE TO FINE SAND (40,40,30)	
10	34"		0.1	SM/SW SMPL NR	9'2" - 12'	5Y 5/3 (olive), SILTY VERY FINE TO COARSE SAND @ 10'2" - 10'4" - dark red rock with coral like tubes that have a dark green coating @ 10'4" - 10'10" - sample - did not log @ 10'10" - 12' - no recovery	
	30"			SW	12' - 14'	5Y 5/3 (olive), wet, VERY FINE TO COARSE SAND (15,20,40,20), trace silt (1-3%) and very coarse sand (1-3%) @ 13' - becomes FINE TO COARSE SAND (20,60,20), trace shell fragments	
15			0.1	SP NR	14' - 14'6"	5Y 5/3 (olive), wet, VERY FINE TO FINE SAND (30,60), scattered medium sand (5%) @ 14'6" - 16' - no recovery	
	30"			SP/SW NR	16' - 21'6"	5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (20,30,40), trace very coarse sand and gravels (1-3%), scattered silt (5%), scattered shells @ 17' - trace shell fragments @ 18' - abundant shell fragments @ 18'6" - trace shell fragments @ 18'6" - 20' - no recovery	
20			0.1	SMPL SP/SW		@ 20' - 20'6" - sample - did not log	
	30"			SP NR	21'6" - 22'6"	5Y 5/3 (olive), wet, VERY FINE TO FINE SAND (35,60), trace coarse sand (1-3%), trace silts (1-3%) @ 22'6" - 24' - no recovery	
25				SP/SW	24' - 26'	5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (25,25,45), trace coarse sand (5%), trace silt (1-3%)	
	27"		SP	NR	26' - 26'3"	5Y 4/2 (olive gray), wet, VERY FINE TO FINE SAND (35,60), trace shells, scattered silts (5%) @ 26'3" - 28' - no recovery	
				SP/SW	28' - 28'5"	5Y 4/2 (olive gray), wet, VERY FINE TO MEDIUM SAND (30,40,20), scattered silt (5%), scattered shells	
30	24"			SM SMPL	28'5" - 29'6"	5GY 4/1 (dark greenish gray), SILTY VERY FINE TO FINE SAND (30,40,30) @ 29'6" - 30' - sample - did not log	

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE26

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.4	NR		@ 30' - 32' - no recovery	
				SP/SW	32' - 32'6"	5Y 5/2 (olive gray), VERY FINE TO MEDIUM SAND (20,30,45), scattered silts	
				SP	32'6" - 33'10"	5Y 5/2 (olive gray), VERY FINE TO FINE SAND (70,30)	
	22"			NR		@ 33'6" - trace silt (1-3%) @ 33'10" - 36' - no recovery	
35							
				SM	36' - 37'11"	5Y 3/2 (dark olive gray), SILTY VERY FINE SAND (20,80) @ 37' - becomes SILTY VERY FINE TO FINE SAND (20,40,40) @ 37'6" - becomes SILTY VERY FINE SAND (20,80)	
	23"			NR		@ 37'11" - 40' - no recovery	
40			0.3	SMPL		@ 40' - 40'6" - sample - did not log	
				SP	40'6" - 41'11"	5Y 4/3 (olive), VERY FINE TO FINE SAND (60,40), trace silt (1-3%)	
	23"			NR		@ 41'11" - 44' - no recovery	
				ML	44' - 44'6"	5Y 3/1 (very dark gray), VERY FINE SANDY SILT (40,60)	
45				SM	44'6" - 45'6"	5Y 3/1 (very dark gray), SILTY VERY FINE SAND (30,70)	
	23"			SP	45'6" - 45'11"	5Y 5/3 (olive), VERY FINE TO FINE SAND (60,35), scattered silts (5%)	
				NR	T.D. - 45'11"	@ 45'11" - 48' - no recovery	
50							
55							
60							

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
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DATE:	4/13/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE27

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 8"	Asphalt	
					8" - 1'6"	Base	
				SP	3' - 7'3"	2.5Y 5/6 (light olive brown), some orange tint, moist, VERY FINE TO FINE SAND (50,50), trace medium and coarse sand (1-3%) @ 5' - 5'6" - Sample - did not log @ 6'6" - becomes VERY FINE SAND, scattered fine sand (10%)	
5				SMPL	7'3" - 8'2"	5Y 4/2 (olive gray), moist, SILTY CLAY, scattered very fine to coarse sand (5-10%)	
			0	SP			
	40"				8'2" - 9'6"	2.5Y 5/4 (light olive brown), damp to moist, CLAYEY VERY FINE TO FINE SAND (30,30,30), trace silt (1-3%) and medium sand (3-5%)	
				CL	9'6" - 10'6"	2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (30,60), trace medium sand (1-3%) and silty clay nodules @ 10' - 10'6" - sample - did not log	
				SC			
				SP	10'6" - 11'	2.5Y 3/2 (very dark grayish brown), moist, VERY FINE COARSE SAND (20,25,15,20), abundant gravel (20%), very slight petroleum odor	
10	38"		0	SMPL			
				SW/GW			
			SW		11' - 22'6"	10YR 4/3 (brown), moist, MEDIUM TO COARSE SAND (40,50), scattered very fine to fine sand and gravel (5-10%) @ 11'2" - 12' - no recovery @ 12'6" - becomes 5Y 5/3 (olive), wet, scattered very coarse sand and shell fragments, trace fine sand (3-5%)	
				NR			
				SW			
	31"						
				SMPL		@ 14'1" - 14'7" - sample - did not log	
				NR		@ 14'7" - 16' - no recovery	
15			0			@ 16' - becomes FINE TO MEDIUM SAND (30,60), scattered very fine and coarse sand (5-10%)	
				SW		@ 16'6" - becomes MEDIUM TO COARSE SAND, trace fine and very coarse sand (1-3%), scattered shell fragments @ 17'3" - abundant shell fragments, trace nodules clayey silt	
	30"					@ 18'3" - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand coarse sand (5%), trace to scattered shell fragments	
				NR		@ 18'6" - 20' - no recovery	
20			0	SMPL		@ 20' - 20'6" - sample - did not log	
				SW		@ 22'3" - scattered gravel @ 22'6" - 24' - no recovery	
	30"						
				NR	24' - 26'6"	5GY 4/1 (dark greenish gray), moist, FINE SAND, scattered very fine and medium sand @ 24'6" - becomes 5Y 4/3 (olive), FINE TO MEDIUM SAND, (40,55), scattered very fine sand (5%)	
				SP		@ 25'6" - becomes 5Y 4/2 (olive gray), VERY FINE TO FINE SAND (40,50), trace silt (1-3%) and medium sand (3-5%) @ 26'3" - becomes VERY FINE SAND, scattered fine sand (5-10%) @ 26'6" - 28' - no recovery	
25	30"						
				NR	28' - 28'6"	5Y 5/3 (olive), very moist, SILTY VERY FINE SAND (30,70), trace shell fragments	
				ML	28'6" - 29'3"	5Y 5/1 (gray), very moist to wet, VERY FINE TO FINE SAND, (25,75)	
				SP			
				SW	29'3" - 29'11"	5Y 5/1 (gray), wet, FINE TO COARSE SAND (20, 55, 20), scattered shell fragments, trace very fine sand	
30	29"		0.3				

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE27

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 29'11" - 30'5" - sample - did not log	
				NR	@ 30'5" - 32' - no recovery	
				SP	32' - 41'4" 5Y 4/2 (olive gray), VERY FINE TO FINE SAND, trace medium sand (1-3%) @ 32'6 " - becomes FINE TO MEDIUM SAND (55,40), trace very fine sand (3-5%) and shell fragments	
	23"			NR	@ 33'6 " - becomes VERY FINE TO FINE SAND, trace silt (1%) and medium sand (1-3%) @ 33'11" - 36' - no recovery	
35				SP	@ 36' - becomes 5Y 4/1 (dark gray) with some blue gray tint (60,35), scattered silt (5%) @ 36'9" - becomes VERY FINE SAND, scattered silt (5-10%) @ 37'6" - becomes trace silt (1-3%) and fine sand (1-3%)	
	22"			NR	@ 37'10" - 40' - no recovery	
40			0.2	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 40'6" - becomes VERY FINE TO FINE SAND (60,40), trace silt and shell fragments	
	16"			NR	@ 41' - becomes (40,60) @ 41'4" - 44' - no recovery	
			ML			
				SP	44' - 44'3" 5Y 4/1 (dark gray), SILTY VERY FINE SAND (25,75)	
45				NR	44'3" - 45'2" 5GY 4/1 (dark greenish gray), very moist, VERY FINE TO FINE SAND (30,70), scattered medium sand (5%), trace silt (1%) @ 45' - becomes (50,50) @ 45'2" - 48' - no recovery	
	14"					
			ML			
				SMPL	48' - 48'3" 5Y 4/1 (dark gray), very moist, SILTY VERY FINE SAND (30,70)	
			SP	NR	48'3" - 52'11" 5Y 5/2 (olive gray), very moist, VERY FINE SAND, scattered silt (5%) and fine sand (5%) @ 48'6" - 52' - no recovery @ 52' - becomes 5GY 4/1 (dark greenish gray), VERY FINE TO FINE SAND (55,40), trace silt (1%) @ 52'6" - becomes 5Y 3/1 (very dark gray)	
50	6"		0			
				SP		
				NR	@ 52'11" - 56' - no recovery	
	11"					
55						
				ML	56' - 57'4" 5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (40,60) @ 56'4" - becomes (25,75) @ 57' - becomes SILT, scattered very fine sand (5%)	
	16"			NR	@ 57'4" - 60' - no recovery	
60						

PACIFIC EDGE ENGINEERING, INC.

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LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/13/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE27

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	SMPL	@ 60' - 60'6" - sample - did not log	
				SP	60'6" - 61' 5Y 4/1 (dark gray), some blue gray tint, VERY FINE TO FINE SAND (40,60), trace silt (1%)	
	26"			ML	61' - 62'2" 5Y 4/1 (dark gray), SILTY VERY FINE SAND (25,75)	
				NR	T.D. - 62'2" @ 62'2" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
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LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/12/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE28

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 6" Asphalt	
					6" - 1'6" Base	
					5' - 5'6" sample - did not log	
					5'6" - 8'9" 2.5Y 5/6 (light olive brown), some gray mottling, moist, FINE SAND, scattered fine sand (5-10%), trace medium sand @ 6' - becomes VERY FINE TO FINE SAND (30,70), trace silt (1-3%) @ 7'6" - scattered silt (5%)	
5				SMPL		
			0	SP	8'9" - 9'4" 5Y 5/2 (olive gray), moist, SILTY CLAY, trace medium to coarse sand (1%)	
	36"				9'4" - 10' 5GY 4/1 (dark greenish gray), moist, VERY FINE TO FINE SAND, scattered medium to coarse sand and fine gravel, slight to moderate petroleum odor @ 10' - very slight petroleum odor	
				CL	10' - 10'9" 10YR 3/4 (dark yellowish brown), moist, VERY FINE TO FINE SANDY GRAVEL, scattered coarse sand, small cobble, no petroleum odor @ 10' - 10'6" - sample - logged	
			0	SP		
10	45"		SMPL	GW		
				SP	10'9" - 12'6" 2.5Y 5/4 (light olive brown), moist, FINE TO MEDIUM SAND, (60, 40) @ 11'6" - becomes (30,70) @ 11'9" - 12' - no recovery @ 12' - becomes 5Y 4/4 (olive) with some orange staining, VERY FINE TO FINE SAND (55,45), trace very coarse sand (1-3%)	
			NR			
				SP		
				SW		
	29"					
				SMPL		
15			0	NR	12'6" - 18'6" 5Y 4/2 (olive gray), MEDIUM TO COARSE SAND (70,25), scattered fine sand, trace shell fragments @ 13'11" - 14'5" - sample - did not log @ 14'5" - 16' - no recovery @ 16' - scattered shell fragments @ 16'6" - becomes FINE TO MEDIUM SAND (35,55), scattered very fine and coarse sand (5%/5%), trace shell fragments @ 17'6" - becomes MEDIUM TO COARSE SAND (65,30), trace very fine sand (5%), scattered shell fragments @ 18'10" - 20' - no recovery @ 20' - 20'6" - sample - did not log	
				SW		
	34"					
				NR		
20			0	SMPL		
				SP	20'6" - 36'3" 5Y 4/2 (olive gray), MEDIUM SAND, scattered fine sand (5-10%) @ 21' - becomes FINE TO MEDIUM SAND (30,55), scattered very fine sand @ 22' - becomes (55,30), scattered very fine sand @ 22'4" - 24' - no recovery @ 24' - becomes VERY FINE TO FINE SAND (30,55), scattered medium sand (5%) and shell fragments @ 25' - becomes VERY FINE SAND, scattered fine sand, (5-10%), trace medium sand (1-3%) @ 26' - becomes VERY FINE TO FINE SAND (30,65), scattered medium sand (5%) @ 26'3"- 28' - no recovery @ 28' - becomes VERY FINE SAND, scattered fine to medium sand (5-10%) @ 28'3" - becomes 5GY 5/1 (greenish gray), VERY FINE TO FINE SAND (30,65), trace medium sand (1-3%) @ 29'3" - becomes 5GY 4/1 (dark greenish gray) @ 29'5" - 29'11" - sample - did not log @ 29'11" - 32' - no recovery	
	28"					
				NR		
				SP		
25						
	27"					
				NR		
				SP		
30	23"		0	SMPL		
				NR		

PACIFIC EDGE ENGINEERING, INC.

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SOIL BORING LOG - PE28

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	NR	@ 29'11" - 32' - no recovery	
				SP	@ 32'9 " - becomes 5Y 4/1 (dark gray), VERY FINE SAND, scattered silt (5%), trace fine sand (1-3%), and small twigs	
	18"			NR	@ 33'4 " - becomes 5GY 4/1 (dark greenish gray), FINE TO MEDIUM SAND (45,45), scattered very fine sand (5-10%) @ 33'6" - 36' - no recovery	
35			SP		@ 36' - becomes MEDIUM SAND, scattered fine and coarse sand (5%)	
				ML	36'3" - 37'6" 5Y 4/1 (dark gray) some black streaks, SILTY VERY FINE SAND (30,65), scattered fine sand	
			SP			
	20"			NR	37'6" - 44'3" 5GY 4/1 (dark greenish gray), VERY FINE TO FINE SAND (30,55), trace medium sand (1-3%) @ 37'8" - 40' - no recovery	
40			0	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 40'6" - becomes FINE TO MEDIUM SAND (30,65), trace very fine sand (1-3%) @ 41' - becomes MEDIUM SAND, scattered fine sand (10%)	
	20"			NR	@ 41'6" - becomes VERY FINE TO FINE SAND (25,70), trace medium sand @ 41'8" - 44' - no recovery @ 44' - becomes FINE SAND, scattered very fine and medium sand (5%)	
				ML	44'3" - 45'7" 5Y 4/1 (dark gray), wet, VERY FINE SANDY SILT (30,70) @ 45'3" - some black mottling, becomes SILTY VERY FINE SAND (30,65), trace fine sand (1-3%)	
45	19"			NR		
					T.D. - 45'7" @ 45'7" - 48' - no recovery	
50						
55						
60						

PACIFIC EDGE ENGINEERING, INC.

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE29

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 6" Asphalt	
					6" - 1'6" Base	
				SP	3' - 8' 2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (30,70), trace medium and coarse sand @ 5' - 5'6" - sample - did not log @ 5'6" - becomes 10YR 5/6 (yellowish brown), damp, (75,25), trace gray silt nodules @ 7'3"' - becomes 2.5Y 5/4 (light olive brown), FINE SAND, scattered very fine sand (10-15%), trace medium sand (1-3%)	
5			0	SMPL		
	38"			SP		
					8' - 9'4" 2.5Y 5/4 (light olive brown), moist, CLAYEY SILT, scattered very fine sand (5-10%), slight to moderate plasticity @ 8'6" - abundant very fine sand	
				ML	9'4" - 11'4" 5Y 5/3 (olive), moist, VERY FINE TO FINE SAND (70,30)	
				SP	@ 10' - 10'6" - sample - did not log	
10	45"		0	SMPL		
				SP	11'4" - 22' 2.5Y 5/4 (light olive brown), moist, VERY FINE TO COARSE SAND, scattered gravel	
			SW			
			NR		@ 11'9" - 12' - no recovery	
				SW	@ 12'6"- becomes 2.5Y 5/3 (light olive brown), MEDIUM TO COARSE SAND (70,20), scattered fine sand (10%)	
	31"					
				SMPL	@ 14'1" -14'7" - sample - did not log	
15			0	NR	@ 14'7" - 16' - no recovery	
				SW	@ 16' - becomes wet, trace shell fragments @ 16'6" - scattered very coarse sand (5%) and very fine sand @ 17'6" - becomes FINE TO MEDIUM SAND, scattered very fine and coarse sand (5-10%), trace shell fragments	
	26"					
				NR	@ 18'2" - 20' - no recovery	
20			0	SW	@ 20'6" - becomes FINE TO COARSE SAND (20,55,20), scattered very fine sand, trace shell fragments	
	30"					
				SP	22' - 40'6" 5Y 4/3 (olive), wet, VERY FINE TO FINE SAND, trace medium sand (1-3%)	
				NR	@ 22'6" - 24' - no recovery	
				SP	@ 24' - becomes VERY FINE TO MEDIUM SAND (30,30,30) @ 24'6" - becomes FINE TO MEDIUM SAND (30,60), scattered very fine and coarse sand	
25	27"				@ 25'3" - becomes VERY FINE TO MEDIUM SAND (25,30,40), trace coarse sand (3-5%), scattered shell fragments	
				NR	@ 25'9" - becomes VERY FINE TO FINE SAND (25,70), trace medium sand @ 26'3" - 28' - no recovery	
				SP	@ 28'6" - becomes FINE SAND, scattered very fine and medium sand (5-10%) @ 29'3" - becomes VERY FINE TO FINE SAND (30,70)	
30	25"		0	SMPL	@ 29'7" - 30'1" - sample - did not log	

PACIFIC EDGE ENGINEERING, INC.

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE29

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0	NR		@ 30'1" - 32' - no recovery	
				SP		@ 32' - becomes 5GY 5/1 (greenish gray), (50,50)	
	19"			NR		@ 33'7" - 36' - no recovery	
35							
				SP		@ 36' - becomes FINE TO MEDIUM SAND (40,55), scattered very fine sand (5%) @ 36'6" - becomes 5GY 4/1 (dark greenish gray), VERY FINE TO FINE SAND (60,40)	
	22"			NR		@ 37'10" - 40' - no recovery	
40			0	SMPL		@ 40' - 40'6" - sample - did not log	
				ML	40'6" - 41'3"	5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE SAND (25,75)	
	23"			SP	41'3" - 44'3"	5GY 5/1 (greenish gray), wet, VERY FINE SAND, scattered fine sand (5%), trace silt (1-3%)	
				NR		@ 41'11" - 44' - no recovery	
			SP			@ 44' - becomes VERY FINE TO FINE SAND (70,30)	
				ML	44'3" - 45'4"	5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, scattered silt (10%)	
45							
	16"			NR		@ 45'4" - 48' - no recovery	
				SP/ ML	48' - 52'6"	5GY 4/1 (dark greenish gray), wet, VERY FINE SAND, scattered silt (5%) and fine sand (5%)	
				SMPL		@ 48'6" - becomes SILTY VERY FINE SAND (30,70)	
50	18"		0	NR		@ 49' - 49'6" - sample - did not log @ 49'6" - 52' - no recovery	
				SP/ML		@ 52' - becomes VERY FINE SANDY SILT (40,60)	
			ML				
				NR	52'6" - 62'	5GY 4/1 (dark greenish gray), very moist, SILT, scattered to abundant very fine sand (10-20%)	
	9"					@ 52'9" - 56' - no recovery	
55							
				ML			
	17"			NR		@ 57'5" - 60' - no recovery	
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/12/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE29

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 60' - 60'6" - sample - did not log	
				ML	@ 60'6" - becomes SILTY VERY FINE SAND (30,70)	
	24"			NR	T.D. - 62' @ 62' - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/12-13/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE30

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 9'9"	2.5Y 5/3 (light olive brown), moist, VERY FINE TO FINE SAND (25,70), trace medium sand (3-5%), and shell fragments	
5			0	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 5'6" - becomes 5Y 5/3 (olive), damp, VERY FINE TO FINE SAND (70,30)	
	36"					@ 5'9" - becomes 10YR 5/4 (yellowish brown)	
						@ 6'6"' - becomes (30,70)	
						@ 7'6"' - becomes (60,40), trace gray silt nodules	
						@ 8'6"' - becomes (40,60)	
10	45"			CL	9'9" - 10'3"	5Y 4/2 (olive gray), moist, SILTY CLAY, scattered very fine sand, slight petroleum odor	
			SMPL	SW		@ 10' - 10'6" - sample - logged, slight petroleum odor	
			0	SP	10'6" - 11'	10YR 3/4 (dark yellowish brown), moist, VERY FINE TO COARSE SAND, scattered silt and gravel	
			NR	SP			
				SW	11' - 12'6"	2.5Y 5/4 (light olive brown), damp, FINE SAND, scattered very fine sand (5%)	
	33"					@ 11'6" - becomes VERY FINE TO FINE SAND (25,75)	
						@ 11'9" - 12' - no recovery	
						@ 12' - becomes (40,60), trace silt (1-3%)	
				SMPL	12'6" - 16'9"	2.5Y 5/4 (light olive brown), wet, FINE TO MEDIUM SAND (30,55), scattered coarse sand (10-15%), trace very fine sand	
15			0	NR		@ 13'3" - becomes MEDIUM TO COARSE SAND (55,40), scattered fine sand (5%)	
				SW		@ 14'3" - 14'9" - sample - did not log	
				SP		@ 14'9" - 16' - no recovery	
						@ 16' - scattered shell fragments	
				SW	16'9" - 17'3"	5Y 4/3 (olive), wet, VERY FINE TO FINE SAND (35,60), scattered medium sand (5%)	
	29"		SP	NR	17'3" - 18'3"	5Y 4/3 (olive), wet, FINE TO MEDIUM SAND (30,60), scattered very fine and coarse sand (5%/5%)	
					18'3" - 18'5"	5Y 4/3 (olive), wet, VERY FINE TO FINE SAND, scattered medium sand (5%)	
20			0	SMPL		@ 18'5" - 20' - no recovery	
				SW		@ 20' - 20'6" - sample - did not log	
					20'6" - 26'4"	5Y 4/3 (olive), wet, FINE TO MEDIUM SAND (45,45), trace very fine and coarse sand (1-3%), trace shell fragments	
	31"					@ 21'6" - becomes MEDIUM TO COARSE SAND (55,40), scattered shell fragments and fine sand (5%)	
				NR		@ 22'7" - 24' - no recovery	
						@ 24' - becomes FINE TO MEDIUM SAND (30,60), scattered coarse sand (5-10%)	
				SW		@ 24'6" - becomes (65,30), scattered very fine sand (5%), trace coarse sand (1-3%)	
25						@ 25'6" - becomes MEDIUM TO COARSE SAND (60,30), scattered fine sand (10%)	
	28"					@ 26' - becomes FINE TO MEDIUM SAND (30,65), trace coarse sand (1-3%)	
				NR		@ 26'4" - 28' - no recovery	
					28' - 28'10"	5Y 5/3 (olive), moist, FINE SAND, scattered very fine sand (5-10%), and medium sand (5%)	
				SP	28'10" - 29'3"	5Y 4/2 (olive), wet, SILTY VERY FINE SAND (30,70)	
				ML	29'3" - 44'3"	5Y 5/3 (olive), VERY FINE TO FINE SAND (30,70), trace medium sand (3-5%)	
				SP			
30	26"		0.5	SMPL		@ 29'8" - 30'2" - sample - did not log	

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/12-13/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE30

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				NR	@ 30'2" - 32' - no recovery	
				SP	@ 32' - becomes FINE SAND, scattered very fine sand (10-15%) @ 33'4" - becomes VERY FINE TO FINE SAND (30,70)	
	20"			NR	@ 33'8" - 36' - no recovery	
35						
				SP	@ 36' - becomes FINE SAND, scattered very fine sand (5%), trace medium sand (1-3%) @ 36'6" - becomes VERY FINE TO FINE SAND (25,75) @ 37'6" - becomes VERY FINE SAND, scattered silt (5-10%)	
	23"			NR	@ 37'11" - 40' - no recovery	
40			0.2	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 40'6" - becomes VERY FINE TO FINE SAND (40,60) @ 41'6" - becomes (60,40), slight blue/gray tint	
	24"			NR	@ 42' - 44' - no recovery	
			SP		@ 44' - becomes 5GY 4/1 (dark greenish gray) (70,30)	
45				ML/ SM	44'3" - 45'10" 5GY 4/1 (dark greenish gray), SILTY VERY FINE SAND (25,75) @ 45'6" - becomes VERY FINE TO FINE SAND (50,50), with nodules dark gray silty very fine sand	
	22"			NR		
					T.D. - 45'10" @ 45'10" - 48' - no recovery	
50						
55						
60						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/26/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE31

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 8"	Asphalt	
					8" - 1'8"	Base	
				SP	3' - 4'4"	2.5Y 6/4 (light yellowish brown), damp, VERY FINE TO FINE SAND, trace silt and medium sand (1-3%)	
				SM/ML	4'4" - 4'10"	5Y 5/3 (olive), dry to damp, SILTY VERY FINE SAND/SANDY SILT	
5	44"		SP 0.8	SMPL, SP	4'10" - 8'	2.5Y 6/4 (light yellowish brown), damp, VERY FINE TO FINE SAND, trace silt and medium sand (1-3%) @ 5' - 5'6" - sample - did not log @ 5'6" - trace coarse sand @ 6'6" - becomes 2.5Y 5/6 (light olive brown), moist, (70,25), scattered silt (5%) @ 8' - scattered clayey silt nodules	
				CL/ML, SP	8' - 8'6"	2.5Y 5/4 (light olive brown), moist, CLAYEY SILT, scattered very fine sand (5-10%), moderate plasticity	
10	30"		0.2	SM/SW, SMPL, NR	8'6" - 9'6"	2.5Y 5/4 (light olive brown), damp to moist, VERY FINE TO FINE SAND, abundant medium sand (10-15%), trace silt and coarse sand (1-3%)	
				SW	9'6" - 10'	10YR 4/4 (dark yellowish brown), damp, VERY FINE TO MEDIUM SAND, scattered coarse sand and gravel (5-10%), scattered silt (5-10%), gravel appears to be dark reddish brown sandstone @ 10' - 10'6" - sample - did not log @ 10'6" - 12' - no recovery	
	28"		SP	SMPL, NR	12' - 13'6"	5Y 5/4 (olive), moist, MEDIUM TO VERY COARSE SAND (55,30,15), trace fine sand (3-5%)	
15			0.9	SP	13'6" - 16'6"	5Y 5/4 (olive), FINE TO MEDIUM SAND (25,60), abundant coarse sand (10-15%) @ 13'10" - 14'4" - sample - did not log @ 14'4" - 16' - no recovery	
				SW	16'6" - 17'6"	5Y 5/4 (olive), FINE TO VERY COARSE SAND (15,30,30,15) @ 17' - trace silty clay nodules	
	28"			SP/SW, NR	17'6" - 21	5Y 5/4 (olive), FINE TO MEDIUM SAND (30,60), scattered coarse sand (5-10%), trace very fine sand (3-5%) @ 18' - becomes (40,50), scattered very fine sand (5-10%), trace coarse sand (3-5%) @ 18'4" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes VERY FINE TO MEDIUM SAND (15,40,40), trace silt (1-3%)	
20			0.2	SMPL, SP/SW	21' - 21'9"	5Y 5/4 (olive), FINE TO COARSE SAND (15,50,35), trace shell fragments	
	31"			SW, SP/SW, NR	21'9" - 28'6"	5Y 5/4 (olive), VERY FINE TO MEDIUM SAND (25,30,30), scattered coarse sand (5-10%) and shell fragments, trace silt (1-3%) @ 22'3" - becomes (30,40,15), trace shell fragments @ 22'7" - 24' - no recovery @ 24' - becomes trace coarse sand (1-3%), scattered silt (5%), no shell fragments @ 24'6" - scattered silt and coarse sand (5-10%) and shell fragments @ 25'3" - becomes FINE TO MEDIUM SAND, abundant very fine sand (10-15%), trace coarse sand (3-5%) and shell fragments @ 26'4" - 28' - no recovery @ 28' - becomes VERY FINE TO MEDIUM SAND (25,40,30), trace silt and coarse sand (1-3%) and shell fragments	
25	28"			SP/SW, NR	28'6" - 52'	5Y 5/2 (olive gray), very moist, VERY FINE SAND, trace silt and fine sand (1-3%) @ 29' - becomes VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace silt (1-3%) @ 29'4" - 29'10" - sample - did not log @ 29'10" - 32' - no recovery	
30	22"		0	SP, SMPL, NR			

PACIFIC EDGE ENGINEERING, INC.

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/26/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE31

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.4	NR	@ 29'10" - 32' - no recovery	
				SP	@ 32' - trace shell fragments @ 32'6" - becomes VERY FINE SAND , abundant silt (10-15%), trace fine sand (3-5%)	
	23"			NR	@ 33'6" - becomes VERY FINE TO FINE SAND (45,45), scattered silt (5-10%) @ 33'11" - 36' - no recovery	
35						
				SP	@ 36' - becomes (30,65), trace silt and medium sand (3-5%)	
	21"			NR	@ 37'9" - 40' - no recovery	
40			1.7	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 41' - becomes (70,25), trace silt (3-5%) @ 41'9" - becomes (45,50)	
	25"			NR	@ 42'1" - 44' - no recovery	
				SP	@ 44' - becomes VERY FINE SAND, scattered silt (5%), trace fine sand (3-5%) @ 45'6" - becomes VERY FINE TO FINE SAND (75,20), trace silt (3-5%)	
45	23"			NR	@ 45'11" - 48' - no recovery	
				SP	@ 48' - appears to become 5Y 4/1 (dark gray), VERY FINE SAND, scattered silt (5%), majority of sample was wood @ 49' - becomes VERY FINE TO FINE SAND (30,65), trace silt (3-5%)	
50	30"		0.6	SMPL	@ 50' - scattered wood @ 50' - 50'6" - sample - did not log	
				NR	@ 50'6" - 52' - no recovery @ 52' - noted 2" of wood (slough?)	
				ML/CL	52' - 52'6" 5Y 4/1 (dark gray), very moist to wet, CLAYEY SILT, strong "rotten egg" odor, trace very fine sand (1-3%), slight to moderate plasticity	
				CL	52'6" - 56'9" 5Y 4/1 (dark gray), very moist to wet, SILTY CLAY, moderate plasticity @ 54' - becomes 5Y 4/2 (olive gray)	
	25"			NR	@ 54'1" - 56' - no recovery	
55						
				CL		
				ML	56'9" - 57'9" 5Y 3/2 (dark olive gray), very moist, CLAYEY SILT, slight plasticity @ 57'3" - becomes 5Y 3/1 (very dark gray), VERY FINE SANDY SILT (40,60)	
	21"			NR	@ 57'9" - 60' - no recovery	
60						

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DATE:	4/26/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE31

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.5	SMPL	@ 60' - 60'6" - sample - did not log	
				SP	60'6" - 62'1" 5GY 4/1 (dark greenish gray), moist, VERY FINE SAND, abundant silt (10-15%)	
	25"				@ 61' - becomes scattered silt and fine sand (5-10%)	
				NR	T.D. - 62'1" @ 62'1" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/28/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE32

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 7'9"	5Y 5/3 (olive), moist, VERY FINE TO FINE SAND (40,60), trace silt (1-3%)	
5			0	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@5'6" - becomes 2.5Y 6/6 (olive yellow), moist, (50,50)	
	33"					@ 6'6" - becomes 5Y 5/3 (olive), some orange staining, (60,40)	
			NR			@ 7'5" - becomes 10YR 5/6 (yellowish brown) intermixed with 5Y 5/3 (olive), moist to very moist, (30,70), scattered silts (5-10%)	
				SM		@ 7'9" - 8' - no recovery	
					8' - 9'6"	5Y 5/3 (olive), very moist, SILTY VERY FINE TO FINE SAND (15,40,45)	
				SC		@8'6" - trace clay (1-3%), scattered silty clay nodules	
10	43"		0	SMPL	9'6" - 10'9"	2.5Y 5/4 (light olive brown), very moist to wet, CLAYEY VERY FINE TO MEDIUM SAND (20,30,30,15), scattered silts (5%), trace coarse sands (1%) and gravels (1%)	
			SC				
				SP			
				NR		@ 10' - 10'6" - sample - did not log	
				SP		@ 10'6" - 10'9" - rock fragments (volcanic pumice material?), purplish hue	
					10'9" - 13'5"	2.5Y 5/4 (light olive brown), very moist to wet, VERY FINE TO FINE SAND (40,50), scattered medium sand (5%)	
	21"		SW				
				NR		@ 11'7" - 12' - no recovery	
15			0			@ 12' - becomes VERY FINE TO MEDIUM SAND (30,40,30), trace silt (1-3%), trace coarse sand (1%)	
						@ 13' - becomes 5Y 4/4 (olive), VERY FINE TO FINE SAND (30,60), trace silt (1-3%), abundant medium sand (10%)	
				SMPL			
				SP	13'5" - 13'9"	5Y 5/4 (olive), wet, FINE TO COARSE SAND (25,25,25,25), trace very coarse sand (1-3%), trace silt (1-3%)	
	21"					@ 13'9" - 16' - no recovery	
				NR		@ 16' - 16'6" - sample - did not log	
					16'6" - 17'9"	5Y 4/4 (olive), wet, VERY FINE TO FINE SAND (30,60), abundant medium sand (10%), trace silt (1-3%)	
						@ 17' - becomes VERY FINE TO MEDIUM SAND (30,40,30), trace silt (1-3%)	
20			0	SMPL		@ 17'9" - 20' - no recovery	
				SW		@ 20' - 20'6" - sample - did not log	
				SP	20'6" - 21'	5Y 5/4 (olive), wet, MEDIUM TO COARSE SAND (40,40), scattered shell fragments, abundant fine sands (10-15%)	
			SW				
	20"			NR	21' - 21'6"	5Y 4/4 (olive), wet, VERY FINE TO MEDIUM SAND (35,60), scattered silt (5%)	
					21'6" - 21'8"	5Y 5/4 (olive), wet, MEDIUM TO COARSE SAND (40,40), scattered shell fragments, abundant fine sands (10-15%)	
				SP		@ 21'8" - 24' - no recovery	
25			SW		24' - 25'	5Y 5/4 (olive), wet, VERY FINE TO FINE SAND (45,50), scattered silt (5%), trace shell fragments	
				SP			
	20"			NR	25' - 25'4"	5Y 5/3 (olive), wet, MEDIUM TO COARSE SAND (50,40), abundant fine sands (10%) and shell fragments	
					25'4" - 33'	5Y 4/3 (olive), wet, VERY FINE TO FINE SAND (60,30), scattered silt (5%)	
						@ 25'8" - 28' - no recovery	
				SP		@ 28' - becomes 5Y 5/3 (olive), wet, VERY FINE TO FINE SAND (45,45) abundant medium sand, trace silt	
				SMPL		@ 29' - becomes 5Y 4/3 (olive)	
30	19"			NR		@ 29'1" - 29'7" - sample - did not log	
						@ 29'7" - 32' - no recovery	

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DATE:	4/28/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE32

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0	NR	@ 29'7" - 32' - no recovery	
				SP	@ 32' - becomes VERY FINE TO MEDIUM SAND (40,40,20), trace silt (1-3%) @ 36' - becomes 5Y 4/1 (dark gray), wet, VERY FINE TO FINE SAND (50,45), scattered silt (5%)	
	15"			NR	@ 33'3" - 36' - no recovery	
35						
				SP		
	20"			NR	@ 37'8" - 40' - no recovery	
40			0	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 41'4" - scattered silt (5-10%)	
	16"			NR	@ 41'4" - 44' - no recovery	
				SP	@ 44' - becomes VERY FINE SAND, abundant silt (10%) @ 45' - becomes VERY FINE TO FINE SAND (50,45), scattered silt (5%) @ 45'6" - becomes VERY FINE SAND, trace silt (1-3%)	
45	22"			NR	T.D. - 45'10" @ 45'10" - 48' - no recovery	
50						
55						
60						

PACIFIC EDGE ENGINEERING, INC.

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/26/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE31

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.5	SMPL	@ 60' - 60'6" - sample - did not log	
	25"			SP	60'6" - 62'1" 5GY 4/1 (dark greenish gray), moist, VERY FINE SAND, abundant silt (10-15%) @ 61' - becomes scattered silt and fine sand (5-10%)	
					T.D. - 62'1"	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/25/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE33

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 5'	2.5Y 5/7 (light olive brown), moist, VERY FINE TO FINE SAND (30,60), trace silt and medium sand (1-3%)	
5			0.5	SMPL		@ 5' - 5'6" - sample - did not log	
	7"		SM	NR	5'6" - 8'6"	5Y 5/3 (olive), damp, SILTY VERY FINE SAND (25,65), scattered fine sand (5-10%), trace very coarse sand (1%) @ 5'7" - 8' - no recovery @ 8' - becomes 2.5Y 5/4 (light olive brown)	
				ML	8'6" - 9'3"	5Y 5/3 (olive), moist, SILT, scattered very fine sand, trace clay (3-5%)	
10	37"		0.7	SW SMPL SP NR	9'3" - 10'	mottled 2.5Y 5/4 (light olive brown) and brick red, damp, VERY FINE TO COARSE SAND, abundant gravel (10-15%), scattered silt (5%) @ 10' - 10'6" - sample - did not log	
				SP	10'6" - 18'8"	5Y 5/3 (olive), moist, FINE TO MEDIUM SAND (30,60), scattered very fine sand (5-10%), and silty clay nodules @ 11' - no clay nodules, (30,65), trace very fine sand (3-5%) @ 11'1" - 12' - no recovery @ 12' - becomes 2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (40,55), trace silt and medium sand (3-5%)	
	31"						
15			1.1	NR		@ 12'6" - becomes FINE TO MEDIUM SAND (30,65), trace silt, very fine and coarse sand (3-5%) @ 13'6" - scattered coarse sand (5%)	
				SP		@ 14'7" - 16' - no recovery @ 16' - becomes 5Y 5/3 (olive), VERY FINE TO FINE SAND (40,50), scattered medium sand (5-10%), trace silt (1-3%)	
	32"					@ 16'6" - becomes 5Y 4/1 (dark gray), FINE TO MEDIUM SAND (30,65), trace very fine sand (3-5%)	
				NR		@ 17'6" - becomes 2.5Y 5/4 (light olive brown), (65,30), trace very fine sand and silt (1-3%) @ 18'8" - 20' - no recovery	
20			1.1	SMPL		@ 20' - 20'6" - sample - did not log	
				SW	20'6" - 28'	2.5Y 4/4 (olive brown), wet, FINE TO COARSE SAND (20,50,20), scattered very fine sand (5-10%), trace silt (1-3%) @ 21' - becomes VERY FINE TO MEDIUM SAND, scattered coarse sand (5%), trace fine gravel (1-3%)	
	28"			NR		@ 22'4" - 24' - no recovery	
				SW		@ 24'6" - becomes 5Y 5/3 (olive), VERY FINE TO COARSE SAND, trace shell fragments @ 25'6" - becomes scattered shell fragments	
25	24"			NR		@ 26' - 28' - no recovery	
				SM	28' - 28'6"	5Y 5/2 (olive gray), very moist, SILTY VERY FINE SAND (30,70)	
				SP	28'6" - 33'9"	5Y 5/2 (olive gray), very moist, VERY FINE TO FINE SAND (80,20), trace silt (3-5%)	
30	17"			NR		@ 29'5" - 32' - no recovery	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/25/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE33

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			1.4	NR	@ 29'5" - 32' - no recovery	
				SP	@ 32' - becomes (45,45), scattered silt (5-10%) @ 32'6" - becomes (30,65), trace silt and medium sand (3-5%)	
	21"			NR	@ 33'9" - 36' - no recovery	
35						
				SM	36' - 37'10" 5Y 5/2 (olive gray), very moist, SILTY VERY FINE SAND (30,60), scattered fine sand (5-10%) @ 36'6" - becomes 5GY 5/1 (greenish gray), (45,55), trace clay (1-3%)	
	22"			NR	@ 37'6" - scattered fine sand (5-10%), no clay @ 37'10" - 40' - no recovery	
40			1.6	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	40'6" - 45'6" 5Y 5/2 (olive gray), very moist, VERY FINE TO FINE SAND (30,65), trace silt (3-5%)	
	21"			NR	@ 41'6" - becomes VERY FINE SAND, scattered silt (5-10%), trace fine sand (3-5%) @ 41'9" - 44' - no recovery	
				SP		
45						
	24"			SM	45'6" - 46' 5Y 5/2 (olive gray), very moist, SILTY VERY FINE SAND (30,65), trace fine sand (3-5%)	
				NR		
					T.D. - 46' @ 46' - 48' - no recovery	
50						
55						
60						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/25/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE34

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
					0 - 8" Asphalt	
					8" - 1'6" Base	
				SP	3' - 8'6" 2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (20,70), scattered medium to very coarse sand (5%), trace gravel (1-3%) @ 5' - 5'6" - sample - did not log @ 5'6" - no gravel @ 6' - becomes 10YR 4/6 (dark yellowish brown), scattered medium sand (5%), trace silt (1-3%) @ 6'6" - scattered silt (5%) @ 7'6" - becomes 2.5Y 5/4 (light olive brown), VERY FINE SAND, scattered silt (5-10%), trace fine sand (3-5%)	
5			0.4	SMPL		
	36"			SP	8'6" - 9'1" 2.5Y 6/2 (light brownish gray), dry, SILTY VERY FINE TO MEDIUM SAND, abundant coarse sand and gravel (10-15%)	
				SM/SW	9'1" - 11'9" 2.5Y 5/6 (light olive brown), moist, MIXED VERY FINE TO FINE SAND, (65,20), abundant silt (10-15%), and SILTY VERY FINE SAND (30,70), scattered nodules/lens of clayey silt @ 10' - 10'6" - sample - did not log @ 11' - becomes mottled 2.5Y 5/6 (light olive brown)and 10YR 6/6 (brownish yellow), VERY FINE TO FINE SAND, abundant silt (10-15%)	
				SM/SP		
10	45"		1.0	SMPL	@ 11'6" - becomes SILTY VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace clay (1%)	
				SM/SP	@ 11'9" - 12' - no recovery	
			NR		12' - 12'9" 2.5Y 5/4 (light olive brown), very moist to wet, FINE TO MEDIUM SAND (50,45), trace silt (1-3%), scattered shell fragments	
				SP	12'9" - 13'6" 10YR 4/2 (dark grayish brown), wet, SILTY VERY FINE TO COARSE SAND (25% silt,65% sands), scattered gravel (10%), trace cobble	
				SM/SW	13'6" - 17'3" 2.5Y 4/2 (dark grayish brown), wet, VERY FINE TO MEDIUM SAND (15,40,40), trace silt (1-3%) and clayey silt nodules @ 13'11" - 16' - no recovery @ 16' - 16'6" - sample - did not log @ 17' - becomes (30,40,25), scattered coarse to very coarse sand (5%) @ 17'3" - 20' - no recovery @ 20' - 20'6" - sample - did not log	
	23"		SW			
				NR		
15			0.6			
				SW		
				NR	20'6" - 24'9" 2.5Y 4/2 (dark grayish brown), very moist, VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace silt (1-3%) @ 21' - becomes 5Y 4/2 (olive gray), FINE TO MEDIUM SAND (45,40), abundant very fine sand (10-15%), trace silt (1-3%) @ 22' - becomes 2.5Y 5/4 (light olive brown), (30,60), scattered very fine sand (5-10%), trace silt (1-3%) @ 22'4" - 24' - no recovery @ 24' - becomes VERY FINE SAND, scattered silt and fine sand (5-10%), trace medium sand	
	15"					
20			1.3	SMPL		
				SP		
	28"			NR	24'9" - 26'3" 2.5Y 5/4 (light olive brown), wet, VERY FINE TO COARSE SAND, scattered silt (5-10%) and shell fragments @ 25'6" - becomes FINE TO COARSE SAND (15,70,15), trace silt (1%) @ 26' - becomes VERY FINE TO MEDIUM SAND (40,35,20), trace silt (3-5%), scattered clay silt nodules @ 26'3" - 28' - no recovery	
				SP		
25				SW		
	27"			NR	28' - 28'6" 5Y 4/2 (olive gray), very moist, SILTY VERY FINE SAND (40,55), trace fine sand (3-5%)	
					28'6" - 29'3" 2.5Y 5/2 (grayish brown), very moist, VERY FINE TO MEDIUM SAND (20,25,40), abundant coarse sand (10-15%), trace silt (1-3%), scattered shell fragments	
				SM		
				SW	29'3" - 32' 5Y 4/2 (olive gray), very moist, VERY FINE TO FINE SAND (30,55), abundant medium sand (10-15%), trace silt (1-3%), trace shell fragments @ 29'7" - 30'1" - sample - did not log	
			SP	SMPL		
30	25"					

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/25/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE34

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.5	NR		@ 30'1" - 32' - no recovery	
				SM	32' - 41'	5Y 4/1 (dark gray), wet, SILTY VERY FINE SAND (30,65), scattered fine sand (5%) @ 32' - 35'8" - majority of sample was wood, limited soil recovered for logging	
	44"						
35							
			NR			@ 35'8" - 36' - no recovery	
			SM	NR		@ 36' - becomes SILTY VERY FINE TO MEDIUM SAND (25% silt, 75% sands), majority of sample recovered was wood	
	4"					@ 36'4" - 40' - no recovery	
						@ 40' - 40'6" - sample - did not log	
40			1.0	SMPL		@ 40'6" - becomes (40,60)	
				SP	41'- 44'3"	5Y 4/2 (olive gray), very moist, VERY FINE TO FINE SAND (40,50), scattered silt (5-10%) @ 42' - becomes (30,60), trace silt (3-5%)	
	27"			NR		@ 42'3" - 44' - no recovery	
						@ 44' - becomes scattered silt (5%)	
			SP	SM	44'3" - 49'4"	5Y 4/2 (olive gray), very moist to wet, SILTY VERY FINE SAND (40,60) @ 45'3" - becomes SILTY VERY FINE TO FINE SAND (25,50,25)	
45							
	21"			NR		@ 45'9" - 48' - no recovery	
				SM			
				ML	49'4" - 53'9"	5Y 4/1 (dark gray), very moist to wet, VERY FINE SANDY SILT (45,55),	
50	25"		0.7	NR		@ 49'7" - 50'1" - sample - did not log @ 50'1" - 52' - no recovery	
				ML		@ 52' - becomes 5Y 4/2 (olive gray), wet to saturated	
	21"			NR	T.D. - 53'9"	@ 53'9" - 56' - no recovery	
55							
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/17/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE35

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 11'4"	2.5Y 5/3 (light olive brown), damp to moist, VERY FINE TO FINE SAND (25,70), trace medium sand (3-5%) @ 5' - 5'6" - sample - did not log @ 5'6" - becomes 10YR 5/6 (yellowish brown) with some olive tint, (40,55), scattered silt (10%) and trace medium sand (3-5%) @ 7'6" - becomes VERY FINE SAND, abundant silt (10-15%), trace fine sand (3-5%) @ 8'6"' - becomes 2.5Y 5/4 (light olive brown), VERY FINE TO FINE SAND (40,50), scattered medium sand (5%), trace silt and gravel (1-3%) @ 9'6" - trace coarse sand (1-3%), trace shell fragments @ 10' - 10'6" - sample - did not log @ 10'6"' - becomes (20,70), scattered medium sand (5-10%), trace coarse sand and fine gravel (1-3%)	
5	38"		0	SMPL SP			
10	42"		0 SW/ SM	SMPL SP NR	11'4" - 11'6"	10YR 4/4 (dark yellowish brown), moist, SILTY FINE TO COARSE SAND (30% silt,60% sands), scattered gravel (10%), trace clay @ 11'6" - 12' - no recovery	
				SP ML	12' - 12'6"	2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (30,60), scattered medium and coarse sand (5-10%)	
	38"			SP	12'6" - 13'6"	5Y 5/3 (olive), very moist to wet, VERY FINE SANDY SILT (30,65), trace clay and fine sand (1-3%)	
15			0.5	SMPL NR SP SP/SW	13'6" - 14'8"	2.5Y 5/4 (light olive brown) trace orange tint, wet, VERY FINE TO MEDIUM SAND (25,35,40) @ 14'3" - becomes FINE TO MEDIUM SAND (45,50), scattered very fine sand (5%) @ 14'8" - 15'2" - sample - did not log @ 15'2" - 16' - no recovery @ 16' - becomes 2.5Y 4/4 (olive), VERY FINE TO FINE SAND (40, 50), scattered silt and medium sand (5%)	
	26"			NR	16'6" - 21'	5Y 4/3 (olive), wet, VERY FINE TO MEDIUM SAND (30,35,35), trace silt (3-5%), and silt clay nodules @ 17'6" - becomes VERY FINE TO FINE SAND (30,60), scattered silt and medium sand (5%) @ 18'2" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes VERY FINE TO MEDIUM SAND (20,35,40), trace silt and coarse sand (5%)	
20			0	SMPL SM			
	28"			NR	21' - 24'6"	5Y 4/2 (olive gray), very moist, SILTY VERY FINE SAND (30,65), scattered fine sand (5%) @ 22' - becomes (20,70), scattered fine sand (10%) @ 22'4" - 24' - no recovery @ 24' - becomes (30,65), trace fine sand (1-3%)	
				SM ML	24'6" - 25'6"	5GY 4/1 (dark greenish gray), very moist, VERY FINE SANDY SILT (40,55), trace fine sand (5%)	
25	27"		SP	SW NR	25'6" - 26'	5Y 5/3 (olive), very moist, VERY FINE TO MEDIUM SAND (25,40,30), trace silt (1-3%)	
			SP	SW	26' - 28'3"	5Y 5/3 (olive), very moist to wet, VERY FINE TO FINE SAND (50,40), scattered silt and medium sand, trace shell fragments @ 26'3" - 28' - no recovery @ 28' - becomes VERY FINE SAND, scattered silt (5-10%), trace fine sand (3-5%)	
30	20"		0.3	SMPL NR	28'3" - 32'3"	5Y 5/3 (olive), very moist to wet, VERY FINE TO MEDIUM SAND (20,25,50), scattered coarse sand (5%) and shell fragments @ 29'2" - 29'8" - sample - did not log @ 29'8" - 32' - no recovery	

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LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
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DATE:	4/17/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE36

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 8'9"	2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (25,70), trace medium sand (3-5%) @ 5' - 5'6" - sample - did not log @ 5'6" - some orange tint (60,40), scattered silt (3-5%) @ 7' - becomes mottled 5Y 5/3 (olive) and 10YR 6/6 (brownish yellow), VERY FINE SAND, scattered fine sand (5-10%) and silt (5-10%) @ 7'6"' - becomes VERY FINE TO FINE SAND (50,45), scattered silt (5-10%)	
5	36"		0.2	SMPL SP			
			ML	SMPL	8'9" - 9'6"	2.5Y 4/4 (olive brown), moist, CLAYEY SILT, scattered very fine sand (5-10%), trace medium and coarse sand (1-3%) @ 9' - 9'6"' - sample - logged, slight petroleum odor	
10	45"		0.2	SP	9'6" - 12'6"	2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (60,40), scattered nodules clayey silt, trace silt (1-3%), no odor @ 10' - no nodules @ 10'6" - scattered silt (5-10%) @ 11'6" - becomes very moist, scattered medium sand (5%)	
			NR	SP		@ 11'9" - 12' - no recovery	
				SW	12'6" - 16'9"	5Y 5/2 (olive gray), wet, VERY FINE TO MEDIUM SAND (30,30,35), trace silt and coarse sand (1-3%) @ 14' - becomes FINE TO COARSE SAND (20,40,40) @ 14'3" - 14'9" - sample - did not log @ 14'9" - 16' - no recovery	
	33"			SMPL			
15			0.4	NR		@ 16' - becomes FINE TO MEDIUM SAND, scattered coarse sand (5%), trace silt nodules	
				SW			
				SP	16'9" - 18'5"	5Y 4/2 (olive gray), wet, FINE TO MEDIUM SAND (30,60), scattered very fine sand (5-10%) @ 18"' - becomes (60,30)	
	29"			NR		@ 18'5" - 20' - no recovery	
20			0.3	SMPL		@ 20' - 20'6" - sample - did not log	
				SW	20'6" - 21'	5Y 4/2 (olive gray), wet, VERY FINE TO MEDIUM SAND (15,50,35), trace coarse sand (1-3%)	
	28"			SP	21' - 24'6"	5Y 4/2 (olive gray), wet, VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%) @ 22'4" - 24' - no recovery @ 24' - becomes 5Y 3/2 (dark olive gray), wet, VERY FINE TO FINE SAND (75,25), moderate petroleum odor	
				NR			
				SP			
25	27"			SW	24'6" - 33'11"	5Y 3/2 (dark olive gray), wet, VERY FINE TO MEDIUM SAND (20,40,35), trace coarse sand (1-3%) @ 25'6" - scattered clayey silt nodules, slight to moderate petroleum odor @ 26'3" - 28' - no recovery @ 28' - becomes (35,40,20), trace silt and coarse sand (1-3%), slight to moderate petroleum odor @ 28'6" - becomes (20,40,40), slight to moderate petroleum odor @ 29' - trace coarse sand (1-3%), slight to moderate petroleum odor @ 29'8" - 30'2" - sample - did not log - slight to moderate petroleum odor	
				NR			
				SW			
30	26"		0.2	SMPL			

PACIFIC EDGE ENGINEERING, INC.

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ELEVATION:		NOTES:	

SOIL BORING LOG - PE36

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			0.2	NR	@ 30'2" - 32' - no recovery	
				SW	@ 32' - becomes FINE TO MEDIUM SAND (30,55), scattered very fine sand (5-10%), trace coarse sand (3-5%), slight petroleum odor @ 33' - becomes VERY FINE TO MEDIUM SAND (15,45,40) @ 33'11" - becomes FINE TO COARSE SAND (20,40,40), large piece of wood, trace shell fragments, trace silt and very fine sand (3-5%)	
	23"					
35				NR	@ 33'11" - 36' - no recovery	
				ML/SM	36' - 36'6" 5Y 3/1 (very dark gray), wet, SILTY VERY FINE SAND (30,60), scattered fine sand (5%), trace medium sand (1-3%), abundant wood, slight petroleum odor	
				SP		
				NR	36'6" - 41' 5Y 3/1 (very dark gray), wet, VERY FINE TO FINE SAND (30,60), scattered silt (10%), no petroleum odor @ 36'8" - becomes 5GY 4/1 (dark greenish gray), trace silt (3-5%) @ 37'3" - 40' - no recovery	
	15"					
40			1.2	SMPL	@ 40' - 40'6" - sample - did not log	
				SP	@ 40'6" - scattered silt (5-10%)	
				ML	41' - 49'3" 5Y 3/2 (dark olive gray), very moist, VERY FINE SANDY SILT (40,50), scattered fine sand (5-10%)	
	22"			NR	@ 41'10" - 44' - no recovery	
				ML	@ 44' - becomes SILTY VERY FINE SAND (40,60) @ 44'6" - becomes VERY FINE SANDY SILT (40,60)	
45				NR	@ 45'4" - 48' - no recovery	
	16"					
				ML	@ 48' - becomes SILT, scattered very fine sand (10%) @ 48'6" - becomes SILTY VERY FINE SAND (30,60), scattered fine sand (5-10%)	
	15"		0.6	NR	T.D. - 49'3" @ 49'3" - 52' - no recovery Note: Broke sampler trying to sample 52' to 56'	
50						
55						
60						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/18/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE37

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 8'4"	2.5Y 5/4 (light olive brown), damp, VERY FINE TO FINE SAND (30,65), trace medium sand @ 5' - 5'6" - sample - did not log @ 5'6" - trace silt (1-3%) @ 6' - becomes VERY FINE SAND, scattered silt (5%) and gravel (sandstone) @ 7' - no gravel, some gray green mottling @ 8' - scattered nodules of clayey silt	
5	40"		0.2	SMPL SP			
				SP/CL	8'4" - 9'6"	2.5Y 5/4 (light olive brown), moist, MIXED VERY FINE TO FINE SAND (40,60) and CLAYEY SILT/SILTY CLAY, scattered fine gravel	
10	45"		0.3	SP SMPL SP	9'6" - 11'7"	2.5Y 5/6 (light olive brown), moist, VERY FINE TO FINE SAND (75,20), trace to scattered silt (3-5%) and medium sand (1-3%) @ 10' - 10'6" - sample - did not log	
			SW NR SM	SW	11'7" - 11'9"	10YR 4/4 (dark yellowish brown), moist, VERY FINE TO COARSE SAND, scattered fine gravel @ 11'9" - 12' - no recovery	
	36"			SP	12' - 12'3"	2.5Y 5/4 (light olive brown), moist, SILTY VERY FINE SAND (30,65), trace fine to medium sand (1-3%)	
15			0.2	SMPL NR	12'3" - 13'6"	5Y 5/3 (olive), wet, VERY FINE TO MEDIUM SAND (30,35,30), scattered coarse sand (5%) and shell fragments	
	33"			SP SW SP	13'6" - 16'6"	5Y 5/3 (olive), wet, VERY FINE TO FINE SAND (30,55), abundant medium sand (10-15%) @ 14'3" - becomes (50,45), trace medium sand (1-3%), scattered silt (5%) @ 14'6" - 15' - sample - did not log @ 15' - 16' - no recovery @ 16' - becomes (30,65), scattered silt (5%)	
20			0.3	NR SMPL	16'6" - 17'6"	5Y 3/2 (dark olive gray), wet, VERY FINE TO MEDIUM SAND (15,20,55), scattered coarse sand, very slight petroleum odor, trace fine gravel	
	25"			SP NR	17'6" - 32'6"	5Y 3/2 (dark olive gray), wet, VERY FINE TO FINE SAND (20,70), scattered medium sand (5-10%), trace coarse sand (1-3%), slight petroleum odor @ 18'9" - 20' - no recovery @ 20' - 20'6" - sample - did not log @ 20'6" - becomes 5GY 4/1 (dark greenish gray), VERY FINE SAND, scattered fine sand (10%) and silt (5%) @ 21' - becomes VERY FINE TO FINE SAND (30,60), trace silt and medium sand (3-5%) @ 21'6" - becomes FINE SAND, scattered very fine sand (5-10%) and medium sand (5%) @ 22'1" - 24' - no recovery @ 24' - becomes VERY FINE TO FINE SAND (25,70), trace silt and medium sand (1-3%) @ 24'6" - becomes VERY FINE SAND, scattered to abundant fine sand (10-15%), trace silt (1-3%) @ 25'6" - becomes VERY FINE TO FINE SAND (25,65), scattered medium sand (5%), trace silt (1-3%) @ 26' - 28' - no recovery @ 28' - becomes (40,55) @ 28'8" - 29'2" - sample - did not log @ 29'2" - 32' - no recovery	
25	24"			SP NR			
30	14"		0.5	SP SMPL NR			

PACIFIC EDGE ENGINEERING, INC.

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LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
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ELEVATION:		NOTES:	

SOIL BORING LOG - PE37

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				NR		@ 32' - becomes 5Y 2.5/1 (black), abundant medium sand (10-15%), slight petroleum oder	
				SP			
			ML	SM/ML	32'6" - 33'6"	5Y 2.5/1 (black), wet, VERY FINE SANDY SILT/SILTY VERY FINE SAND, scattered fine sand (5%), slight petroleum oder	
	22"			NR	33'6" - 33'10"	5Y 2.5/1 (black), wet, VERY FINE SANDY SILT (30,70), slight petroleum oder @ 33'10" - 36'- no recovery	
35							
				SM	36' - 36'6"	5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE SAND (40,55), scattered fine sand (5%), slight petroleum oder	
				SP			
	15"			NR	36'6" - 48'3"	5GY 4/1 (dark greenish gray), wet, VERY FINE TO FINE SAND (45,50), scattered silt (5-10%), slight petroleum oder @ 37'3" - 40' - no recovery	
40			2.0	SMPL		@ 40' - 40'6" - sample - did not log	
				SP		@ 40'6" - becomes (30,65) @ 41'6" - trace medium sand (1-3%)	
	26"			NR		@ 42'2" - 44' - no recovery	
				SP		@ 44' - becomes (15,75), scattered medium sand (5-10%), trace silt (1-3%), very slight petroleum odor @ 44'6" - becomes (50,45), trace medium sand and silt (3-5%)	
45							
				NR		@ 45'8" - 48' - no recovery	
	20"					@ 48' - becomes VERY FINE SAND, scattered silt and fine sand (3-5%), no petroleum odor	
			SP				
				ML	48'3" - 53'2"	5GY 4/1 (dark greenish gray), wet, VERY FINE SANDY SILT (45,50), trace fine sand (1-3%)	
				SMPL		@ 49'2" - 49'8" - sample - did not log	
50	20"		1.4	NR		@ 49'8" - 52' - no recovery @ 52' - becomes SILT, scattered very fine sand (10%) @ 52'3" - becomes VERY FINE SANDY SILT (45,55)	
				ML		@ 53' - becomes SILT, scattered clay (5%) and trace very fine sand (1-3%)	
	14"			NR	T.D. - 53'2"	@ 53'2" - 56' - no recovery	
55							
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/18/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE38

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 9'8"	2.5Y 5/6 (light olive brown), moist, VERY FINE TO FINE SAND (30,65), trace medium sand and silt (1-3%)	
5			2.1	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 6' - becomes (50,45) and scattered silt (5%)	
	34"					@ 7' - scattered silty clay nodules	
			NR			@ 7'9" - 8' - no recovery	
				SP		@ 9' - trace medium sand (~5%), no clay nodules	
10	26"		1.3	SMPL		@ 9'8" - 10'2" - sample - did not log	
				NR		@ 10'2" - 12' - no recovery	
				SM/ML	12' - 12'6"	2.5Y 5/4 (light olive brown), moist, VERY FINE SANDY SILT/SILTY VERY FINE SAND	
				SW	12'6" - 14'	2.5Y 4/4 (olive brown), moist, VERY FINE TO MEDIUM SAND (15,35,50)	
	34"		SP			@ 13'8" - trace coarse sand (~3%)	
				SMPL			
15			2.4	NR	14'- 14'4"	2.5Y 4/4 (olive brown), moist, VERY FINE TO FINE SAND (35,60), trace medium sand (3-5%)	
				ML		@ 14'4" - 14'10" - sample - did not log	
				SM		@ 14'10" - 16' - no recovery, becomes saturated	
	34"			SW	16' - 16'6"	2.5Y 4/4 (olive brown), saturated, VERY FINE SANDY SILT (25,70), trace coarse sand (2%), trace clay (3%)	
			SP		16'6" - 17'6"	2.5Y 4/4 (olive brown), wet, SILTY VERY FINE TO FINE SAND (35,35,25), trace medium sand (1-3%)	
				NR			
20			2.2	SMPL	17'6" - 18'6"	5Y 4/2 (olive gray), wet, MEDIUM TO COARSE SAND (40,55), scattered fine sand (5-10%)	
				SP	18'6" - 28'4"	5Y 4/2 (olive gray), wet, FINE TO MEDIUM SAND (35,65), scattered very fine sand (5-10%)	
	31"					@ 18'10" - 20' - no recovery	
				NR		@ 20' - 20'6" - sample - did not log	
						@ 21'6" - becomes FINE SAND, scattered very fine and medium sand (10%), slight petroleum odor, trace silt (1-3%)	
				SP		@ 22'7" - becomes 5GY 4/1 (dark greenish gray), slight petroleum odor	
25						@ 22'7" - 24' - no recovery	
	27"					@ 24' - becomes VERY FINE TO FINE SAND (30,65), trace silt and medium sand (1-3%)	
				NR		@ 26' - becomes FINE SAND, scattered very fine and medium sand (5-10%)	
						@ 26'3" - 28' - no recovery	
			SP		28'4" - 28'8"	5Y 3/2 (dark olive gray), saturated, SILTY VERY FINE SAND (30,65), trace fine sand (3-5%), slight petroleum odor	
				SM	28'8" - 29'4"	saturated, VERY FINE TO MEDIUM SAND (25,50,20), trace silt (2%), slight petroleum odor	
				SW			
				SMPL		@ 29'4" - 29'10" - sample - did not log	
30	22"		0.5	NR		@ 29'10" - 32' - no recovery	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/18/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE38

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				NR			
			SW	SP	32' - 33'2"	2.5Y 2/0 (black), saturated, VERY FINE TO FINE SAND (30,65), trace silt (3-5%), slight petroleum odor @ 32'4" - becomes VERY FINE SAND, abundant silt (10-15%)	
	16"			NR	33'2" - 33'4"	5Y 3/2 (dark olive gray), saturated, VERY FINE TO MEDIUM SAND (20,60,20) @ 33'4" - 36' - no recovery	
35							
				SP	36' - 53'6"	5GY 5/1 (greenish gray), saturated, VERY FINE SAND, scattered silt and fine sand (5%), trace medium sand (3-5%) @ 37'6" - becomes VERY FINE TO FINE SAND (40,55), trace silt and medium sand (3-5%)	
	21"			NR		@ 37'9" - 40' - no recovery	
40			0.4	SMPL		@ 40' - 40'6" - sample - did not log	
				SP		@ 40'6" - becomes (50,45), trace silt (5%)	
	22"			NR		@ 41'10" - 44' - no recovery	
				SP		@ 44' - becomes (30,60), trace medium sand and silt (1-3%)	
45							
	22"			NR		@ 45'10" - 48' - no recovery	
				SP		@ 48'6" - becomes VERY FINE SAND , trace silt and fine sand (3-5%)	
				SMPL		@ 49'6" - 50' - sample - did not log	
50	24"		0.7	NR		@ 50' - 52' - no recovery	
				SP		@ 52'6" - scattered to abundant silt (10-15%), no fine sand	
	18"			NR		@ 53'6" - 56' - no recovery	
55							
				ML	56' - 56'6"	5Y 4/2 (olive gray), saturated, CLAYEY SILT, low plasticity, scattered very fine sand (5%)	
				CL			
	28"		SP		56'6" - 58'2"	5Y 4/2 (olive gray), wet, SILTY CLAY, trace very fine sand (1-3%) @ 57'4" - becomes 2.5Y 4/2 (dark grayish brown)	
				NR	58'2" - 60'11"	5GY 4/1 (dark greenish gray), saturated, VERY FINE TO FINE SAND (25,70), scattered silt (3-5%) @ 58'4" - 60' - no recovery	
60			0.5				

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/18/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE38

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SMPL	@ 60' - 60'6" - sample - did not log	
				SP	@ 60'6" - 60'11" - limited soil recovery, mostly large piece of wood	
	11"			NR	T.D. - 60'11" @ 60'11 - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE39

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
				SP	3' - 8'6" 2.5Y 5/4 (light olive brown), damp, VERY FINE TO FINE SAND (20,75), trace silt and medium sand	
5			0.9	SMPL	@ 5' - 5'6" - sample - did not log	
				SP	@ 5'6" - trace coarse sand and very fine gravel (1-3%)	
	42"				@ 7'6" - becomes 2.5Y 7/6 (yellow) with orange tint, (70,25), trace silt and fine sand (1-3%)	
					@ 8'3" - becomes mottled 10YR 5/6 (yellowish brown) and 5Y 5/3 (olive), (25,70), trace silt and medium sand (~3%)	
			ML		8'6" - 8'9" 10YR 3/2 (very dark grayish brown), damp, VERY FINE SANDY SILT, trace fine to medium sand (1-3%)	
				SP	8'9" - 17'6" 2.5Y 5/4 (light olive brown), moist, VERY FINE TO FINE SAND (30,65), trace silt (3-5%)	
10	36"		1.3	SMPL	@ 9'6" - becomes (15,80), trace silt and medium sand (1-3%)	
				SP	@ 10' - 10'6" - sample - did not log	
				NR	@ 10'6" - scattered medium sand (5%)	
					@ 10'9" - becomes (30,65), trace silt and medium sand (1-3%)	
				SP	@ 11' - 12' - no recovery	
					@ 12' - becomes 5Y 5/3 (olive) with some orange tint, wet, (30,60), scattered medium sand (5-10%), trace silt (3-5%)	
	30"				@ 13' - abundant medium sand (10-15%), trace sand and gravel (1-3%)	
				SMPL	@ 13'6" - becomes (30,60), scattered medium sand (5-10%), trace silt (1-3%), no orange tint	
15			0.3	NR	@ 14' - 14'6" - sample - did not log	
					@ 14'6" - 16' - no recovery	
				SP	@ 16' - becomes (60,35), trace silt (3-5%) and medium sand (1-3%)	
					@ 16'6" - becomes VERY FINE SAND, abundant silt (10-15%), trace fine sand (3-5%)	
	36"			SW	17'6" - 18'9" 5Y 4/2 (olive gray), wet, FINE TO COARSE SAND (20,40,35), trace very fine sand (3-5%)	
			SP			
				NR	18'9" - 34' 5GY 4/1 (dark greenish gray), wet, FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt (1-3%)	
20			0.3	SP	@ 19' - 20' - no recovery	
					@ 20' - becomes VERY FINE TO FINE SAND (25,65), scattered medium sand (5-10%), trace silt (1-3%), slight to moderate moth ball and petroleum odor	
	37"				@ 21'6" - trace clay nodules, moderate petroleum/moth ball odor	
					@ 22' - becomes FINE SAND, scatt'd very fine & med. sand (5-10%)	
					@ 23'1" - 24' - no recovery	
				NR	@ 24' - becomes 5GY 5/1 (greenish gray), VERY FINE TO FINE SAND (25,65), scattered medium sand (5-10%), trace silt (1-3%), very slight petroleum odor	
				SP	@ 25'3" - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt (1-3%), trace black staining	
25					@ 26' - becomes VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace silt, no odor	
	28"				@ 26'4" - 28' - no recovery	
				NR	@ 28' - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt (1-3%), trace black staining	
				SP	@ 28'9"- becomes 5Y 5/2 (olive gray), VERY FINE SAND, abundant silt (10-15%), trace fine sand (3-5%), slight petroleum odor	
					@ 29'3" - becomes 5GY 4/1 (dark greenish gray), VERY FINE SAND (30,65), trace silt (3-5%)	
30	26"			SMPL	@ 29'8" - 30'2" - sample - did not log	

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE39

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.2	NR		@ 30'2" - 32' - no recovery	
				SP		@ 32' - becomes (50,45), trace silt (3-5%) and medium sand (1-3%) @ 32'6" - becomes (30,65) @ 34' - noted 1" layer, black, VERY FINE SANDY SILT, moderate petroleum odor	
	24"			NR		@ 34' - 36' - no recovery	
35							
				SM	36' - 36'6"	5Y 3/1 (very dark gray), very moist, SILTY VERY FINE SAND (30,65), trace fine sand (1-3%), moderate petroleum odor	
				SP			
			ML		36'6" - 37'3"	5Y 3/1 (very dark gray), very moist, VERY FINE TO FINE SAND (25,70), trace silt (3-5%), moderate petroleum odor	
	23"			SMPL			
				NR	37'3" - 40'3"	5Y 2.5/1 (black), very moist, VERY FINE SANDY SILT (40,60), moderate petroleum odor @ 37'6" - 39'11" - sample, did not log @ 37'11" - 40' - no recovery @ 40' - becomes 5GY 4/1 (dark greenish gray), scattered clay nods.	
40			ML				
			0.5	SM/ SP	40'3" - 41'9"	5GY 5/1 (greenish gray), very moist, SILTY VERY FINE SAND (30,70), slight to moderate petroleum odor (mothball?) @ 41' - becomes VERY FINE SAND, abundant silt (10-15%)	
	26"		SP				
				NR	41'9" - 46'	5GY 5/1 (greenish gray), very moist, VERY FINE TO FINE SAND (30,65), trace silt (3-5%) @ 42'2" - 44' - no recovery @ 44' - scattered medium sand (5%), very slight petroleum odor @ 44'6" - becomes (40,50), scattered silt (5%), trace clay nodules @ 45'6" - becomes VERY FINE SAND, scattered silt and fine sand (5-10%), no odor @ 46' - 48' - no recovery	
				SP			
45							
	24"			NR			
				SM	48' - 48'6"	5GY 4/1 (dark greenish gray), very moist, SILTY VERY FINE SAND (35,60), scattered clay nodules (5%)	
				SP			
50	23"		0	SMPL	48'6" - 49'5"	5GY 5/1 (greenish gray), very moist, VERY FINE SAND, scattered silt and fine sand (5-10%) @ 49'5" - 49'11 - sample, did not log @ 49'11" - 52' - no recovery	
				NR			
				ML/ CL	52' - 53'6"	5Y 4/2 (olive gray), very moist, VERY FINE SANDY SILT, (45,50), scattered fine sand, non plastic @ 52'6" - becomes CLAYEY SILT, scattered very fine sand (5-10%), moderate plasticity @ 53'3" - becomes SILTY CLAY, scattered very fine sand (5%), plastic @ 53'6" - becomes VERY FINE SANDY SILT (40,55), trace fine sand and clay	
	20"			NR			
55							
					T.D. - 53'6"	@ 53'8" - 56' - no recovery	
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE40

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 5'	5Y 5/4 (olive), moist, VERY FINE TO FINE SAND (20,75), trace silt and medium sand (1-3%)	
5			1.4	SMPL		@ 5' - 5'6" - sample - did not log	
	34"			SP/ CL	5'6" - 7'	2.5Y 5/4 (light olive brown), moist, MIXED VERY FINE TO FINE SAND (30,65) AND SILTY CLAY, scattered silt (5%)	
			NR	SP	7' - 7'10"	5Y 5/3 (olive), damp, VERY FINE TO FINE SAND (20,75), trace silt and medium sand	
				SW		@ 7'10" - 8' - no recovery	
				SP	8' - 8'9"	10YR 4/4 (dark yellowish brown), damp, VERY FINE TO COARSE SAND (20,30,15,20), scattered silt and gravel (5-10%)	
10	37"		1.1	SMPL	8'9" - 12'9"	5Y 5/4 (olive), damp, VERY FINE TO FINE SAND (30,65), trace silt and medium sand (1-3%)	
				SP			
				NR		@ 10' - 10'6" - sample - did not log	
				SP		@ 10'6" - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt and coarse sand (1-3%)	
				SW		@ 11'1" - 12' - no recovery	
	41"					@ 12' - becomes 5Y 4/2 (olive gray), VERY FINE TO FINE SAND (30,65), trace silt and medium to coarse sand (3-5%)	
15			1.5	SMPL	12'9" - 21'1"	2.5Y 5/4 (light olive brown), damp, VERY FINE TO MEDIUM SAND (20,40,30), trace silt and coarse sand (1-3%)	
				NR		@ 14'3" - becomes FINE TO MEDIUM SAND (30,55), scattered very fine sand (5%) and coarse and (5-10%), trace silt (1-3%)	
				SW		@ 14'11" - 15'5" - sample - did not log	
						@ 15'5" - 16' - no recovery	
	20"			NR		@ 17'8" - 20' - no recovery	
20			0.7	SMPL		@ 20' - 20'6" - sample - did not log	
				SW		@ 20'6" - becomes 2.5Y 4/4 (olive brown), VERY FINE TO MEDIUM SAND (20,35,40), trace silt and coarse sand (3-5%)	
				NR		@ 21'1" - 24' - no recovery	
	13"						
				SP	24' - 32'6"	2.5Y 4/4 (olive brown), wet, VERY FINE TO FINE SAND (30,50), abundant medium sand (10-15%), trace silt (1-3%)	
25				NR		@ 24'3" - becomes FINE TO MEDIUM SAND, scattered very fine sand (10%), trace silt and coarse sand (1-3%)	
	13"					@ 25' - becomes 5Y 4/2 (olive gray), VERY FINE SAND, scattered silt (5-10%), trace fine sand (1-3%)	
						@ 25'1" - 28' - no recovery	
						@ 28' - becomes VERY FINE TO FINE SAND (20,70), trace silt (1-3%)	
						@ 28'6" - scattered medium sand (5-10%)	
				SP		@ 29'6"- becomes 5GY 4/1 (dark greenish gray), FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace silt (1%), very slight petroleum odor	
30	26"			SMPL		@ 29'8" - 30'2" - sample - did not log	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE40

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			1.0	NR		@ 30'2" - 32' - no recovery	
				SP		@ 32' - becomes VERY FINE TO FINE SAND (70,25), trace silt and medium sand (3-5%), very slight petroleum odor	
			SM/ ML		32'6" - 36'6"	5GY 4/1 (dark greenish gray), wet, SILTY VERY FINE SAND (40,60), slight petroleum odor, trace clay (1%)	
	16"			NR		@ 33'4" - 36' - no recovery	
35							
			SM/ ML			@ 36' - becomes 2/5Y 2/0 (black), (30,60), scattered fine sand (5-10%), moderate petroleum odor	
				SP	36'6" - 41'1"	2.5Y 2/0 (black), wet, VERY FINE TO FINE SAND (40,55), trace silt (3-5%), moderate petroleum odor	
	24"					@ 37'6" - becomes (15,80), trace silt and medium sand (1-3%)	
				NR		@ 38' - 40' - no recovery	
40			0.6	SMPL		@ 40' - 40'6" - sample - did not log	
				SP		@ 40'6" - becomes (30,65), trace silt and medium sand (1-3%)	
				NR		@ 41'1" - 44' - no recovery	
	13"						
				GW	44' - 60'6"	5Y 5/2 (olive gray), wet, VERY FINE TO COARSE SANDY GRAVEL (15% sands, 75% gravels), scattered silts (5-10%) trace clay (1%), no odor, gravel is angular to subangular	
45							
	21"			NR		@ 45' - some orange mottling @ 45'9" - 48' - no recovery	
				GW		@ 48' - becomes mottled 10YR 7/8 (yellow) and 5Y 5/2 (olive gray)	
				SMPL		@ 48'8" - 49'2" - sample - did not log	
				NR		@ 49'2" - 52' - no recovery	
50	14"		0.9				
				GW		@ 53' - becomes 50% FINE TO VERY COARSE SAND and 50% FINE GRAVEL (50,50), scattered silts (5-10%)	
	16"			NR		@ 53'4" - 56' - no recovery	
55							
						@ 56' - becomes 10% FINE TO VERY COARSE SAND and 90% FINE GRAVEL (10,90), gravel becomes subrounded to subangular, slight petroleum odor, scattered silts (5-10%)	
				NR		@ 56'10" - 60' - no recovery	
	10"						
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE40

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			1.0	SMPL	@ 60' - 60'6" - sample - did not log	
			GW		@ 60'6" - gravel subangular to angular	
	10"				T.D. - 60'10" @ 60'10" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21 and 4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE41

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 7"	Asphalt	
					7" - 1'6"	Base	
				SP	3' - 19'	5Y 5/3 (olive), damp, VERY FINE TO FINE SAND (45,50), trace silt (1-3%)	
5			0.8	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 5'6" - becomes (30,60), trace silt (1%), and medium sand (3-5%)	
	35"					@ 6' - becomes (45,50), trace silt and medium sand (1-3%)	
						@ 6'6" - becomes (30,60), trace silt and medium sand (3-5%)	
			NR			@ 7'6" - becomes 5Y 5/2 (olive gray), moist, (40,50), trace silt and medium sand (3-5%)	
				SP		@ 7'11" - 8' - no recovery	
						@ 9' - becomes (70,30), trace silt and medium sand (1-3%)	
						@ 9'6" - becomes 5Y 4/1 (dark gray)	
10	32"		0.2			@ 10'2" - very slight petroleum odor	
				SMPL		@ 10'2" - 10'8" - sample - did not log	
				NR		@ 10'8" - 12' - no recovery	
				SP		@ 12' - becomes FINE TO MEDIUM SAND (45,45), trace very fine and coarse sand (3-5%)	
						@ 12'6" - become VERY FINE TO FINE SAND (50,40), trace silt and medium sand (3-5%)	
	34"					@ 13'6" - becomes (30,60), trace silt and medium sand (1-3%)	
				SMPL		@ 14'4" - 14'10" - sample - did not log	
15			0.9	NR		@ 14'10" - 16' - no recovery	
						@ 16' - becomes 5Y 2.5/2 (black), (75,20), trace silt and medium sand (3-5%), slight petroleum odor	
				SP		@ 16'6" - becomes (45,45)	
	36"					@ 17'6" - becomes (75,20), slight petroleum odor	
						@ 18'6" - becomes (45,45)	
				NR		@ 19' - 20' - no recovery	
20			0.7	SMPL		@ 20' - 20'6" - sample - did not log	
				SP/SM	20'6" - 24'6"	2.5Y 2/0 (brown), wet, VERY FINE SAND WITH SCATTERED SILT (5-10%) TO SILTY VERY FINE SAND (30,60), scattered very fine sand (5-10%), slight to moderate petroleum odor	
	29"					@ 22'5" - 24' - no recovery	
				NR		@ 24' - becomes (40,60)	
				SP/SM			
25				SP	24'6" - 28'6"	5Y 3/1 (very dark gray), very moist, VERY FINE TO FINE SAND, scattered silt and medium sand (5-10%)	
	14"			NR		@ 25'2" - 28' - no recovery	
						@ 28' - abundant silt (10-15%)	
						@ 28' - 29' - abundant wood	
				SP			
				ML	28'6" - 32'7"	5Y 3/2 (dark olive gray), wet, VERY FINE TO FINE SANDY SILT (30,65), scattered fine sand (5%), trace clay	
30	28"			SMPL		@ 29'10" - 30'4" - sample - did not log	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/21/06 & 4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE41

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.2	NR		@ 30'4" - 32' - no recovery	
				ML		@ 32' - becomes (45,50), trace fine sand (3-5%)	
				NR		@ 32'7" - 36' - no recovery	
	7"						
35							
				SP	36' - 37'7"	5Y 3/2 (dark olive gray), very moist, VERY FINE TO FINE SAND (40,45), abundant silt (10-15%)	
	19"			NR		@ 37'7" - 40' - no recovery	
40			0.1	SMPL		@ 40' - 40'6" - sample - did not log	
				ML/SM	40'6" - 44'9"	5Y 3/2 (dark olive gray), very moist, VERY FINE SANDY SILT (45,45), trace fine sand (3-5%)	
				NR		@ 41' - 44' - no recovery	
	12"						
						@ 44' - becomes SILT, abundant very fine sand (10-15%), very slight to no petroleum odor	
				ML		@ 44'6" - becomes scattered very fine sand (5-10%)	
45				NR		@ 44'9" - 48' - no recovery	
	9"						
				SP	48' - 48'6"	5Y 4/1 (dark gray), moist, VERY FINE TO FINE SAND, scattered silt (5-10%)	
				SM/ML			
					48'6" - 53'6"	5Y 4/1 (dark gray), moist, SILTY VERY FINE SAND (40,55), scattered fine sand (5%)	
50	22"		0	NR		@ 49' - becomes (50,50)	
						@ 49'10" - 52' - no recovery	
						@ 52' - becomes 5GY 4/1 (dark greenish gray), (25,75)	
				SM/ML		@ 52'6" - becomes SILT, scattered very fine sand (5-10%), trace clay (3-5%)	
	18"			NR		@ 53' - becomes SILTY VERY FINE SAND (25,75)	
55					T.D. - 53'6"	@ 53'6" - 56' - no recovery	
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	5/1/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE42

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				SP	3' - 21'4"	10YR 4/3 (brown), moist, VERY FINE TO FINE SAND (30,60), scattered silt (5-10%), trace medium sand and gravel (3%)	
5			0.2	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 5'6" - becomes 2.5Y 4/4 (olive brown), no gravel	
	35"					@ 6'6" - becomes (20,75), trace silt (3-5%)	
			NR			@ 7'11" - 8' - no recovery	
				SP		@ 8' - becomes (50,40), scattered silt (5-10%)	
10	28"		0.3	SMPL		@ 9'10" - 10'4" - sample - did not log	
				NR		@ 10'4" - 12' - no recovery	
				SP		@ 12' - becomes (40,55), trace silt and medium sand (3-5%)	
						@ 13'6" - becomes (25,70)	
	25"			SMPL		@ 13'7" - 14'1" - sample - did not log	
				NR		@ 14'1" - 16' - no recovery	
15			0.5				
				SP		@ 16' - becomes 2.5Y 4/2 (dark grayish brown), FINE TO MEDIUM SAND (40,50), scattered very fine sand (10%)	
						@ 17' - becomes VERY FINE TO MEDIUM SAND (15,45,40)	
	24"					@ 17'8" - becomes VERY FINE TO FINE SAND (40,50), scattered silt (5-10%)	
				NR		@ 18' - 20' - no recovery	
20			0	SMPL		@ 20' - 20'6" - sample - did not log	
				SP		@21'4" - becomes 2.5Y 3/2 (very dark grayish brown), VERY FINE TO MEDIUM SAND (15,40,40), trace silt and coarse sand (3-5%), slight petroleum odor	
	16"			NR		@ 21'4" - 24' - no recovery	
				SM	24' - 26'	5Y 3/2 (dark olive gray), very moist, SILTY VERY FINE SAND (20,70), scattered fine sand (5-10%)	
25						@ 24'6" - becomes (45,45), slight to moderate petroleum odor	
	24"					@ 25'6" - becomes SILTY VERY FINE SAND (20,70), scattered fine sand (5-10%)	
				NR		@ 26' - 28' - no recovery	
				SP	28' - 29'7"	5Y 3/2 (dark olive gray), very moist, VERY FINE TO FINE SAND (40,45), scattered silt (5-10%)	
						@ 29'4" - becomes (30,60), scattered silt and medium sand (5-10%)	
30	25"			SMPL		@ 29'7" - 30'1" - sample - did not log	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	5/1/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE42

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			1.0	NR		@ 30'1" - 32' - no recovery	
				ML	32' - 41'	5Y 3/2 (dark olive gray), very moist, VERY FINE SANDY SILT (55,45)	
						@ 33' - becomes 5Y 2.5/1 (black), SILT, abundant very fine sand (10-15%), strong petroleum odor, no to slight plasticity	
	14"			NR		@ 33'2" - 36' - no recovery	
35							
				ML		@ 36' - becomes 5Y 3/2 (dark olive gray), VERY FINE SANDY SILT (55,45)	
						@ 37'3" - becomes SILT, scattered very fine sand and clay (5-10%), slight to moderate plasticity	
	19"			NR		@ 37'7" - 40' - no recovery	
						@ 40' - 40'6" - sample - did not log	
40			0.7	SMPL		@ 40'6" - becomes 5Y 3/2 (dark olive gray), VERY FINE SANDY SILT (55,45)	
				ML			
				SM	41' - 44'10"	5Y 3/2 (dark olive gray), very moist, SILTY VERY FINE SAND (45,50), trace fine sand (5%)	
	27"					@ 42' - becomes SILTY VERY FINE TO FINE SAND (20,40,40)	
				NR		@ 42'3" - 44' - no recovery	
						@ 44' - becomes (15,30,55)	
						@ 44'6" - becomes SILTY VERY FINE SAND (30,55), abundant fine sand (10-15%)	
				SM			
45				ML	44'10" - 53'	5Y 3/1 (very dark gray), very moist, VERY FINE SANDY SILT (30,70), no to slight plasticity	
	15"			NR		@ 45'3" - 48' - no recovery	
				ML		@ 49'3" - becomes SILT, scattered very fine sand (5-10%), slight plasticity	
	25"			SMPL		@ 49'7" - 50'1" - sample - did not log	
50			0.2	NR		@ 50'1" - 52' - no recovery	
				ML		@ 52' - becomes VERY FINE SANDY SILT (25,75)	
						@ 52'4" - becomes SILT/CLAYEY SILT, moderate plasticity	
				SM	53' - 53'3"	5Y 4/2 (olive gray), very moist, SILTY VERY FINE SAND (30,60), scattered fine sand (5-10%)	
	15"			NR			
55					T.D. - 53'3"	@ 53'3" - 56' - no recovery	
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/25/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE43

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
					0 - 6"	Asphalt	
					6" - 1'6"	Base	
				SP	3' - 9'11"	2.5Y 5/4 (light olive brown), damp, VERY FINE TO FINE SAND (25,65), scattered medium sand (5%), trace coarse sand (1-3%)	
5			0.1	SMPL		@ 5' - 5'6" - sample - did not log @ 5'6" - becomes 5Y 5/2 (olive gray), VERY FINE TO FINE SAND (60,35), trace silt (1-3%) @ 6'6" - becomes (30,60), scattered sand (5%), trace silt (1-3%)	
	36"					@ 7'6" - becomes (45,45)	
10	29"		0.7	SMPL NR		@ 9'10" - becomes wet @ 9'11" - 10'5" - sample - did not log @ 10'5" - 12' - no recovery	
				SM	12' - 13'6"	5Y 5/2 (olive gray), wet, SILTY VERY FINE SAND (40,55), trace fine sand (3-5%) @ 12'6" - becomes SILTY VERY FINE TO FINE SAND (25,40,35)	
	29"			SP SMPL NR	13'6" - 17'6"	5Y 5/2 (olive gray), wet, VERY FINE TO FINE SAND (20,65), abundant medium sand (10-15%), trace silt (1-3%) @ 13'11" - 14'5" - sample - did not log @ 14'5" - 16' - no recovery	
15			0.8	SP		@ 16'6" - becomes FINE TO MEDIUM SAND (40,45), abundant very fine sand (10-15%), trace silt (3-5%)	
	33"			SM NR	17'6" - 21'	5Y 4/1 (dark gray), very moist, SILTY VERY FINE SAND (40,55), scattered fine sand (5%) @ 18'6" - becomes (20,70), scattered fine sand (5-10%) @ 18'9" - 20' - no recovery @ 20' - 20'6" - sample - did not log	
20			0.7	SMPL SM			
	27"			ML NR	21' - 22'3"	5Y 4/1 (dark gray), very moist, VERY FINE SANDY SILT (40,55), trace medium sand (1-3%) @ 22'3" - very slight petroleum odor @ 22'3" - 24' - no recovery	
25	20"			SM NR	24' - 25'6"	5Y 4/1 (dark gray), very moist, SILTY VERY FINE SAND (40,55), trace fine sand (1-3%) @ 24'6" - becomes 5Y 3/1 (very dark gray), SILTY VERY FINE TO FINE SAND (30,30,35), trace medium sand (3-5%), slight petroleum odor @ 25'8" - 28' - no recovery	
			ML	SP	28' - 28'6"	5Y 4/1 (dark gray), very moist, VERY FINE TO FINE SAND (30,65), trace silt (3-5%)	
			SMPL	SM	28'6" - 29'3"	5Y 4/1 (dark gray), SILTY VERY FINE SAND (25,65), scattered fine sand (5-10%) @ 29'1" - 29'7" - sample, logged @ 29'7" - 32' - no recovery	
30	19"			NR			

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/25/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE43

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			1.2	NR	29'3" - 33'9"	5Y 2.5/1 (black), wet, VERY FINE SANDY SILT (25,75), non-plastic, slight to moderate petroleum odor @ 29'7" - 32' - no recovery	
				ML		@ 33' - becomes saturated, moderate odor, scattered clay (5-10%) @ 33'6" - becomes (45,55)	
	21"			NR		@ 33'9" - 36' - no recovery	
35							
				SM	36' - 37'6"	5Y 2.5/1 (black), very moist, SILTY VERY FINE SAND (35,60), trace fine sand (3-5%), slight to moderate petroleum odor	
	28"			ML	37'6" - 45'3"	5Y 2.5/1 (black), saturated, CLAYEY SILT (20,70), scattered very fine sand (5-10%), moderate petroleum odor, slight plasticity	
				NR		@ 38' - becomes VERY FINE SANDY SILT (45,50), trace clay (1-3%), slight to moderate petroleum odor @ 38'4" - 40' - no recovery	
40			0.9	SMPL		@ 40' - 40'6" - sample - did not log	
				ML		@ 40'6" - becomes saturated, moderate petroleum odor (35,65) @ 42' - becomes 5Y 3/1 (very dark gray), (45,50), scattered fine sand (5%)	
	30"					@ 42'6" - 44' - no recovery	
				NR		@ 44'9" - becomes CLAYEY SILT (20,70), scattered very fine sand (5-10%), slight to moderate plasticity	
				ML			
45							
	31"			SM	45'3" - 49'6"	5Y 3/1 (very dark gray), very moist, SILTY VERY FINE SAND (40,50), scattered fine sand (5-10%), slight petroleum odor	
				NR		@ 46'3" - becomes SILTY VERY FINE TO MEDIUM SAND (20,30,20,20) @ 46'7" - 48' - no recovery	
				SM			
50	28"		0.3	ML	49'6" - 54'9"	5Y 3/1 (very dark gray), wet to saturated, CLAYEY SILT (20,70), scattered very fine sand (5-10%), slight to moderate plasticity, slight petroleum odor	
				SMPL		@ 49'10" - 50'4" - sample - did not log	
				NR		@ 50'4" - 52' - no recovery	
				ML		@ 52' - becomes VERY FINE SANDY SILT (35,65), very slight petroleum odor, non-plastic @ 52'6" - becomes (45,55)	
	33"					@ 53'6" - becomes SILT, scattered clay (5%) and very fine sand (5-10%), slightly plastic, saturated	
55				NR			
					T.D. - 54'9"	@ 54'9" - 56' - no recovery	
60							

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE44

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				SP	3' - 5'	5Y 6/3 (pale olive), damp, VERY FINE TO FINE SAND (30,65), trace silt and medium sand (1-3%) and shell fragments @ 4'6" - becomes FINE TO MEDIUM SAND (40,50), scattered very fine sand (5-10%), trace shell fragments @ 5' - 5'6" - sample - did not log	
5			0.6	SMPL			
				SM	5'6" - 6'3"	5Y 5/3 (olive), moist, SILTY VERY FINE SAND (20,75), trace fine sand (3-5%)	
	43"			SP	6'3" - 12'6"	5Y 5/2 (olive gray), moist, VERY FINE TO FINE SAND (60,30), scattered silt (5-10%) @ 7'6" - becomes (40,50), scattered silt (5-10%) @ 8'6" - becomes VERY FINE SAND, scattered silt and fine sand (5-10%)	
10	26"		1.0	SMPL		@ 9'8" - 10'2" - sample - did not log	
				NR		@ 10'2" - 12' - no recovery	
				SP			
				SM	12'6" - 21'9"	5Y 5/2 (olive gray), very moist, SILTY VERY FINE SAND (30,70)	
	24"			NR		@ 14' - 16' - no recovery	
15			1.3				
				SM			
	28"			NR		@ 18'4" - 20' - no recovery	
20			1.4	SM		@ 20'6" - becomes 5Y 3/1 (very dark gray), wet, SILTY VERY FINE TO MEDIUM SAND, scattered silty clay nodules @ 21' - becomes SILTY VERY FINE TO FINE SAND (40,55), trace medium sand (3-5%)	
	25"		ML/ CL	SMPL	21'9" - 22'1"	5Y 2.5/1 (black), wet, CLAYEY SILT/SILTY CLAY, moderate petroleum odor @ 21'6" - 22'1" - sample (logged)	
				NR		@ 22'1" - 24' - no recovery	
				SM	24' - 25'3"	5Y 3/2 (dark olive gray), wet, SILTY VERY FINE TO FINE SAND (40,55), trace medium sand (1-3%)	
25	25"			SP	25'3" - 26'1"	5GY 4/1 (dark greenish gray), very moist, VERY FINE TO FINE SAND (30,60), scattered medium sand (5-10%), trace silt (3-5%), very slight petroleum odor @ 26'1" - no odor	
				NR		@ 26'1" - 28' - no recovery @ 28' - 28'3" - slough?	
			SP	ML	28'3" - 33'	5Y 4/1 (dark gray), wet, CLAYEY SILT, slight petroleum odor, moderate plasticity @ 29' - becomes SILT, scattered clay and very fine sand (5-10%), moderate petroleum odor, slight plasticity	
30	24"			SMPL		@ 29'6" - 30' - sample - did not log	

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE44

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
			0.7	NR		@ 30' - 32' - no recovery	
				ML		@ 32' - becomes VERY FINE SANDY SILT (40,55), trace fine sand (1-3%), slight petroleum odor	
	25"			SM		@ 32'6" - becomes CLAYEY SILT, scattered very fine to fine sand (5-10%), trace shell fragments, moderate petroleum odor, slight to moderate plasticity	
				NR			
35					33' - 37'3"	5Y 3/1 (very dark gray), wet, SILTY VERY FINE TO FINE SAND (30,65), trace clay (1-3%)	
				ML/CL		@ 33'6" - becomes 5GY 4/1 (dark greenish gray) @ 34'1" - 36' - no recovery @ 36' - slight petroleum odor, some black staining	
	32"				37'3" - 38'8"	5Y 4/1 (dark gray), wet, CLAYEY SILT/SILTY CLAY, some black staining, very slight petroleum odor, moderate plasticity	
				NR		@ 38'6" - decrease in clay, scattered very fine sand (5%) @ 38'8" - 40' - no recovery	
40			0.6	SMPL		@ 40' - 40'6" - sample - did not log	
				ML	40'6" - 46'5"	5Y 3/2 (dark olive gray), very moist, VERY FINE SANDY SILT (40,55), slight petroleum odor	
	34"					@ 42' - becomes CLAYEY SILT, scattered very fine sand (5-10%), slight to moderate plasticity, slight to moderate petroleum odor	
				NR		@ 42'10" - 44' - no recovery @ 44' - becomes SILT, scattered very fine sand (5-10%), trace clay (1-3%)	
				ML		@ 44'6" - abundant very fine sand (10-15%)	
45	29"					@ 45'6" - becomes CLAYEY SILT, slight to moderate plasticity, slight to moderate petroleum odor	
				NR		@ 46'5" - 48' - no recovery	
				SP	48' - 49'6"	5Y 3/2 (dark olive gray), wet, VERY FINE TO FINE SAND, scattered silt and medium sand (5-10%), moderate to strong petroleum odor	
50	30"		0.8	ML	49'6" - 54'3"	5Y 4/2 (olive gray), wet, CLAYEY SILT, slight plasticity, moderate petroleum odor	
				SMPL		@ 50' - 50'6" - sample - did not log	
				NR		@ 50'6" - 52' - no recovery	
				ML		@ 52' - becomes 5Y 2.5/1 (black), very moist, VERY FINE SANDY SILT (35,65), slight to moderate petroleum odor @ 52'6" - becomes (50,50), slight to moderate petroleum odor	
	27"					@ 53'6" - becomes SILT, saturated, scattered clay and very fine sand, slight to moderate petroleum odor	
				NR			
55					T.D. - 54'3"	@ 54'3" - 56' - no recovery	
60							

PACIFIC EDGE ENGINEERING, INC.

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - East of Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE45

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION		GRAPHIC LOG
				SP	3' - 6'3"	5Y 5/3 (olive), damp, VERY FINE TO FINE SAND (30,65), trace silt (1-3%)	
5			0.7	SMPL		@ 5' - 5'6" - sample - did not log	
				SP		@ 5'6" - becomes 10YR 4/2 (dark grayish brown), damp to moist, scattered medium to coarse sand and fine gravel (5-10%)	
	25"			ML		@ 6' - becomes (60,30), scattered medium to coarse sand (5%)	
			SW	NR	6'3" - 6'9"	5Y 4/1 (dark gray), moist, CLAYEY SILT, scattered fine to coarse sand and gravel (5-10%)	
				SP	6'9" - 7'1"	5GY 4/1 (dark greenish gray), very moist, VERY FINE TO MEDIUM SAND (15,30,45), scattered coarse sand (5%), trace silt (1-3%)	
10	26"		1.1	SMPL		@ 7' - noted 1" lens clayey silt with fine sand	
				NR		@ 7'1" - 8' - no recovery	
					8' - 13'6"	5Y 5/2 (olive gray), moist, VERY FINE TO FINE SAND (40,55), scattered silt (5%), trace gravel (1%)	
				SP		@ 8'6" - becomes (30,65), trace silt and medium sand (1-3%)	
						@ 9'8" - 10'2" - sample - did not log	
						@ 10'2" - 12' - no recovery	
			SM				
	27"			SMPL	13'6" - 16'6"	5Y 4/3 (olive), wet, SILTY VERY FINE SAND (30,70)	
				NR		@ 13'9" - 14'3" - sample - did not log	
15			1.2			@ 14'3" - 16' - no recovery	
				SM		@ 16' - becomes (15,85), scattered fine sand	
				ML	16'6" - 18'3"	5Y 4/3 (olive), wet, VERY FINE SANDY SILT (45,55), slight plasticity	
	33"						
				SM	18'3" - 18'9"	5Y 4/3 (olive), very moist, SILTY VERY FINE SAND (30,65), trace fine sand (1-3%)	
				NR		@ 18'9" - 20' - no recovery	
20			1.3	ML	20' - 21'	5Y 4/3 (olive), wet, CLAYEY SILT, slight plasticity, scattered very fine sand (5%)	
				SP	21' - 22'2"	5GY 4/1 (dark greenish gray), wet, FINE TO MEDIUM SAND, trace silt, very fine and coarse sand (1-3%), slight petroleum odor	
	28"						
			ML				
				NR	22'2" - 24'6"	5Y 2.5/1 (black), wet, CLAYEY SILT, scattered very fine to fine sand, moderate petroleum odor	
						@ 22'4" - 24' - no recovery	
				ML			
25				SM	24'6" - 28'6"	5Y 3/2 (dark olive gray) with blue tint, wet, SILTY VERY FINE SAND (40,50), scattered fine sand (5-10%), trace clay (1-3%), moderate petroleum odor	
	26"					@ 25'6" - becomes (30,65), scattered fine sand (5%)	
				NR		@ 26'2" - 28' - no recovery	
				SM		@ 28' - becomes (40,55)	
				ML	28'6" - 29'4"	5Y 2.5/2 (black), wet, SILT, abundant very fine sand (10-15%), trace clay (1-3%), moderate petroleum odor	
				SMPL		@ 29'4" - 29'10" - sample - did not log	
30	22"			NR		@ 29'10" - 32' - no recovery	

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - East of Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE45

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
			1.5	NR	@ 29'10" - 32' - no recovery	
				SM	32' - 32'6" 5Y 3/2 (dark olive gray), wet, SILTY VERY FINE SAND (30,60), scattered very fine sand (5-10%), trace medium sand (1-3%), moderate petroleum odor	
				ML	32'6" - 34'3" 5Y 3/2 (dark olive gray), very moist, VERY FINE SANDY SILT (40,55), scattered fine sand, moderate petroleum odor	
	30"		SM		@ 33'6" - trace clay, becomes wet	
35				NR	34'3" - 36'6" 5Y 3/2 (dark olive gray), very moist, SILTY VERY FINE SAND (25,70), scattered fine sand, moderate petroleum odor	
				SM	@ 34'6" - 36' - no recovery	
				SM/ML	@ 36' - becomes 5Y 3/1 (very dark gray), (20,80)	
	24"			NR	36'6" - 38' 5Y 3/1 (very dark gray), very moist to wet, VERY FINE SANDY SILT (40,55), trace clay and fine sand (3-5%), moderate petroleum odor @ 37'6" - becomes (45,45), scattered fine sand (5-10%) @ 38' - 40' - no recovery	
40			1.1	SMPL	@ 40' - 40'6" - sample - did not log	
	38"			ML	40'6" - 47' 5Y 3/2 (dark olive gray), wet, SILT, scattered very fine sand (5-10%), slight plasticity, moderate petroleum odor @ 41' - scattered clay (5-10%) @ 43' - becomes VERY FINE SANDY SILT (35,65)	
				NR	@ 43'2" - 44' - no recovery	
45				ML	@ 44' - becomes SILT, scattered very fine sand (5%), trace clay (1-3%) @ 44'6" - becomes VERY FINE SANDY SILT (20,80)	
	39"				@ 45'6" - becomes SILT, scattered very fine sand (5%) @ 46'3" - becomes VERY FINE SANDY SILT (40,60)	
			SM			
				NR	47' - 48'11" 5Y 3/2 (dark olive gray), SILTY VERY FINE SAND (40,60) @ 47'3" - 48' - no recovery	
				SM	@ 48' - becomes (30,65), scattered fine sand (5%), slight to no petroleum odor @ 48'6" - becomes (20,75), scattered fine sand (5%)	
50	29"		0.8	SMPL	@ 48'11" - 50'5" - sample - did not log	
				NR	@ 50'5" - 52' - no recovery	
				ML	52' - 56'3" 5Y 3/2 (dark olive gray), wet, VERY FINE SANDY SILT (40,60)	
	21"			NR	@ 53'6" - becomes CLAYEY SILT, trace very fine sand (3-5%) @ 53'9" - 56' - no recovery	
55					@ 56' - becomes 5Y 4/1 (dark gray), SILT, trace clay and very fine sand	
			ML			
				SP	56'3" - 57'7" 5Y 4/2 (olive gray), very moist, VERY FINE TO FINE SAND (30,55), abundant silt (10-15%)	
	19"			NR	@ 57'7" - 60' - no recovery	
60						

PROJECT/#:	0106.0015.002.001	DRILLING METHOD/DIAMETER:	Geoprobe
LOCATION:	POLB - Pier E Cutback	DRILLING COMPANY:	Interphase
LOGGED BY:	GRD	MONITORING EQUIPMENT:	PID
DATE:	4/24/06	DROP/WEIGHT:	
ELEVATION:		NOTES:	

SOIL BORING LOG - PE45

DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	PID	USCS SYMBOL	SOIL DESCRIPTION	GRAPHIC LOG
	28"		0.9	CL	60' - 62'4" 5Y 4/3 (olive), very moist, SILTY CLAY, trace very fine sand	
				NR	T.D. - 62'4" @62'4" - 64' - no recovery	
65						
70						
75						
80						
85						
90						

PACIFIC EDGE ENGINEERING, INC.

Appendix C

Soil Analytical Reports

AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 15
Date Received 04/05/2006
Date Reported 04/14/2006

Job Number	Ordered	Client
29124	04/05/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E. Street
Long Beach, CA

Enclosed are the results of analyses on 4 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 22349 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29124

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: P.M
Address: 26691 Plaza, Suite 270	Project Name: Pier E Redevelopment	Address: SAA
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:
Telephone: 949 470-1937 Fax: 949 470-0943	Long Beach, CA	Address:
Special Instruction:	Project ID: 0106.0015.002.001	
	Project Manager: Greg Dickinson	P.O.#:

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 extractables	EPA 8081A/8082	EPA 8260B	EPA 8310	Archive	Remarks
	168712	PE2-3'	4/4/06	08:10	~~2~~ 3	1.5"OD Plastic encore	Soil	None	X	X	X	X	X		
	168713	PE2-5/9.5/16	4/4/06	08:20	3	1.5"OD Plastic	Soil		X	X	X	X	X		composite before analysis
	168714 ~~50/60~~	~~PE2-5/11~~ PE2-20/29.5	4/4/06	09:00	~~2~~ 4	1.5"OD Plastic	Soil		X	X	X		X		"
		PE2-5'10"-7'11"	4/4/06		1									X	
		PE2-8'-9'6"			1									X	
		PE2-12'-13'			1									X	
		PE2-13'-14'			1									X	
		PE2-14'-14'11"			1									X	
		PE2-16'6"-17'6"			1									X	
		PE2-17'6"-18'3"			1									X	

Collected By: Scott Miller	Date 4/4/06	Time see above	Relinquished By: Scott Miller	Date 4/5/06	Time 1400
Relinquished By:	Date	Time	Received For Laboratory MOS	Date 4/5/06	Time 1400
Condition of Sample:					

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 22350 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29124

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: P.M.
Address: 26691 Plaza, Suite 270	Project Name: Pier E Redevelopment	Address: SAA.
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:
Telephone: 949 470 1937	Long Beach, CA	Address:
Fax: 949 470 0943		
Special Instruction:	Project ID: 0106.0015.002.001	
	Project Manager: Greg Dickinson	P.O.#:

ANALYSIS REQUESTED: Archive

ITEM	LAB USE ONLY: Lab ID	SAMPLE DESCRIPTION: Sample ID	Date	Time	Container(s) #	Container(s) Type	Matrix	Preservation	Archive	Remarks
		PE2-20'6"-21'6"	4/4/06		1	1.5" OD Plastic	Soil	None	X	
		PE2-21'6"-22'3"			1				X	
		PE2-24'-25'6"			1				X	
		PE2-25'6"-26'8"			1				X	
		PE2-28'-29'			1				X	
		PE2-29'-29'6"			1				X	
		PE2-30'-30'11"			1				X	
		PE2-32'-33'			1				X	
		PE2-33'-33'6"			1				X	
		PE2-33'6"-34'6"			1				X	

Collected By: Scott Miller	Date 4/4/06 Time	Relinquished By: Scott Miller	Date 4/5/06 Time 1400
Relinquished By:	Date Time	Received For Laboratory MJP	Date 4/5/06 Time 1400
Condition of Sample:			

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

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Environmental Testing Services
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COC# № 22352 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29124

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza, Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive 8260B		Remarks
		PE2-34'6"-35'1"	4/4/06		1	1.5" OD Plastic	Soil	None	X		
		PE2-36' to 37'			1				X		
		PE2-37'-37'6"			1				X		
		PE2-37'6"-38'6"			1				X		
		PE2-38'6"-39'4"			1				X		
	168715	PE2-14'11"		08:30	3	~~Sm~~ encore				X	

Collected By: Scott Miller	Date 4/4/06 Time	Relinquished By: Scott Miller	Date 4/5/06 Time 1400
Relinquished By:	Date Time	Received For Laboratory	Date 4/5/06 Time 1400
Condition of Sample:			TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E. Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29124	04/05/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**168712**	**168713**	**168714**		
Sample ID			PE2-3'	PE2-5',9'6",16	PE2-20,29.5,4		
Date Sampled			04/04/2006	' 04/04/2006	0.5,49 04/04/2006		
Date Extracted			04/11/2006	04/11/2006	04/11/2006		
Preparation Method							
Date Analyzed			04/12/2006	04/12/2006	04/12/2006		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
AA Metals							
Mercury	0.10	0.20	ND	ND	0.25		
ICP Metals							
Antimony	0.15	0.50	0.55	0.57	0.71		
Arsenic	0.10	0.25	ND	ND	2.60		
Barium	0.05	0.50	34.5	40.7	98.0		
Beryllium	0.05	0.50	ND	ND	ND		
Cadmium	0.05	0.50	ND	ND	ND		
Chromium	0.25	0.50	11.0	11.6	24.6		
Cobalt	0.05	0.50	3.91	5.20	8.26		
Copper	0.25	0.50	3.36	6.07	28.1		
Lead	0.10	0.25	1.29	1.22	17.6		
Molybdenum	0.05	0.50	ND	ND	0.98		
Nickel	0.05	0.50	5.93	8.48	16.2		
Selenium	0.20	0.50	0.72	0.87	0.79		
Silver	0.40	0.50	ND	ND	ND		
Thallium	0.20	0.50	ND	ND	ND		
Vanadium	0.30	0.50	22.3	25.0	42.5		
Zinc	0.05	0.50	21.1	24.9	70.8		

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Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29124	04/05/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	119	80-120								
ICP Metals										
Antimony	101	80-120								
Arsenic	101	80-120								
Barium	102	80-120								
Beryllium	104	80-120								
Cadmium	104	80-120								
Chromium	98	80-120								
Cobalt	105	80-120								
Copper	102	80-120								
Lead	106	80-120								
Molybdenum	104	80-120								
Nickel	107	80-120								
Selenium	102	80-120								
Silver	104	80-120								
Thallium	103	80-120								
Vanadium	101	80-120								
Zinc	105	80-120								

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E. Street
Long Beach, CA

Page: **4**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041306-1

Our Lab I.D.		**168712**	**168713**	**168714**		
Client Sample I.D.		PE2-3'	PE2-5',9'6",16'	PE2-20,29.5,40.5,49		
Date Sampled		04/04/2006	04/04/2006	04/04/2006		
Date Prepared		04/12/2006	04/12/2006	04/12/2006		
Preparation Method						
Date Analyzed		04/13/2006	04/13/2006	04/13/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	ND	ND		
TPH ORO (C22+)	50	ND	ND	ND		

Our Lab I.D.		**168712**	**168713**	**168714**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	91	91	112		

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	109	103	5.7	75-120	15					

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E. Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 5
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29124	04/05/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**168712**	**168713**	**168714**		
Sample ID			PE2-3'	PE2-5',9'6",16	PE2-20,29.5,4		
Date Sampled			04/04/2006	' 04/04/2006	0.5,49 04/04/2006		
Date Extracted			04/07/2006	04/07/2006	04/07/2006		
Preparation Method							
Date Analyzed			04/07/2006	04/07/2006	04/07/2006		
Matrix			Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aldrin	0.23	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND		
Gamma-Chlordane	0.19	2.00	ND	ND	ND		
alpha-Chlordane	0.20	2.00	ND	ND	ND		
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND		
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND		
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND		
Dieldrin	0.20	4.00	ND	ND	ND		
Endosulfan 1	0.20	2.00	ND	ND	ND		
Endosulfan 11	0.24	4.00	ND	ND	ND		
Endosulfan sulfate	0.27	4.00	ND	ND	ND		
Endrin	0.25	4.00	ND	ND	ND		
Endrin aldehyde	0.44	4.00	ND	ND	ND		
Endrin ketone	0.30	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND		
Heptachlor	0.23	2.00	ND	ND	ND		
Heptachlor epoxide	0.23	2.00	ND	ND	ND		
Methoxychlor	0.39	17.00	ND	ND	ND		
Toxaphene	17	170	ND	ND	ND		

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ANALYTICAL RESULTS

Page: 6
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29124	04/05/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168712	168713	168714		
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	90	91	88		

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	73	64	13.1	42-122	<30					
4,4'-DDT (DDT)	38	31	20.3	25-160	<30					
Dieldrin	83	74	11.5	36-146	<30					
Endrin	71	62	13.5	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	68	59	14.2	32-127	<30					
Heptachlor	62	55	12.0	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

Site

1200 Pier E. Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 040706-1

Our Lab I.D.			168712	168713	168714
Client Sample I.D.			PE2-3'	PE2-5',9'6",16'	PE2-20,29.5,40.5,49
Date Sampled			04/04/2006	04/04/2006	04/04/2006
Date Prepared			04/07/2006	04/07/2006	04/07/2006
Preparation Method					
Date Analyzed			04/07/2006	04/07/2006	04/07/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND

Our Lab I.D.			168712	168713	168714
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169		90	91	88

QUALITY CONTROL REPORT

QC Batch No: 040706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	98	98	<1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041306-2B

Our Lab I.D.			168712
Client Sample I.D.			PE2-3'
Date Sampled			04/04/2006
Date Prepared			04/14/2006
Preparation Method			
Date Analyzed			04/14/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041306-2B

Our Lab I.D.			168712
Client Sample I.D.			PE2-3'
Date Sampled			04/04/2006
Date Prepared			04/14/2006
Preparation Method			
Date Analyzed			04/14/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041306-2B

Our Lab I.D.			168712
Client Sample I.D.			PE2-3'
Date Sampled			04/04/2006
Date Prepared			04/14/2006
Preparation Method			
Date Analyzed			04/14/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		168712
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	94
Dibromofluoromethane	70-120	116
Toluene-d8	70-120	106

QUALITY CONTROL REPORT

QC Batch No: 041306-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	103	103	<1	75-120	15
Chlorobenzene	105	105	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	98	95	3.1	75-120	15
MTBE	113	99	13.2	75-120	15
Toluene (Methyl benzene)	104	102	1.9	75-120	15
Trichloroethene (TCE)	108	107	<1	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-1B

Our Lab I.D.			**168713**	**168715**
Client Sample I.D.			PE2-5',9'6",16'	PE2-14' 11"
Date Sampled			04/04/2006	04/04/2006
Date Prepared			04/14/2006	04/14/2006
Preparation Method				
Date Analyzed			04/14/2006	04/14/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-1B

Our Lab I.D.			168713	168715
Client Sample I.D.			PE2-5',9'6",16'	PE2-14' 11"
Date Sampled			04/04/2006	04/04/2006
Date Prepared			04/14/2006	04/14/2006
Preparation Method				
Date Analyzed			04/14/2006	04/14/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-1B

Our Lab I.D.			168713	168715
Client Sample I.D.			PE2-5',9'6",16'	PE2-14' 11"
Date Sampled			04/04/2006	04/04/2006
Date Prepared			04/14/2006	04/14/2006
Preparation Method				
Date Analyzed			04/14/2006	04/14/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.			168713	168715
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Bromofluorobenzene	70-120		99	98
Dibromofluoromethane	70-120		90	90
Toluene-d8	70-120		98	98

QUALITY CONTROL REPORT

QC Batch No: 041406-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	100	96	4.1	75-120	15
Chlorobenzene	104	102	1.9	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	101	93	8.2	75-120	15
MTBE	97	90	7.5	75-120	15
Toluene (Methyl benzene)	101	106	4.8	75-120	15
Trichloroethene (TCE)	102	100	2.0	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041206-1

Our Lab I.D.		**168712**	**168713**	**168714**		
Client Sample I.D.		PE2-3'	PE2-5/9.5/16	PE2-20/29.5/ 50/60		
Date Sampled		04/04/2006	04/04/2006	04/04/2006		
Date Prepared		04/12/2006	04/12/2006	04/12/2006		
Preparation Method						
Date Analyzed		04/12/2006	04/12/2006	04/12/2006		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Comment(s): *168713: Low surrogate recovery due to matrix.*						
Acenaphthene	100	ND	ND	ND		
Acenaphthylene	50	ND	ND	ND		
Anthracene	2	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND		
Benzo(a)pyrene	5	ND	ND	ND		
Benzo(b)fluoranthene	2	ND	ND	ND		
Benzo(ghi)perylene	7	ND	ND	ND		
Benzo(k)fluoranthene	2	ND	ND	ND		
Chrysene	5	ND	ND	ND		
Dibenz(a,h)anthracene	17	ND	ND	ND		
Fluoranthene	5	ND	ND	ND		
Fluorene	10	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND		
Naphthalene	50	ND	ND	ND		
Phenanthrene	4	ND	ND	ND		
Pyrene	10	ND	ND	ND		

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29124	04/05/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

SYSTEM MONITORING REPORT

Our Lab I.D.		168712	168713	168714		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	65	38	58		
Phenol-d5	10-107	78	47	73		
2,4,6-Tribromophenol	10-123	95	50	74		
Nitrobenzene-d5	35-114	43	36	49		
2-Fluorobiphenyl	33-116	46	28	37		
Terphenyl-d14	33-141	88	58	73		

QUALITY CONTROL REPORT

QC Batch No: 041206-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	69	73	5.6	46-118						
Pyrene	83	84	1.2	26-127						

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Number of Pages 20
Date Received 04/06/2006
Date Reported 04/17/2006

Job Number	Ordered	Client
29125	04/06/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 8 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:
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2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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Environmental Testing Services
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COC# № 35652 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To:
Address: 26691 Plaza Suite 270	Address:
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction: * Composite w/ PE2-20/29.5/30/40/50	P.O.#:
E-mail: Submitted 4/5/06	

Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015-Ext	8081A/8082	8260B	8310	Comp 1	Comp 2	Comp 3				Remarks
		PE2-40'6"	4/6/06	7:45	1	plastic	Soil							X						*
		PE2-49		8:20	1									X						*
1	168716	PE4-3		10:00	5	2 plastic 3 oncore			X	X	X	X	X							
2	168717	PE4-5 (Composite)		10:15	1				X	X	X		X		X					
		PE4-10		10:25	1										X					
		PE4-16		10:45	1										X					
3	168718	PE4-20 (Composite)		11:05	1				X	X	X		X			X				
		PE4-30		11:25	1											X				
		PE4-40		11:55	1											X				
		PE4-49'4"		~~12:30~~ 12:20	1											X				

Collected By: Greg Dickinson	Date 4/6/06	Time Sicabar	Relinquished By: [signature] Date 4/6/06 Time 16:40
Relinquished By:	Date	Time	Received For Laboratory [signature] Date 4/6/06 Time 16:40
Received By:	Date	Time	Condition of Sample:

TAT ☐ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35650 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza Suite 270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470-1937	Address:
Fax: 949 470-0943	
Special Instruction: * Composite w/ PE4-20/30/40/45'	P.O.#:
E-mail: on page 1	
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street, Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 metals	8015-Ext	8081A/8082	8260B	8310	Archive	Comp 3	Comp 4	Comp 5			Remarks
		PE4-60 *	4/6/06	13:50	1	plastic	Soil								X					*
4	168719	PE3-3'		14:15	5	plastic/encore			X	X	X	X	X							
5	168720	PE3-5'		14:25	1	Plastic			X	X	X		X			X				
		PE3-10 (Composite)		14:35	1											X				
		PE3-15 (Composite)		14:50	1											X				
6	168721	PE3-20		15:15	1				X	X	X		X				X			
		PE3-29'3"		15:30	1												X			
7	168722	PE4-14'10"			3	Encore						X								
8	168723	PE3-15'			3	Encore						X								
		~~PE2-41'-41'8"~~												X						

Collected By: Greg Dickinson	Date 4/6/06	Time Solahor	Relinquished By:	Date 4/6/06	Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06	Time 1640
Received By:	Date	Time	Condition of Sample:		

TAT: ☑ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35659 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29105

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive	Remarks
		PE2 41'-41'8"	4/6/06		1	Plastic	Soil	None	X	
		PE2 44'-45'4"			1				X	
		PE2 48'-49'			1				X	
		PE2 52'-53'			1				X	
		PE2 53'-53'6"			1				X	
		PE4 5'6"-6'6"			1				X	
		PE4 6'6"-7'			1				X	
		PE4 7'-7'9"			1				X	
		PE4 8'-9'			1				X	
		PE4 9'-9'6"			1				X	

Collected By: Greg Dickinson	Date 4/6/06	Time See above	Relinquished By:	Date 4/6/06	Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06	Time 16:40
Received By:	Date	Time	Condition of Sample:		

TAT ☑ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35651 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza Suite 270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470-1937	Address:
Fax: 949 470-0943	
Special Instruction:	P.O.#:
E-mail:	

Project Name: Pier E Redevelopment
Site Address: 1200 Pier E Street, Long Beach, CA
Project ID: 0106.0015.002.001
Project Manager: Greg Dickinson

ANALYSIS REQUESTED: Archive

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive	Remarks
		PE4 9'6"-10'	4/6/06		1	Plastic	Soil	None	X	
		PE4 10'6"-11'			1				X	
		PE4 11'-11'10"			1				X	
		PE4 12'-12'6"			1				X	
		PE4 12'6"-13'			1				X	
		PE4 13'-14'			1				X	
		PE4 14'-14'10"			1				X	
		PE4 16'6"-17'6"			1				X	
		PE4 17'6"-18'8"			1				X	
		PE4 20'6"-21'10"			1				X	

Collected By: Greg Dickinson	Date 4/6/06	Time Sunday	Relinquished By:	Date 4/6/06 Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06 Time 16:40
Received By:	Date	Time	Condition of Sample:	

TAT: ☑ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35658 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza, Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive	Remarks
		PE4 24'-25'	4/6/06		1	Plastic	Soil	None	X	
		PE4 25'-26'			1				X	
		PE4 26'-27'			1				X	
		PE4 27'-27'6"			1				X	
		PE4 28'-29'			1				X	
		PE4 29'-29'6"			1				X	
		PE4 29'6"-30'			1				X	
		PE4 30'6"-31'			1				X	
		PE4 32'-33'			1				X	
		PE4 33-34'			1				X	

Collected By: Greg Dickinson	Date 4/6/06	Time See above	Relinquished By:	Date 4/6/06	Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06	Time 16:40
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35655 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza Suite 270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction:	
E-mail:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive	Remarks
		PE4 34-35'	4/6/06		1	Plastic	Soil	None	X	
		PE4 36'-37'			1				X	
		PE4 37'-38'1"			1				X	
		PE4 40'6"-41'			1				X	
		PE4 41'-42'2"			1				X	
		PE4 44'-45'			1				X	
		PE4 48'-49'			1				X	
		PE4 49-49'4"			1				X	
		PE4 52'-53'			1				X	
		PE4 53'-54'2"			1				X	

Collected By: Greg Dickinson	Date 4/6/06	Time [illegible]	Relinquished By:	Date 4/6/06	Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06	Time 16:40
Received By:	Date	Time	Condition of Sample:		

TAT ☐ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35654 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1937 Fax: 949 470-0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive	Remarks
		PE4 56'-57'	4/6/06		1	Plastic	Soil	None	X	
		PE4 57-58'			1				X	
		PE4 58'-58' 10"			1				X	
		PE4 60'6"-61'			1				X	
		PE4 61'-61'6"			1				X	
		PE4 61'6"-62'			1				X	
		PE4 62'-62'5"			1				X	
		PE3 5'6"-6'							X	
		PE3 6'-7'							X	
		PE3 7'-7'9"							X	

Collected By: Greg Dickinson	Date 4/6/06	Time see above	Relinquished By:	Date 4/6/06	Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06	Time 16:40
Received By:	Date	Time	Condition of Sample:		

TAT: ☑ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 35657 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29125

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:
Telephone: 949 470 1937	Long Beach, CA	Address:
Fax: 949 470 0943		
Special Instruction:	Project ID: 0106.0015.002.001	
E-mail:	Project Manager: Greg Dickinson	P.O.#:

ANALYSIS REQUESTED: Archive

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Archive	Remarks
		PE3 8'-9'	4/6/06		1	Plastic	Soil	None	X	
		PE3 9'-10'			1				X	
		PE3 10'6"-11'9"			1				X	
		PE3 12'-13'			1				X	
		PE4 35'-35'8"	4/6/06		1	"	"	"	X	

Collected By: Greg Dickinson	Date 4/6/06	Time Grab	Relinquished By:	Date 4/6/06	Time 16:40
Relinquished By:	Date	Time	Received For Laboratory	Date 4/6/06	Time 1640
Received By:	Date	Time	Condition of Sample:		

TAT: ☑ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**168716**	**168718**	**168719**	**168720**	**168721**
Sample ID			PE4-3	PE4-20,30,40,	PE3-3	PE3-5',10',15'	PE3-20',29'3"
Date Sampled			04/06/2006	49.3,60 04/06/2006	04/06/2006	04/06/2006	04/06/2006
Date Extracted			04/11/2006	04/11/2006	04/11/2006	04/11/2006	04/11/2006
Preparation Method							
Date Analyzed			04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	0.30	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	0.73	1.01	ND	0.70	0.67
Arsenic	0.10	0.25	2.39	5.21	ND	2.00	ND
Barium	0.05	0.50	86.5	115	34.3	141	120
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	25.9	34.8	10.1	17.9	25.6
Cobalt	0.05	0.50	7.30	11.6	3.86	7.73	10.1
Copper	0.25	0.50	11.9	43.9	3.08	12.4	16.0
Lead	0.10	0.25	4.50	20.2	1.02	2.32	2.81
Molybdenum	0.05	0.50	ND	0.66	ND	0.68	ND
Nickel	0.05	0.50	13.2	21.4	5.68	12.2	16.5
Selenium	0.20	0.50	ND	ND	0.74	0.62	0.53
Silver	0.40	0.50	ND	0.54	ND	0.64	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	42.5	58.9	21.8	42.3	44.2
Zinc	0.05	0.50	33.8	95.9	19.7	40.2	40.8

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	112	80-120								
ICP Metals										
Antimony	106	80-120								
Arsenic	107	80-120								
Barium	106	80-120								
Beryllium	108	80-120								
Cadmium	108	80-120								
Chromium	103	80-120								
Cobalt	111	80-120								
Copper	105	80-120								
Lead	112	80-120								
Molybdenum	109	80-120								
Nickel	113	80-120								
Selenium	108	80-120								
Silver	107	80-120								
Thallium	109	80-120								
Vanadium	104	80-120								
Zinc	110	80-120								

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 4
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			168717
Sample ID			PE4-5',10',16'
Date Sampled			04/06/2006
Date Extracted			04/11/2006
Preparation Method			
Date Analyzed			04/12/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	0.64
Arsenic	0.10	0.25	0.26
Barium	0.05	0.50	67.2
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	14.7
Cobalt	0.05	0.50	6.28
Copper	0.25	0.50	8.86
Lead	0.10	0.25	2.94
Molybdenum	0.05	0.50	ND
Nickel	0.05	0.50	9.58
Selenium	0.20	0.50	1.13
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	28.9
Zinc	0.05	0.50	32.3

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	112	80-120								
ICP Metals										
Antimony	106	80-120								
Arsenic	107	80-120								
Barium	106	80-120								
Beryllium	108	80-120								
Cadmium	108	80-120								
Chromium	103	80-120								
Cobalt	111	80-120								
Copper	105	80-120								
Lead	112	80-120								
Molybdenum	109	80-120								
Nickel	113	80-120								
Selenium	108	80-120								
Silver	107	80-120								
Thallium	109	80-120								
Vanadium	104	80-120								
Zinc	110	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041306-2

Our Lab I.D.		**168716**	**168718**	**168720**		
Client Sample I.D.		PE4-3	PE4-20,30,40, 49.3,60	PE3-5',10',15'		
Date Sampled		04/06/2006	04/06/2006	04/06/2006		
Date Prepared		04/12/2006	04/12/2006	04/12/2006		
Preparation Method						
Date Analyzed		04/12/2006	04/12/2006	04/12/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	ND	ND		
TPH ORO (C22+)	50	ND	ND	ND		

Our Lab I.D.		**168716**	**168718**	**168720**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	88	87	86		

QUALITY CONTROL REPORT

QC Batch No: 041306-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	104	104	<1	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041406-1

Our Lab I.D.		168717	168719	168721		
Client Sample I.D.		PE4-5',10',16'	PE3-3	PE3-20',29'3"		
Date Sampled		04/06/2006	04/06/2006	04/06/2006		
Date Prepared		04/13/2006	04/13/2006	04/13/2006		
Preparation Method						
Date Analyzed		04/14/2006	04/14/2006	04/14/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	ND	48		
TPH ORO (C22+)	50	ND	ND	180		

Our Lab I.D.		168717	168719	168721		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	116	91	88		

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	92	93	1.1	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**168716**	**168717**	**168718**	**168719**	**168720**
Sample ID			PE4-3	PE4-5',10',16'	PE4-20,30,40,	PE3-3	PE3-5',10',15'
Date Sampled			04/06/2006	04/06/2006	49.3,60 04/06/2006	04/06/2006	04/06/2006
Date Extracted			04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Preparation Method							
Date Analyzed			04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168716	168717	168718	168719	168720
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	84	99	93	83	93

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	74	66	11.4	42-122	<30					
4,4'-DDT (DDT)	61	55	10.3	25-160	<30					
Dieldrin	84	75	11.3	36-146	<30					
Endrin	73	66	10.1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	70	62	12.1	32-127	<30					
Heptachlor	64	57	11.6	34-111	<30					

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**168721**				
Sample ID			PE3-20',29'3"				
Date Sampled			04/06/2006				
Date Extracted			04/10/2006				
Preparation Method							
Date Analyzed			04/10/2006				
Matrix			Soil				
Units			ug/kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
Aldrin	0.23	2.00	ND				
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND				
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND				
Gamma-Chlordane	0.19	2.00	ND				
alpha-Chlordane	0.20	2.00	ND				
4,4'-DDD (DDD)	0.27	4.00	ND				
4,4'-DDE (DDE)	0.22	4.00	ND				
4,4'-DDT (DDT)	0.22	4.00	ND				
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND				
Dieldrin	0.20	4.00	ND				
Endosulfan 1	0.20	2.00	ND				
Endosulfan 11	0.24	4.00	ND				
Endosulfan sulfate	0.27	4.00	ND				
Endrin	0.25	4.00	ND				
Endrin aldehyde	0.44	4.00	ND				
Endrin ketone	0.30	4.00	ND				
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND				
Heptachlor	0.23	2.00	ND				
Heptachlor epoxide	0.23	2.00	ND				
Methoxychlor	0.39	17.00	ND				
Toxaphene	17	170	ND				

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Job Number	Order Date	Client
29125	04/06/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168721
Surrogates	Con.Limit	% Rec.
Surrogate Percent Recovery		
Decachlorobiphenyl	43-169	91

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aldrin	74	66	11.4	42-122	<30
4,4'-DDT (DDT)	61	55	10.3	25-160	<30
Dieldrin	84	75	11.3	36-146	<30
Endrin	73	66	10.1	30-147	<30
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	70	62	12.1	32-127	<30
Heptachlor	64	57	11.6	34-111	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041006-1

Our Lab I.D.			168716	168717	168718	168719	168720
Client Sample I.D.			PE4-3	PE4-5',10',16'	PE4-20,30,40, 49.3,60	PE3-3	PE3-5',10',15'
Date Sampled			04/06/2006	04/06/2006	04/06/2006	04/06/2006	04/06/2006
Date Prepared			04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Preparation Method							
Date Analyzed			04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			168716	168717	168718	168719	168720
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		84	99	93	83	93

QUALITY CONTROL REPORT

QC Batch No: 041006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	104	108	3.8	39-150	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041006-1

Our Lab I.D.			**168721**				
Client Sample I.D.			PE3-20',29'3"				
Date Sampled			04/06/2006				
Date Prepared			04/10/2006				
Preparation Method							
Date Analyzed			04/10/2006				
Matrix			Soil				
Units			ug/kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Aroclor-1016 (PCB-1016)	3.60	33.00	ND				
Aroclor-1221 (PCB-1221)	4.20	67.00	ND				
Aroclor-1232 (PCB-1232)	2.10	33.00	ND				
Aroclor-1242 (PCB-1242)	2.10	33.00	ND				
Aroclor-1248 (PCB-1248)	2.10	33.00	ND				
Aroclor-1254 (PCB-1254)	2.10	33.00	ND				
Aroclor-1260 (PCB-1260)	2.10	33.00	ND				

Our Lab I.D.			**168721**				
Surrogates	**% Rec.Limit**		**% Rec.**				
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		91				

QUALITY CONTROL REPORT

QC Batch No: 041006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	104	108	3.8	39-150	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			168716	168719	168722	168723	
Client Sample I.D.			PE4-3	PE3-3	PE4-14'10"	PE3-15'	
Date Sampled			04/06/2006	04/06/2006	04/06/2006	04/06/2006	
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Preparation Method							
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/kg	ug/kg	ug/kg	ug/kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acetone	12.7	50.0	ND	ND	ND	ND	
Benzene	1.02	2.00	ND	ND	ND	ND	
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	
Chloroethane	2.15	30.00	ND	ND	ND	ND	
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	
Dibromomethane	2.30	10.00	ND	ND	ND	ND	
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			168716	168719	168722	168723	
Client Sample I.D.			PE4-3	PE3-3	PE4-14'10"	PE3-15'	
Date Sampled			04/06/2006	04/06/2006	04/06/2006	04/06/2006	
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Preparation Method							
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/kg	ug/kg	ug/kg	ug/kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	
2-Hexanone	3.18	50.00	ND	ND	ND	ND	
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	
MTBE	2.90	5.00	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	
Naphthalene	1.14	10.00	ND	ND	ND	ND	
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	
Styrene	0.80	10.00	ND	ND	ND	ND	
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			168716	168719	168722	168723	
Client Sample I.D.			PE4-3	PE3-3	PE4-14'10"	PE3-15'	
Date Sampled			04/06/2006	04/06/2006	04/06/2006	04/06/2006	
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Preparation Method							
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/kg	ug/kg	ug/kg	ug/kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	
o-Xylene	1.01	2.00	ND	ND	ND	ND	
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	

Our Lab I.D.			168716	168719	168722	168723	
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		98	100	100	104	
Dibromofluoromethane	70-120		92	93	89	89	
Toluene-d8	70-120		100	99	99	98	

QUALITY CONTROL REPORT

QC Batch No: 041406-2C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Benzene	90	92	2.2	75-120	15					
Chlorobenzene	93	93	<1	75-120	15					
1,1-Dichloroethene (1,1-Dichloroethylene)	98	97	1.0	75-120	15					
MTBE	87	83	4.7	75-120	15					
Toluene (Methyl benzene)	93	97	4.2	75-120	15					
Trichloroethene (TCE)	97	98	1.0	75-120	15					

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 071206-1

Our Lab I.D.		168716	168717	168718	168719	168720
Client Sample I.D.		PE4-3	PE4-5',10',16'	PE4-20,30,40, 49.3,60	PE3-3	PE3-5',10',15'
Date Sampled		04/06/2006	04/06/2006	04/06/2006	04/06/2006	04/06/2006
Date Prepared		04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Preparation Method						
Date Analyzed		04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		168716	168717	168718	168719	168720
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	52	56	64	56	56
Phenol-d5	10-107	67	71	68	72	77
2,4,6-Tribromophenol	10-123	67	80	65	85	75
Nitrobenzene-d5	35-114	48	54	49	53	50
2-Fluorobiphenyl	18-116	35	35	41	42	37
Terphenyl-d14	33-141	70	79	65	79	73

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 071206-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	69	73	5.6	46-118						
Pyrene	83	84	1.2	26-127						

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 071206-1

Our Lab I.D.		**168721**				
Client Sample I.D.		PE3-20',29'3"				
Date Sampled		04/06/2006				
Date Prepared		04/12/2006				
Preparation Method						
Date Analyzed		04/12/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Acenaphthene	100	ND				
Acenaphthylene	50	ND				
Anthracene	2	ND				
Benz(a)anthracene (Benzo(a)anthracene)	5	ND				
Benzo(a)pyrene	5	ND				
Benzo(b)fluoranthene	2	ND				
Benzo(ghi)perylene	7	ND				
Benzo(k)fluoranthene	2	ND				
Chrysene	5	ND				
Dibenz(a,h)anthracene	17	ND				
Fluoranthene	5	ND				
Fluorene	10	ND				
Indeno(1,2,3-cd)pyrene	5	ND				
Naphthalene	50	ND				
Phenanthrene	4	ND				
Pyrene	10	ND				

Our Lab I.D.		**168721**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	60				
Phenol-d5	10-107	83				
2,4,6-Tribromophenol	10-123	78				
Nitrobenzene-d5	35-114	65				
2-Fluorobiphenyl	18-116	53				
Terphenyl-d14	33-141	111				

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29125	04/06/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 071206-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	69	73	5.6	46-118						
Pyrene	83	84	1.2	26-127						

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Ordered By

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Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 31
Date Received 04/07/2006
Date Reported 04/18/2006

Job Number	Ordered	Client
29160	04/07/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 11 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 36880 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29160

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza Suite 270 Mission Viejo, CA, 92691	Address: SAA
Telephone: 949 470 1937 Fax: 949 470 0943	Invoice To:
Special Instruction:	Address:
E-mail:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	Comp1	Comp2	~~Comp3~~				Remarks
1	168863	PE7-3'	4/7/06	07:25	2 3	Plastic encore	Soil	None	X	X	X	X	X							
2	168864	PE7-5' (Composite)	4/7/06	07:35	1	Plastic			X	X	X		X	X						
		PE7-10'			1	"								X						
		PE7-14'4"		10:40	3 1	encore Plastic						X		X						169000
3	168865	PE7-20'			1	"			X	X	X		X		X					
		PE7-30'			1	"									X					
		PE7-40'			1	"									X					
		PE7-49'11" (Composite)			1	"									X					
		PE7-60'			1	"									X					
4	168866	PE6-3'		10:58	2 3	Plastic encore			X	X	X	X	X							

Collected By: Scott Miles	Date 4/7/06	Time see above	Relinquished By: Scott Miles	Date 4/7/06	Time 16:30
Relinquished By:	Date	Time	Received For Laboratory: Moss	Date 4/7/06	Time 1600
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 35656 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29160

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza Suite 270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470 - 1937	Address:
Fax: 949 470 - 0943	
Special Instruction:	
E-mail:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	Comp 3	Comp 4	Comp 5	Comp 6			Remarks
5	168867	PE6-5'	4/7/06		1	~~Soil~~ Plastic	Soil	None	X	X	X		X	X						
		PE6-10'			1	"			X	X	X		X	X						
		PE6 14'9" (Comp)		12:00	1 3	Plastic encore			X	X	X	X	X	X						169001
6	168868	PE6 20'			1	Plastic			X	X	X		X		X					
		PE6 30' (Comp)			1	"			X	X	X		X		X					
7	168869	PE8-3'		12:58	2 3	Plastic encore			X	X	X	X	X							
8	168870	PE8-5'			1	Plastic			X	X	X		X			X				
		PE8-10' (Comp)			1	"			X	X	X		X			X				
		PE8-14'8"			1 3	Plastic encore			X	X	X	X	X			X				169002
9	168871	PE8-20'			1	Plastic			X	X	X		X				X			

Collected By: Scott Miller	Date 4/7/06	Time see above	Relinquished By: Scott Miller	Date 4/7/06	Time 16:30
Relinquished By:	Date	Time	Received For Laboratory	Date 4/7/06	Time 1650
Received By:	Date	Time	Condition of Sample:		

TAT
☒ Normal
☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 36881 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29160

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To:
Address: 26691 Plaza Suite 270, Mission Viejo, CA 92691	Address:
Telephone: 949 470 1937	Invoice To:
Fax: 949 470 0943	Address:
Special Instruction:	
E-mail:	P.O.#:

Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street, Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	Comp 6	Comp 7					Remarks
		PE8-30'	4/7/06		1	Plastic	Soil	None	X	X	X		X	X						
10	168872	PE9-3'	4/7/06	14:26	2 3	Plastic encore			X	X	X	X	X							
11	168873	PE9-5'			1	Plastic			X	X	X		X		X					
		PE9-10'			1				X	X	X		X		X					
		PE9-14'6"		15:25	1/3	Plastic encore			X	X	X	X	X		X					169003

Collected By: Scott Miller	Date 4/7/06	Time See above	Relinquished By: Scott Miller	Date 4/7/06	Time 16:30
Relinquished By:	Date	Time	Received For Laboratory	Date 4/7/06	Time 16:30
Received By:	Date	Time	Condition of Sample:		

TAT
☒ Normal
☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

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Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**168863**	**168864**	**168865**	**168866**	**168867**
Sample ID			PE7-3'	PE7-5',10',14'	PE7-20,30,40,	PE6-3'	PE6-5',10',14'
Date Sampled			04/07/2006	4" 04/07/2006	49.9,60 04/07/2006	04/07/2006	9" 04/07/2006
Date Extracted			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	0.60	0.71	ND	ND
Arsenic	0.10	0.25	0.52	ND	1.64	ND	ND
Barium	0.05	0.50	58.9	43.6	99.7	36.1	40.0
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	16.3	33.0	24.0	12.7	12.4
Cobalt	0.05	0.50	5.09	5.27	9.03	4.03	4.79
Copper	0.25	0.50	7.53	6.29	16.7	4.78	6.05
Lead	0.10	0.25	1.54	1.70	5.23	1.76	1.39
Molybdenum	0.05	0.50	ND	0.65	ND	ND	ND
Nickel	0.05	0.50	11.9	8.56	14.7	6.97	7.38
Selenium	0.20	0.50	0.56	ND	ND	ND	ND
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	26.9	23.4	40.9	22.0	23.0
Zinc	0.05	0.50	31.0	33.3	52.9	22.7	24.1

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	95	80-120								
Arsenic	98	80-120								
Barium	98	80-120								
Beryllium	96	80-120								
Cadmium	95	80-120								
Chromium	95	80-120								
Cobalt	101	80-120								
Copper	96	80-120								
Lead	102	80-120								
Molybdenum	103	80-120								
Nickel	104	80-120								
Selenium	95	80-120								
Silver	97	80-120								
Thallium	101	80-120								
Vanadium	95	80-120								
Zinc	98	80-120								

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ANALYTICAL RESULTS

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**168868**	**168869**	**168870**	**168871**	**168872**
Sample ID			PE6-20',30'	PE8-3'	PE8-5',10',14'	PE8-20',30'	PE9-3'
Date Sampled			04/07/2006	04/07/2006	8" 04/07/2006	04/07/2006	04/07/2006
Date Extracted			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	0.63	ND	0.56	ND
Arsenic	0.10	0.25	ND	4.48	0.55	ND	1.21
Barium	0.05	0.50	79.7	60.5	46.2	61.2	38.1
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	15.2	25.1	11.4	13.2	13.7
Cobalt	0.05	0.50	5.96	8.21	5.00	5.51	5.40
Copper	0.25	0.50	17.0	16.5	6.47	7.14	5.34
Lead	0.10	0.25	3.74	3.95	1.81	1.70	2.08
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	10.7	16.1	7.42	8.41	8.41
Selenium	0.20	0.50	ND	ND	ND	ND	ND
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	28.2	36.5	23.2	24.6	24.9
Zinc	0.05	0.50	41.8	42.5	26.4	28.2	24.7

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Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	95	80-120								
Arsenic	98	80-120								
Barium	98	80-120								
Beryllium	96	80-120								
Cadmium	95	80-120								
Chromium	95	80-120								
Cobalt	101	80-120								
Copper	96	80-120								
Lead	102	80-120								
Molybdenum	103	80-120								
Nickel	104	80-120								
Selenium	95	80-120								
Silver	97	80-120								
Thallium	101	80-120								
Vanadium	95	80-120								
Zinc	98	80-120								

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Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**168873**
Sample ID			PE9-5',10',14'
Date Sampled			6" 04/07/2006
Date Extracted			04/13/2006
Preparation Method			
Date Analyzed			04/14/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	ND
Arsenic	0.10	0.25	ND
Barium	0.05	0.50	37.2
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	10.9
Cobalt	0.05	0.50	4.33
Copper	0.25	0.50	5.98
Lead	0.10	0.25	1.31
Molybdenum	0.05	0.50	ND
Nickel	0.05	0.50	6.56
Selenium	0.20	0.50	0.60
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	21.0
Zinc	0.05	0.50	21.4

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Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	95	80-120								
Arsenic	98	80-120								
Barium	98	80-120								
Beryllium	96	80-120								
Cadmium	95	80-120								
Chromium	95	80-120								
Cobalt	101	80-120								
Copper	96	80-120								
Lead	102	80-120								
Molybdenum	103	80-120								
Nickel	104	80-120								
Selenium	95	80-120								
Silver	97	80-120								
Thallium	101	80-120								
Vanadium	95	80-120								
Zinc	98	80-120								

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ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041606-1

Our Lab I.D.		168863	168864	168865	168866	168867
Client Sample I.D.		PE7-3'	PE7-5',10',14' 4"	PE7-20,30,40, 49.9,60	PE6-3'	PE6-5',10',14' 9"
Date Sampled		04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared		04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method						
Date Analyzed		04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		168863	168864	168865	168866	168867
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	120	88	89	88	120

QUALITY CONTROL REPORT

QC Batch No: 041606-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	98	106	7.8	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041606-1

Our Lab I.D.		168869	168870	168871	168872	
Client Sample I.D.		PE8-3'	PE8-5',10',14' 8"	PE8-20',30'	PE9-3'	
Date Sampled		04/07/2006	04/07/2006	04/07/2006	04/07/2006	
Date Prepared		04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Preparation Method						
Date Analyzed		04/15/2006	04/15/2006	04/15/2006	04/15/2006	
Matrix		Soil	Soil	Soil	Soil	
Units		mg/kg	mg/kg	mg/kg	mg/kg	
Dilution Factor		1	1	1	1	
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH DRO (C13-C22)	10	ND	ND	ND	ND	
TPH ORO (C22+)	50	ND	ND	ND	ND	

Our Lab I.D.		168869	168870	168871	168872	
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery						
Chlorobenzene	70-120	90	92	120	89	

QUALITY CONTROL REPORT

QC Batch No: 041606-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	98	106	7.8	75-120	15					

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ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041606-2

Our Lab I.D.		168868	168873			
Client Sample I.D.		PE6-20',30'	PE9-5',10',14' 6"			
Date Sampled		04/07/2006	04/07/2006			
Date Prepared		04/15/2006	04/15/2006			
Preparation Method						
Date Analyzed		04/17/2006	04/17/2006			
Matrix		Soil	Soil			
Units		mg/kg	mg/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
TPH DRO (C13-C22)	10	ND	ND			
TPH ORO (C22+)	50	ND	ND			

Our Lab I.D.		168868	168873			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Chlorobenzene	70-120	120	91			

QUALITY CONTROL REPORT

QC Batch No: 041606-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	102	104	1.9	75-120	15					

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			168863	168864	168865	168866	168867
Sample ID			PE7-3'	PE7-5',10',14'	PE7-20,30,40,	PE6-3'	PE6-5',10',14'
Date Sampled			04/07/2006	4" 04/07/2006	49.9,60 04/07/2006	04/07/2006	9" 04/07/2006
Date Extracted			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method							
Date Analyzed			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168863	168864	168865	168866	168867
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	78	86	90	89	83

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	77	68	12.4	42-122	<30					
4,4'-DDT (DDT)	79	67	16.4	25-160	<30					
Dieldrin	86	77	11.0	36-146	<30					
Endrin	93	82	12.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	75	66	12.8	32-127	<30					
Heptachlor	75	66	12.8	34-111	<30					

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Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**168868**	**168869**	**168870**	**168871**	**168872**
Sample ID			PE6-20',30'	PE8-3'	PE8-5',10',14'	PE8-20',30'	PE9-3'
Date Sampled			04/07/2006	04/07/2006	8" 04/07/2006	04/07/2006	04/07/2006
Date Extracted			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method							
Date Analyzed			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168868	168869	168870	168871	168872
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	100	86	106	95	93

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	77	68	12.4	42-122	<30					
4,4'-DDT (DDT)	79	67	16.4	25-160	<30					
Dieldrin	86	77	11.0	36-146	<30					
Endrin	93	82	12.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	75	66	12.8	32-127	<30					
Heptachlor	75	66	12.8	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**168873**				
Sample ID			PE9-5',10',14' 6"				
Date Sampled			04/07/2006				
Date Extracted			04/13/2006				
Preparation Method							
Date Analyzed			04/13/2006				
Matrix			Soil				
Units			ug/kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
Aldrin	0.23	2.00	ND				
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND				
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND				
Gamma-Chlordane	0.19	2.00	ND				
alpha-Chlordane	0.20	2.00	ND				
4,4'-DDD (DDD)	0.27	4.00	ND				
4,4'-DDE (DDE)	0.22	4.00	ND				
4,4'-DDT (DDT)	0.22	4.00	ND				
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND				
Dieldrin	0.20	4.00	ND				
Endosulfan 1	0.20	2.00	ND				
Endosulfan 11	0.24	4.00	ND				
Endosulfan sulfate	0.27	4.00	ND				
Endrin	0.25	4.00	ND				
Endrin aldehyde	0.44	4.00	ND				
Endrin ketone	0.30	4.00	ND				
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND				
Heptachlor	0.23	2.00	ND				
Heptachlor epoxide	0.23	2.00	ND				
Methoxychlor	0.39	17.00	ND				
Toxaphene	17	170	ND				

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29160	04/07/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168873				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	100				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	77	68	12.4	42-122	<30					
4,4'-DDT (DDT)	79	67	16.4	25-160	<30					
Dieldrin	86	77	11.0	36-146	<30					
Endrin	93	82	12.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	75	66	12.8	32-127	<30					
Heptachlor	75	66	12.8	34-111	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041306-1

Our Lab I.D.			168863	168864	168865	168866	168867
Client Sample I.D.			PE7-3'	PE7-5',10',14' 4"	PE7-20,30,40, 49.9,60	PE6-3'	PE6-5',10',14' 9"
Date Sampled			04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method							
Date Analyzed			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			168863	168864	168865	168866	168867
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		78	86	90	89	83

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1260 (PCB-1260)	96	104	8.0	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041306-1

Our Lab I.D.			168868	168869	168870	168871	168872
Client Sample I.D.			PE6-20',30'	PE8-3'	PE8-5',10',14' 8"	PE8-20',30'	PE9-3'
Date Sampled			04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method							
Date Analyzed			04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			168868	168869	168870	168871	168872
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		100	86	106	95	93

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1260 (PCB-1260)	96	104	8.0	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041306-1

Our Lab I.D.			**168873**
Client Sample I.D.			PE9-5',10',14' 6"
Date Sampled			04/07/2006
Date Prepared			04/13/2006
Preparation Method			
Date Analyzed			04/13/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.			**168873**
Surrogates	**% Rec.Limit**		**% Rec.**
Surrogate Percent Recovery			
Decachlorobiphenyl	43-169		100

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Aroclor-1260 (PCB-1260)	96	104	8.0	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			168863	168866	168869	168872	169000
Client Sample I.D.			PE7-3'	PE6-3'	PE8-3'	PE9-3'	PE7-14'4"
Date Sampled			04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method							
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			168863	168866	168869	168872	169000
Client Sample I.D.			PE7-3'	PE6-3'	PE8-3'	PE9-3'	PE7-14'4"
Date Sampled			04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method							
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			168863	168866	168869	168872	169000
Client Sample I.D.			PE7-3'	PE6-3'	PE8-3'	PE9-3'	PE7-14'4"
Date Sampled			04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method							
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			168863	168866	168869	168872	169000
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		99	104	98	102	102
Dibromofluoromethane	70-120		88	89	96	96	92
Toluene-d8	70-120		99	100	99	100	99

QUALITY CONTROL REPORT

QC Batch No: 041406-2C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	90	92	2.2	75-120	15
Chlorobenzene	93	93	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	98	97	1.0	75-120	15
MTBE	87	83	4.7	75-120	15
Toluene (Methyl benzene)	93	97	4.2	75-120	15
Trichloroethene (TCE)	97	98	1.0	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			**169001**	**169002**	**169003**
Client Sample I.D.			PE6-14'9"	PE8-14'8"	PE9-14'6"
Date Sampled			04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006
Preparation Method					
Date Analyzed			04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND

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Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			169001	169002	169003
Client Sample I.D.			PE6-14'9"	PE8-14'8"	PE9-14'6"
Date Sampled			04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006
Preparation Method					
Date Analyzed			04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND

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Environmental Testing Services
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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041406-2C

Our Lab I.D.			169001	169002	169003
Client Sample I.D.			PE6-14'9"	PE8-14'8"	PE9-14'6"
Date Sampled			04/07/2006	04/07/2006	04/07/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006
Preparation Method					
Date Analyzed			04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND

Our Lab I.D.		169001	169002	169003
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Bromofluorobenzene	70-120	98	100	102
Dibromofluoromethane	70-120	91	94	94
Toluene-d8	70-120	98	100	100

QUALITY CONTROL REPORT

QC Batch No: 041406-2C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	90	92	2.2	75-120	15
Chlorobenzene	93	93	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	98	97	1.0	75-120	15
MTBE	87	83	4.7	75-120	15
Toluene (Methyl benzene)	93	97	4.2	75-120	15
Trichloroethene (TCE)	97	98	1.0	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson
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Site

1200 Pier E Street
Long Beach, CA

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041306-1

Our Lab I.D.		168863	168864	168865	168866	168867
Client Sample I.D.		PE7-3'	PE7-5',10',14' 4"	PE7-20,30,40, 49,60	PE6-3'	PE6-5',10',14' 9"
Date Sampled		04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared		04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method						
Date Analyzed		04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Comment(s): *Low surrogate recovery due to Matrix*						
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	13.7	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	17.4	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

SYSTEM MONITORING REPORT

Our Lab I.D.		168863	168864	168865	168866	168867
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
2-Fluorophenol	21-105	41	45	21	36	32
Phenol-d5	10-107	48	65	33	45	47
2,4,6-Tribromophenol	10-123	52	60	55	59	67
Nitrobenzene-d5	35-114	33	20	16	19	26
2-Fluorobiphenyl	18-116	26	27	16	23	29
Terphenyl-d14	33-141	55	67	55	54	60

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	75	77	2.6	46-118						
Pyrene	88	86	2.3	26-127						

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041306-1

Our Lab I.D.		**168868**	**168869**	**168870**	**168871**	**168872**
Client Sample I.D.		PE6-20',30'	PE8-3'	PE8-5',10',14' 8"	PE8-20',30'	PE9-3'
Date Sampled		04/07/2006	04/07/2006	04/07/2006	04/07/2006	04/07/2006
Date Prepared		04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Preparation Method						
Date Analyzed		04/13/2006	04/13/2006	04/13/2006	04/13/2006	04/13/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Comment(s): *168868 : Low surrogate recovery due to Matrix.*						
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

SYSTEM MONITORING REPORT

Our Lab I.D.		168868	168869	168870	168871	168872
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
2-Fluorophenol	21-105	32	39	45	55	65
Phenol-d5	10-107	43	47	60	60	74
2,4,6-Tribromophenol	10-123	63	54	67	65	81
Nitrobenzene-d5	35-114	25	36	39	44	37
2-Fluorobiphenyl	18-116	23	34	38	41	42
Terphenyl-d14	33-141	64	52	66	63	81

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	75	77	2.6	46-118						
Pyrene	88	86	2.3	26-127						

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ANALYTICAL RESULTS

Ordered By

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Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson
Page: 30
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041306-1

Our Lab I.D.		**168873**				
Client Sample I.D.		PE9-5',10',14' 6"				
Date Sampled		04/07/2006				
Date Prepared		04/13/2006				
Preparation Method						
Date Analyzed		04/13/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Acenaphthene	100	ND				
Acenaphthylene	50	ND				
Anthracene	2	ND				
Benz(a)anthracene (Benzo(a)anthracene)	5	ND				
Benzo(a)pyrene	5	ND				
Benzo(b)fluoranthene	2	ND				
Benzo(ghi)perylene	7	ND				
Benzo(k)fluoranthene	2	ND				
Chrysene	5	ND				
Dibenz(a,h)anthracene	17	ND				
Fluoranthene	5	ND				
Fluorene	10	ND				
Indeno(1,2,3-cd)pyrene	5	ND				
Naphthalene	50	ND				
Phenanthrene	4	ND				
Pyrene	10	ND				

SYSTEM MONITORING REPORT

Our Lab I.D.		168873				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	51				
Phenol-d5	10-107	59				
2,4,6-Tribromophenol	10-123	63				
Nitrobenzene-d5	35-114	38				
2-Fluorobiphenyl	18-116	35				
Terphenyl-d14	33-141	67				

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ANALYTICAL RESULTS

Page: 31
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29160	04/07/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 041306-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	75	77	2.6	46-118						
Pyrene	88	86	2.3	26-127						

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Ordered By

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Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 20
Date Received 04/11/2006
Date Reported 04/19/2006

Job Number	Ordered	Client
29179	04/11/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 9 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Wendy Lu
Organics Supervisor

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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Environmental Testing Services
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COC# № 36886 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29179

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza Suite 270	Address: SAA
Mission Viejo CA 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction:	
E-mail:	P.O.#:

Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	6015 Ext	8081 A/8082	8260 B	8310	PE9-20'/40'/49'11"/60' Composite	PE11 5'/10'/14'7" Composite	PE11-20'/29'10"/40'/50'11"/60' Composite				Remarks
1	168988	PE9-20'	4/10/06	07:20	1	Plastic	Soil	None	X	X	X		X	X						
		PE9-30'	Composite Plastic	07:40	1									X						
		PE9-40'		08:15	1									X						
		PE9-49'11"		09:10	1									X						
		PE9-60'		10:10	1									X						
2	168989	PE11-3'		10:40	2 3	Plastic encore			X	X	X	X	X							
3	168990	PE11-5'	Composite Plastic	10:50	1	Plastic			X	X	X		X		X					
		PE11-10'		10:55	1	Plastic			X	X	X		X		X					
		PE11-14'7"		11:05	1 3	Plastic encore			X	X	X	X	X		X					159004
4	168991	PE11-20'		11:15	1	Plastic			X	X	X		X			X				

Collected By: Scott Miller	Date 4/10/06	Time See above	Relinquished By: Scott Miller	Date 4/10/06	Time 17:00
Relinquished By: [signature]	Date 4/11/06	Time	Received For Laboratory: [signature]	Date 4/11/06	Time 1400
Received By:	Date	Time	Condition of Sample:		

TAT
☒ Normal
☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 22351 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29179

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering
Address: 26691 Plaza Suite 270
Mission Viejo, CA, 92691
Telephone: 949 470 1937
Fax: 949 470 0943
Special Instruction: * wait for samples from 30-60 feet before compositing

Project Name: Pier E Redevelopment
Site Address: 1200 Pier E Street
Long Beach, CA
Project ID: 0106.0015.002.001
Project Manager: Greg Dickinson

Report To: PM
Address: SAA
Invoice To:
Address:
P.O.#:

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081 W/ 8082	8260B	8310	PE11-20'/29'10"/40'/50'1"/60'	PE13-5'/10'/14'4"	PE13-20'						Remarks
		PE11-29'10"	4/10/06	11:40	1	Plastic	Soil	None	X	X	X		X	X								
		PE11-40'	Composite Plastic	12:45	1									X								
		PE11-50'1"		13:20	1									X								
		PE11-60'		14:20	1									X								
5	168992	PE13-3'		14:50	2 3	Plastic encore			X	X	X	X	X									
6	168993	PE13-5'	Composite Plastic	14:55	1	Plastic			X	X	X		X		X							
		PE13-10'		15:00	1	Plastic									X							
		PE13-14'4"		15:05	1 3	Plastic encore			X	X	X	X	X		X							169005
7	168994	PE13-20'		15:20	1	Plastic			X	X	X		X			X						*
		30', 40', 50', 60'																				

Collected By: [signature] Date 4/10/06 Time See above
Relinquished By: [signature] Date 4/11/06 Time
Condition of Sample:

Relinquished By: [signature] Date 4/10/06 Time 17:00
Received For Laboratory [signature] Date 4/11/06 Time 1400

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

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Site

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Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			168988	168989	168990	168991	168992
Sample ID			PE9-20,30,40,	PE11-3'	PE11-5,10,15	PE11-20,30,4	PE13-3'
Date Sampled			49.9,60 04/10/2006	04/10/2006	04/10/2006	0,50,60 04/10/2006	04/10/2006
Date Extracted			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	0.22	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	0.94	ND	0.58	0.64	ND
Arsenic	0.10	0.25	1.97	5.53	2.20	1.06	ND
Barium	0.05	0.50	109	56.3	44.8	89.6	25.5
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	21.6	14.5	8.95	16.9	7.07
Cobalt	0.05	0.50	10.1	6.50	5.17	8.56	3.12
Copper	0.25	0.50	21.3	6.43	7.03	12.3	2.72
Lead	0.10	0.25	5.84	2.33	1.58	3.14	1.22
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	15.3	11.7	7.63	12.5	5.06
Selenium	0.20	0.50	0.58	0.60	0.70	0.58	0.62
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	47.5	29.5	21.1	38.3	16.5
Zinc	0.05	0.50	65.3	35.2	24.1	49.2	17.7

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	108	80-120								
ICP Metals										
Antimony	100	80-120								
Arsenic	100	80-120								
Barium	98	80-120								
Beryllium	99	80-120								
Cadmium	102	80-120								
Chromium	95	80-120								
Cobalt	104	80-120								
Copper	96	80-120								
Lead	104	80-120								
Molybdenum	103	80-120								
Nickel	106	80-120								
Selenium	100	80-120								
Silver	99	80-120								
Thallium	102	80-120								
Vanadium	96	80-120								
Zinc	103	80-120								

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**168993**	**168994**			
Sample ID			PE13-5,10,15	PE13-20,30,4			
Date Sampled			04/10/2006	0,50,60 04/10/2006			
Date Extracted			04/14/2006	04/14/2006			
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
AA Metals							
Mercury	0.10	0.20	ND	ND			
ICP Metals							
Antimony	0.15	0.50	ND	0.80			
Arsenic	0.10	0.25	ND	2.73			
Barium	0.05	0.50	30.3	111			
Beryllium	0.05	0.50	ND	ND			
Cadmium	0.05	0.50	ND	ND			
Chromium	0.25	0.50	6.34	21.2			
Cobalt	0.05	0.50	3.14	9.67			
Copper	0.25	0.50	4.64	19.0			
Lead	0.10	0.25	1.09	4.91			
Molybdenum	0.05	0.50	ND	ND			
Nickel	0.05	0.50	4.99	15.5			
Selenium	0.20	0.50	0.67	ND			
Silver	0.40	0.50	ND	ND			
Thallium	0.20	0.50	ND	ND			
Vanadium	0.30	0.50	13.7	42.7			
Zinc	0.05	0.50	15.4	56.7			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	108	80-120								
ICP Metals										
Antimony	100	80-120								
Arsenic	100	80-120								
Barium	98	80-120								
Beryllium	99	80-120								
Cadmium	102	80-120								
Chromium	95	80-120								
Cobalt	104	80-120								
Copper	96	80-120								
Lead	104	80-120								
Molybdenum	103	80-120								
Nickel	106	80-120								
Selenium	100	80-120								
Silver	99	80-120								
Thallium	102	80-120								
Vanadium	96	80-120								
Zinc	103	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041806-1

Our Lab I.D.		**168988**	**168989**			
Client Sample I.D.		PE9-20,30,40, 49.9,60	PE11-3'			
Date Sampled		04/10/2006	04/10/2006			
Date Prepared		04/17/2006	04/17/2006			
Preparation Method						
Date Analyzed		04/18/2006	04/18/2006			
Matrix		Soil	Soil			
Units		mg/kg	mg/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
TPH DRO (C13-C22)	10	ND	ND			
TPH ORO (C22+)	50	ND	ND			

Our Lab I.D.		**168988**	**168989**			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Chlorobenzene	70-120	90	87			

QUALITY CONTROL REPORT

QC Batch No: 041806-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	106	<1	75-120	15					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 041806-2

Our Lab I.D.		168990	168991	168992	168993	168994
Client Sample I.D.		PE11-5,10,15	PE11-20,30,40,50,60	PE13-3'	PE13-5,10,15	PE13-20,30,40,50,60
Date Sampled		04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Date Prepared		04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Preparation Method						
Date Analyzed		04/19/2006	04/19/2006	04/19/2006	04/19/2006	04/19/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		168990	168991	168992	168993	168994
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	85	88	115	115	116

QUALITY CONTROL REPORT

QC Batch No: 041806-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	100	99	1.0	75-120	15					

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Page: 8
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			168988	168989	168990	168991	168992
Sample ID			PE9-20,30,40,	PE11-3'	PE11-5,10,15	PE11-20,30,4	PE13-3'
Date Sampled			49.9,60 04/10/2006	04/10/2006	04/10/2006	0,50,60 04/10/2006	04/10/2006
Date Extracted			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168988	168989	168990	168991	168992
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	102	110	118	111	110

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	83	76	8.8	42-122	<30					
4,4'-DDT (DDT)	71	67	5.8	25-160	<30					
Dieldrin	90	91	1.1	36-146	<30					
Endrin	100	97	3.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	80	73	9.2	32-127	<30					
Heptachlor	76	69	9.7	34-111	<30					

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ANALYTICAL RESULTS

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Page: 10
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**168993**	**168994**			
Sample ID			PE13-5,10,15	PE13-20,30,4			
Date Sampled			04/10/2006	0,50,60 04/10/2006			
Date Extracted			04/14/2006	04/14/2006			
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006			
Matrix			Soil	Soil			
Units			ug/kg	ug/kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Aldrin	0.23	2.00	ND	ND			
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND			
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND			
Gamma-Chlordane	0.19	2.00	ND	ND			
alpha-Chlordane	0.20	2.00	ND	ND			
4,4'-DDD (DDD)	0.27	4.00	ND	ND			
4,4'-DDE (DDE)	0.22	4.00	ND	ND			
4,4'-DDT (DDT)	0.22	4.00	ND	ND			
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND			
Dieldrin	0.20	4.00	ND	ND			
Endosulfan 1	0.20	2.00	ND	ND			
Endosulfan 11	0.24	4.00	ND	ND			
Endosulfan sulfate	0.27	4.00	ND	ND			
Endrin	0.25	4.00	ND	ND			
Endrin aldehyde	0.44	4.00	ND	ND			
Endrin ketone	0.30	4.00	ND	ND			
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND			
Heptachlor	0.23	2.00	ND	ND			
Heptachlor epoxide	0.23	2.00	ND	ND			
Methoxychlor	0.39	17.00	ND	ND			
Toxaphene	17	170	ND	ND			

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ANALYTICAL RESULTS

Page: 11
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29179	04/11/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		168993	168994			
Surrogates	Con.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	116	130			

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	83	76	8.8	42-122	<30					
4,4'-DDT (DDT)	71	67	5.8	25-160	<30					
Dieldrin	90	91	1.1	36-146	<30					
Endrin	100	97	3.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	80	73	9.2	32-127	<30					
Heptachlor	76	69	9.7	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041406-1

Our Lab I.D.			168988	168989	168990	168991	168992
Client Sample I.D.			PE9-20,30,40, 49.9,60	PE11-3'	PE11-5,10,15	PE11-20,30,40,50,60	PE13-3'
Date Sampled			04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Date Prepared			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.		168988	168989	168990	168991	168992
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	102	110	118	111	110

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	105	106	<1	39-150	<30

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ANALYTICAL RESULTS

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1200 Pier E Street
Long Beach, CA

Page: 13
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041406-1

Our Lab I.D.			168993	168994
Client Sample I.D.			PE13-5,10,15	PE13-20,30,40,50,60
Date Sampled			04/10/2006	04/10/2006
Date Prepared			04/14/2006	04/14/2006
Preparation Method				
Date Analyzed			04/14/2006	04/14/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND

Our Lab I.D.		168993	168994
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery			
Decachlorobiphenyl	43-169	116	130

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	105	106	<1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041506-1C

Our Lab I.D.			168989	168992	169004	169005
Client Sample I.D.			PE11-3'	PE13-3'	PE11-14'7"	PE13-14'4"
Date Sampled			04/10/2006	04/10/2006	04/10/2006	04/10/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method						
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041506-1C

Our Lab I.D.			168989	168992	169004	169005
Client Sample I.D.			PE11-3'	PE13-3'	PE11-14'7"	PE13-14'4"
Date Sampled			04/10/2006	04/10/2006	04/10/2006	04/10/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method						
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041506-1C

Our Lab I.D.			168989	168992	169004	169005
Client Sample I.D.			PE11-3'	PE13-3'	PE11-14'7"	PE13-14'4"
Date Sampled			04/10/2006	04/10/2006	04/10/2006	04/10/2006
Date Prepared			04/15/2006	04/15/2006	04/15/2006	04/15/2006
Preparation Method						
Date Analyzed			04/15/2006	04/15/2006	04/15/2006	04/15/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND

Our Lab I.D.			168989	168992	169004	169005
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Bromofluorobenzene	70-120		101	103	101	99
Dibromofluoromethane	70-120		96	92	94	92
Toluene-d8	70-120		101	99	100	100

QUALITY CONTROL REPORT

QC Batch No: 041506-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	89	100	11.6	75-120	15
Chlorobenzene	93	96	3.2	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	99	98	1.0	75-120	15
MTBE	99	89	10.6	75-120	15
Toluene (Methyl benzene)	99	102	3.0	75-120	15
Trichloroethene (TCE)	97	101	4.0	75-120	15

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041406-1

Our Lab I.D.		168988	168989	168990	168991	168992
Client Sample I.D.		PE9-20,30,40, 49.9,60	PE11-3'	PE11-5,10,15	PE11-20,30,40,50,60	PE13-3'
Date Sampled		04/10/2006	04/10/2006	04/10/2006	04/10/2006	04/10/2006
Date Prepared		04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method						
Date Analyzed		04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	24.9	ND	ND	ND	ND
Benzo(b)fluoranthene	2	34.5	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	25.2	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	22.9	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	18.0	ND	ND	ND	ND
Pyrene	10	47.7	ND	ND	ND	ND

Our Lab I.D.		168988	168989	168990	168991	168992
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	62	55	68	58	44
Phenol-d5	10-107	70	63	82	75	54
2,4,6-Tribromophenol	10-123	110	79	91	79	86
Nitrobenzene-d5	35-114	50	48	59	53	46
2-Fluorobiphenyl	18-116	57	51	62	50	49
Terphenyl-d14	33-141	72	78	85	73	70

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	75	77	2.6	46-118						
Pyrene	96	94	2.1	26-127						

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041406-1

Our Lab I.D.		**168993**	**168994**			
Client Sample I.D.		PE13-5,10,15	PE13-20,30,40,50,60			
Date Sampled		04/10/2006	04/10/2006			
Date Prepared		04/14/2006	04/14/2006			
Preparation Method						
Date Analyzed		04/14/2006	04/14/2006			
Matrix		Soil	Soil			
Units		ug/kg	ug/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
Acenaphthene	100	ND	ND			
Acenaphthylene	50	ND	ND			
Anthracene	2	ND	ND			
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND			
Benzo(a)pyrene	5	ND	11.5			
Benzo(b)fluoranthene	2	ND	ND			
Benzo(ghi)perylene	7	ND	ND			
Benzo(k)fluoranthene	2	ND	ND			
Chrysene	5	ND	ND			
Dibenz(a,h)anthracene	17	ND	ND			
Fluoranthene	5	ND	30.0			
Fluorene	10	ND	ND			
Indeno(1,2,3-cd)pyrene	5	ND	ND			
Naphthalene	50	ND	ND			
Phenanthrene	4	ND	ND			
Pyrene	10	ND	46.7			

Our Lab I.D.		**168993**	**168994**			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
2-Fluorophenol	21-105	43	82			
Phenol-d5	10-107	46	99			
2,4,6-Tribromophenol	10-123	54	122			
Nitrobenzene-d5	35-114	45	88			
2-Fluorobiphenyl	18-116	42	96			
Terphenyl-d14	33-141	64	121			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29179	04/11/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	75	77	2.6	46-118						
Pyrene	96	94	2.1	26-127						

AMERICAN SCIENTIFIC LABORATORIES, LLC
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Ordered By

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Number of Pages 26
Date Received 04/12/2006
Date Reported 04/24/2006

Job Number	Ordered	Client
29199	04/12/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 16 samples analyzed as specified on attached chain of custody.

Wendy Lu
Organics Supervisor

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:
1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 36997 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29199

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction: * Composite with PE13-20	Project ID: 0106.0015.002.001		
E-mail: Collected 4/11/06	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE13-20/30/40/50/60	PE14-5'/10'/16'	PE14-20'/29'?					Remarks
		PE 13-30'	4/11/06	07:40		Plastic	Soil	None	X	X	X		X	X							*
		PE 13-40'	Composite	08:20										X							
		PE 13-50'		08:50										X		Job # 29199					
		PE13-60'		10:05										X							
1	169126	PE14-3'		10:45	2	Plastic Encore			X	X	X		X								
2	169127	PE14-5'		10:55	1	Plastic			X	X	X		X		X						
		PE14-10'	Composite	11:00	1	Plastic									X						
		PE14-16'		11:10	1	Plastic									X						
3	169128	PE14-20'		11:15					X	X	X		X			X					
4	169129	PE14-3'		10:45	1	encore						X									

Collected By: Scott Miller	Date 4/11/06	Time See above	Relinquished By: Scott Miller	Date 4/11/06	Time 16:45
Relinquished By:	Date	Time	Received For Laboratory	Date 4/12/06	Time 9:15
Received By:	Date	Time	Condition of Sample		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

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COC# № 36998 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29199

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza # 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 19[redacted]37	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	4015 Ext	8081 A/8082	8260 B	8310	PE 14 - 20'/29'7"	PE 12 - 5'/9'9"/14'	PE 12 - 20'/29'4"				Remarks
		PE 14-29'7"	4/11/06	11:35	1	Plastic	Soil	None						X						
5	169130	PE 14-16'		11:55	3	encore						X								
6	169131	PE 12-3'		12:40	2	Plastic			X	X	X		X							
7	169132	PE12-3'		12:40	3	encore						X								
8	169133	PE12-5' (Composite)		12:45	1	Plastic			X	X	X		X		X					
		PE12-9'9"		12:52	1										X					
		PE12-14'		13:00	1										X					
9	169134	PE12-20' (Comp.)		13:15	1				X	X	X		X			X				
		PE12-29'4"		13:35	1											X				
10	169135	PE12-14'6"		13:45	3	encore						X								

Collected By: Scott Miles	Date 4/11/06	Time See above	Relinquished By: Scott Miles Date 4/11/06 Time 16:45
Relinquished By:	Date	Time	Received For Laboratory: [illegible] Date 4/12/06 Time 1415
Received By:	Date	Time	Condition of Sample:

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

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COC# № 36999 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29199

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction:	
E-mail:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE10 - 5/10/14'6"	Arsenic						Remarks
11	169136	PE10-3'	4/11/06	14:00	3	encore	Soil	None				X									
12	169137	PE10-5' (Composite)		14:10	1	Plastic			X	X	X		X	X							
		PE10-10'		14:15	1									X							
		PE10-14'6"		14:25	1									X							
13	169138	PE10-20'		14:50	1										X						
13	169139	PE10-14'6"		14:55	3	encore						X									
14	169140	PE1-3'		15:20	2	Plastic			X	X	X		X								
15	169141	PE1-3'		15:20	3	encore						X									
16	169142	PE-10-3'		14:00	2	Plastic			X	X	X		X								

Collected By: Brett Miller	Date 4/11/06	Time see above	Relinquished By: Brett Miller Date 4/11/06 Time 16:45
Relinquished By:	Date	Time	Received For Laboratory MOB Date 4/12/06 Time 1415
Received By:	Date	Time	Condition of Sample:

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169126	169127	169128	169131	169133
Sample ID			PE14-3'	PE14-5',10',1	PE14-20',29'7	PE12-3'	PE12-5',9'9",1
Date Sampled			04/11/2006	6' 04/11/2006	" 04/11/2006	04/11/2006	4' 04/11/2006
Date Extracted			04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Preparation Method							
Date Analyzed			04/18/2006	04/18/2006	04/18/2006	04/18/2006	04/18/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND	ND	ND
Arsenic	0.10	0.25	ND	ND	ND	1.24	ND
Barium	0.05	0.50	30.1	25.4	83.9	57.1	27.3
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	10.9	8.37	14.5	14.6	9.63
Cobalt	0.05	0.50	4.00	3.14	7.63	5.54	3.52
Copper	0.25	0.50	3.68	2.06	11.0	6.47	2.91
Lead	0.10	0.25	1.47	1.05	3.96	3.29	1.31
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	7.13	5.26	10.2	9.56	5.91
Selenium	0.20	0.50	0.77	0.85	0.71	0.59	0.60
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	19.3	15.1	32.0	29.5	17.1
Zinc	0.05	0.50	22.7	19.8	43.4	24.5	22.2

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ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	99	80-120								
Barium	96	80-120								
Beryllium	96	80-120								
Cadmium	100	80-120								
Chromium	93	80-120								
Cobalt	102	80-120								
Copper	93	80-120								
Lead	104	80-120								
Molybdenum	98	80-120								
Nickel	98	80-120								
Selenium	101	80-120								
Silver	94	80-120								
Thallium	102	80-120								
Vanadium	94	80-120								
Zinc	102	80-120								

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 4
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169134	169137	169140	169142
Sample ID			PE12-20',29'4	PE10-5',10',1	PE1-3'	PE10-3'
Date Sampled			" 04/11/2006	4'6" 04/11/2006	04/11/2006	04/11/2006
Date Extracted			04/17/2006	04/17/2006	04/17/2006	04/17/2006
Preparation Method						
Date Analyzed			04/18/2006	04/18/2006	04/18/2006	04/18/2006
Matrix			Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
AA Metals						
Mercury	0.10	0.20	ND	ND	ND	ND
ICP Metals						
Antimony	0.15	0.50	0.51	ND	ND	ND
Arsenic	0.10	0.25	ND	ND	ND	2.19
Barium	0.05	0.50	59.2	59.2	25.9	50.1
Beryllium	0.05	0.50	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND
Chromium	0.25	0.50	17.7	13.5	10.6	14.1
Cobalt	0.05	0.50	8.81	6.03	4.54	6.14
Copper	0.25	0.50	11.9	8.15	3.07	6.19
Lead	0.10	0.25	2.98	2.53	1.35	1.89
Molybdenum	0.05	0.50	0.97	ND	ND	ND
Nickel	0.05	0.50	16.6	9.18	7.49	9.82
Selenium	0.20	0.50	0.62	0.73	0.84	0.61
Silver	0.40	0.50	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND
Vanadium	0.30	0.50	31.5	24.5	18.8	28.0
Zinc	0.05	0.50	35.1	27.7	23.3	34.0

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ANALYTICAL RESULTS

Page: 5
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	99	80-120								
Barium	96	80-120								
Beryllium	96	80-120								
Cadmium	100	80-120								
Chromium	93	80-120								
Cobalt	102	80-120								
Copper	93	80-120								
Lead	104	80-120								
Molybdenum	98	80-120								
Nickel	98	80-120								
Selenium	101	80-120								
Silver	94	80-120								
Thallium	102	80-120								
Vanadium	94	80-120								
Zinc	102	80-120								

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ANALYTICAL RESULTS

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Site

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Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 6
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 042206-2

Our Lab I.D.		169126	169127	169128	169131	169133
Sample ID		PE14-3'	PE14-5',10',16'	PE14-20',29'7"	PE12-3'	PE12-5',9'9",14'
Date Sampled		04/11/2006	04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Extracted		04/19/2006	04/19/2006	04/19/2006	04/19/2006	04/19/2006
Preparation Method						
Date Analyzed		04/23/2006	04/23/2006	04/23/2006	04/23/2006	04/23/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		169126	169127	169128	169131	169133
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	99	99	99	99	87	99

QUALITY CONTROL REPORT

Batch No: 042206-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	104	<1	75-120	15					

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ANALYTICAL RESULTS

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Attn: Greg Dickinson

Page: 7
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 042206-2

Our Lab I.D.		169134	169137	169140	169142	
Sample ID		PE12-20',29'4"	PE10-5',10',14'6"	PE1-3'	PE10-3'	
Date Sampled		04/11/2006	04/11/2006	04/11/2006	04/11/2006	
Date Extracted		04/19/2006	04/19/2006	04/19/2006	04/19/2006	
Preparation Method						
Date Analyzed		04/23/2006	04/23/2006	04/23/2006	04/23/2006	
Matrix		Soil	Soil	Soil	Soil	
Units		mg/kg	mg/kg	mg/kg	mg/kg	
Detection Limit Multiplier		1	1	1	1	
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH DRO (C13-C22)	10	ND	ND	ND	ND	
TPH ORO (C22+)	50	ND	ND	ND	ND	

Our Lab I.D.		169134	169137	169140	169142	
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery						
Chlorobenzene	70-120	106	91	86	94	

QUALITY CONTROL REPORT

Batch No: 042206-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	104	<1	75-120	15					

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ANALYTICAL RESULTS

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Page: 8
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169126**	**169127**	**169128**	**169131**	**169133**
Sample ID			PE14-3'	PE14-5',10',1	PE14-20',29'7	PE12-3'	PE12-5',9'9",1
Date Sampled			04/11/2006	6' 04/11/2006	" 04/11/2006	04/11/2006	4' 04/11/2006
Date Extracted			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Page: 9
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169126	169127	169128	169131	169133
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	121	150	134	141	134

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	83	76	8.8	42-122	<30					
4,4'-DDT (DDT)	71	67	5.8	25-160	<30					
Dieldrin	90	91	1.1	36-146	<30					
Endrin	100	97	3.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	80	73	9.2	32-127	<30					
Heptachlor	76	69	9.7	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 10
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			169134	169137	169140	169142
Sample ID			PE12-20',29'4	PE10-5',10',1	PE1-3'	PE10-3'
Date Sampled			" 04/11/2006	4'6" 04/11/2006	04/11/2006	04/11/2006
Date Extracted			04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method						
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169134	169137	169140	169142	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	92	81	85	79	

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	83	76	8.8	42-122	<30					
4,4'-DDT (DDT)	71	67	5.8	25-160	<30					
Dieldrin	90	91	1.1	36-146	<30					
Endrin	100	97	3.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	80	73	9.2	32-127	<30					
Heptachlor	76	69	9.7	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041406-1

Our Lab I.D.			169126	169127	169128	169131	169133
Client Sample I.D.			PE14-3'	PE14-5',10',16'	PE14-20',29'7"	PE12-3'	PE12-5',9'9",14'
Date Sampled			04/11/2006	04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Prepared			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method							
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169126	169127	169128	169131	169133
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		121	150	134	141	134

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	105	106	<1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041406-1

Our Lab I.D.			169134	169137	169140	169142
Client Sample I.D.			PE12-20',29'4"	PE10-5',10',14'6"	PE1-3'	PE10-3'
Date Sampled			04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Prepared			04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method						
Date Analyzed			04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND

Our Lab I.D.			169134	169137	169140	169142
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169		92	81	85	79

QUALITY CONTROL REPORT

QC Batch No: 041406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	105	106	<1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041906-1B

Our Lab I.D.			**169129**
Client Sample I.D.			PE14-3' Encore
Date Sampled			04/11/2006
Date Prepared			04/19/2006
Preparation Method			
Date Analyzed			04/19/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041906-1B

Our Lab I.D.			169129
Client Sample I.D.			PE14-3' Encore
Date Sampled			04/11/2006
Date Prepared			04/19/2006
Preparation Method			
Date Analyzed			04/19/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041906-1B

Our Lab I.D.			169129
Client Sample I.D.			PE14-3' Encore
Date Sampled			04/11/2006
Date Prepared			04/19/2006
Preparation Method			
Date Analyzed			04/19/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169129
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	100
Dibromofluoromethane	70-120	114
Toluene-d8	70-120	102

QUALITY CONTROL REPORT

QC Batch No: 041906-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	82	90	9.3	75-120	15
Chlorobenzene	109	104	4.7	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	90	86	4.5	75-120	15
MTBE	99	106	6.8	75-120	15
Toluene (Methyl benzene)	82	94	13.6	75-120	15
Trichloroethene (TCE)	100	96	4.1	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-1C

Our Lab I.D.			169132	169135	169136	169139
Client Sample I.D.			PE12-3' Encore	PE12-14'6" Encore	PE10-3' Encore	PE10-14'6" Encore
Date Sampled			04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-1C

Our Lab I.D.			169132	169135	169136	169139
Client Sample I.D.			PE12-3' Encore	PE12-14'6" Encore	PE10-3' Encore	PE10-14'6" Encore
Date Sampled			04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-1C

Our Lab I.D.			169132	169135	169136	169139
Client Sample I.D.			PE12-3' Encore	PE12-14'6" Encore	PE10-3' Encore	PE10-14'6" Encore
Date Sampled			04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND

Our Lab I.D.			169132	169135	169136	169139
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Bromofluorobenzene	70-120		118	105	104	105
Dibromofluoromethane	70-120		96	96	70	82
Toluene-d8	70-120		78	86	92	76

QUALITY CONTROL REPORT

QC Batch No: 042006-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	97	97	<1	75-120	15
Chlorobenzene	88	98	10.8	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	108	116	7.1	75-120	15
MTBE	85	96	12.2	75-120	15
Toluene (Methyl benzene)	108	110	1.8	75-120	15
Trichloroethene (TCE)	99	108	8.7	75-120	15

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 20

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-2B

Our Lab I.D.			**169130**	**169141**
Client Sample I.D.			PE14-16' Encore	PE1-3' Encore
Date Sampled			04/11/2006	04/11/2006
Date Prepared			04/21/2006	04/21/2006
Preparation Method				
Date Analyzed			04/21/2006	04/21/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	8J
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-2B

Our Lab I.D.			169130	169141
Client Sample I.D.			PE14-16' Encore	PE1-3' Encore
Date Sampled			04/11/2006	04/11/2006
Date Prepared			04/21/2006	04/21/2006
Preparation Method				
Date Analyzed			04/21/2006	04/21/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29199	04/12/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-2B

Our Lab I.D.			169130	169141
Client Sample I.D.			PE14-16' Encore	PE1-3' Encore
Date Sampled			04/11/2006	04/11/2006
Date Prepared			04/21/2006	04/21/2006
Preparation Method				
Date Analyzed			04/21/2006	04/21/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Comment(s):
Low Di-B-F-Methane Recoverage, due to matrix.

Our Lab I.D.			169130	169141
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Bromofluorobenzene	70-120		103	104
Dibromofluoromethane	70-120		0	114
Toluene-d8	70-120		106	102

QUALITY CONTROL REPORT

QC Batch No: 042006-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	104	104	<1	75-120	15
Chlorobenzene	97	96	1.0	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	94	99	5.2	75-120	15
MTBE	98	98	<1	75-120	15
Toluene (Methyl benzene)	97	94	3.1	75-120	15
Trichloroethene (TCE)	111	111	<1	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 23
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		169126	169127	169128	169131	169133
Sample ID		PE14-3'	PE14-5',10',16'	PE14-20',29'7"	PE12-3'	PE12-5',9'9",14'
Date Sampled		04/11/2006	04/11/2006	04/11/2006	04/11/2006	04/11/2006
Date Extracted		04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Preparation Method						
Date Analyzed		04/14/2006	04/14/2006	04/14/2006	04/14/2006	04/14/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	6.68	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	19.3	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	29.9	ND	ND

Our Lab I.D.		169126	169127	169128	169131	169133
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	56	59	86	87	64
Phenol-d5	10-107	109	94	108	111	94
2,4,6-Tribromophenol	10-123	112	107	123	112	118
Nitrobenzene-d5	35-114	87	91	97	87	99
2-Fluorobiphenyl	18-116	83	69	96	103	83

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ANALYTICAL RESULTS

Page: **24**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		**169126**	**169127**	**169128**	**169131**	**169133**
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Terphenyl-d14	33-141	115	129	110	108	112

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	75	77	2.6	46-118						
Pyrene	96	94	2.1	26-127						

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 25
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		169134	169137	169140	169142	
Sample ID		PE12-20',29'4"	PE10-5',10',14'6"	PE1-3'	PE10-3'	
Date Sampled		04/11/2006	04/11/2006	04/11/2006	04/11/2006	
Date Extracted		04/17/2006	04/17/2006	04/17/2006	04/17/2006	
Preparation Method						
Date Analyzed		04/17/2006	04/17/2006	04/17/2006	04/17/2006	
Matrix		Soil	Soil	Soil	Soil	
Units		ug/kg	ug/kg	ug/kg	ug/kg	
Detection Limit Multiplier		1	1	1	1	
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acenaphthene	100	ND	ND	ND	ND	
Acenaphthylene	50	ND	ND	ND	ND	
Anthracene	2	ND	ND	ND	ND	
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	
Benzo(a)pyrene	5	ND	ND	ND	ND	
Benzo(b)fluoranthene	2	ND	ND	ND	ND	
Benzo(ghi)perylene	7	ND	ND	ND	ND	
Benzo(k)fluoranthene	2	ND	ND	ND	ND	
Chrysene	5	ND	ND	ND	ND	
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	
Fluoranthene	5	ND	ND	ND	ND	
Fluorene	10	ND	ND	ND	ND	
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	
Naphthalene	50	ND	ND	ND	ND	
Phenanthrene	4	ND	ND	ND	ND	
Pyrene	10	ND	ND	ND	ND	

Our Lab I.D.		169134	169137	169140	169142	
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery						
2-Fluorophenol	21-105	24	33	39	52	
Phenol-d5	10-107	34	43	60	67	
2,4,6-Tribromophenol	10-123	29	34	78	68	
Nitrobenzene-d5	35-114	67	41	60	56	
2-Fluorobiphenyl	18-116	37	38	55	64	

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ANALYTICAL RESULTS

Page: 26
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29199	04/12/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		169134	169137	169140	169142	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Terphenyl-d14	33-141	39	55	100	87	

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	65	74	12.9	46-118						
Pyrene	73	77	5.3	26-127						

AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

Ordered By

Pacific Edge Engineering, Inc.
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Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 27
Date Received 04/13/2006
Date Reported 04/25/2006

Job Number	Ordered	Client
29215	04/13/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 14 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Wendy Lu
Organics Supervisor

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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Environmental Testing Services
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COC# № 37000 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29215

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE 29-5'/10'/14'1"	PE 29-20'/29'7"					Remarks
1	169199	PE29-3'	4/12/06	07:25	3	encore	Soil	None				X								
2	169200	PE29-3'		07:25	2	Plastic			X	X	X		X							
3	169201	PE29-5'		07:35	1				X	X	X		X	X						
		PE29-10'	composite	07:40	1									X						
		PE29-14'1"		07:50	1									X						
4	169202	PE29-20'		08:05	1				X	X	X		X		X					
		PE29-29'7"	composite	08:30	1										X					
		PE29-40'		09:14	1										X					
		PE29-49'		09:50	1										X					
		PE29-60'		10:47	1										X					

Collected By: Scott Miller	Date 4/12/06	Time as above	Relinquished By: Scott Miller	Date 4/12/06	Time 17:00
Relinquished By: [signature]	Date 4/13/06	Time	Received For Laboratory: MOSES	Date 4/13/06	Time 1435
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 32520 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29215

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE28-5'/9.5'/13'11"	PE28-20'/29'5"/40'	Remarks
5	169203	PE29-14'	4/12/06	10:50	3	encore	Soil	None				X				
6	169204	PE28-3'		11:18	3	encore						X				
7	169205	PE28-3'		11:18	2	Plastic			X	X	X		X			
8	169206	PE28-5'9 (Composite)		11:30	1				X	X	X		X	X		
		PE28-9.5 (Composite)		11:33	1									X		
		PE28-13'11" (Composite)		11:38	1									X		
9	169207	PE28-20' (Composite)		11:51	1				X	X	X		X		X	
		PE28-29'5"		13:00	1										X	
		PE28-40'		13:50	1										X	
10	169208	PE28-13'11"		14:06	3	encore						X				

Collected By: Scott Miller Date 4/12/06 Time as above

Relinquished By: Scott Miller Date 4/12/06 Time 17:00

Relinquished By: [signature] Date 4/13/06 Time

Received For Laboratory [signature] Date 4/13/06 Time 1435

Condition of Sample:

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 32524 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29215

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering
Address: 26691 Plaza #270
Mission Viejo, CA 92691
Telephone: 949 470-1937
Fax: 949 470-0943
Special Instruction: * Wait for rest of composite samples to be collected and listed

Project Name: Pier E Redevelopment
Site Address: 1200 Pier E Street
Long Beach, CA
Project ID: 0106.0015.002.001
Project Manager: Greg Dickinson

Report To: PM
Address: SAA
Invoice To:
Address:
P.O.#:

ANALYSIS REQUESTED: Title 22 Metals; 8015 Ext; 8081A/8082; 8260B; 8310; PE 5/10/14'3"; Hold

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE 5/10/14'3"	Hold						Remarks
11	169209	PE30-3'	4/12/06	14:40	3	encore	Soil	None				X									
12	169210	PE30-3'		14:40	2	Plastic			X	X	X		X								
13	169211	PE30-5' (composite)		14:48	1				X	X	X		X	X							
		PE30-10'		14:55	1									X							Take sample from 10' and with "XX"
		PE30-14'3"		15:00	1									X							
	169212	PE30-20'		15:15	1										X						*
14	169213	PE30-14'3"		15:30	3	encore						X									

Collected By: Scott Miller Date 4/12/06 Time as above
Relinquished By: Scott Miller Date 4/12/06 Time 17:00
Relinquished By: [signature] Date 4/13/06 Time
Received For Laboratory [signature] Date 4/13/06 Time 1435
Condition of Sample:

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

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Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169200	169201	169202	169205	169206
Sample ID			PE29-3'	PE29-5',10',1	PE29-20,30,4	PE28-3'	PE28-5',10',13
Date Sampled			04/12/2006	4'1" 04/12/2006	0,49,60 04/12/2006	04/12/2006	'11" 04/12/2006
Date Extracted			04/18/2006	04/18/2006	04/18/2006	04/18/2006	04/18/2006
Preparation Method							
Date Analyzed			04/18/2006	04/18/2006	04/18/2006	04/18/2006	04/18/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	ND	0.65	ND	0.53
Arsenic	0.10	0.25	ND	0.45	ND	ND	1.32
Barium	0.05	0.50	43.8	31.7	57.9	27.5	46.5
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	12.5	9.05	13.2	8.27	13.2
Cobalt	0.05	0.50	4.97	3.93	6.17	3.44	5.50
Copper	0.25	0.50	3.91	4.07	8.68	2.96	8.99
Lead	0.10	0.25	0.91	1.69	2.77	1.21	4.50
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	8.32	6.33	10.0	5.93	10.5
Selenium	0.20	0.50	0.69	0.81	0.76	0.69	0.65
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	22.1	17.4	24.3	15.2	22.0
Zinc	0.05	0.50	28.3	19.9	34.4	22.6	29.1

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	99	80-120								
Barium	96	80-120								
Beryllium	96	80-120								
Cadmium	100	80-120								
Chromium	93	80-120								
Cobalt	102	80-120								
Copper	93	80-120								
Lead	104	80-120								
Molybdenum	98	80-120								
Nickel	98	80-120								
Selenium	101	80-120								
Silver	94	80-120								
Thallium	102	80-120								
Vanadium	94	80-120								
Zinc	102	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169207**	**169210**	**169211**		
Sample ID			PE28-20',29'5	PE30-3'	PE30-5',10',1		
Date Sampled			",40' 04/12/2006	04/12/2006	4'3" 04/12/2006		
Date Extracted			04/18/2006	04/18/2006	04/18/2006		
Preparation Method							
Date Analyzed			04/18/2006	04/18/2006	04/18/2006		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
AA Metals							
Mercury	0.10	0.20	ND	ND	ND		
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND		
Arsenic	0.10	0.25	ND	ND	ND		
Barium	0.05	0.50	43.0	33.4	27.3		
Beryllium	0.05	0.50	ND	ND	ND		
Cadmium	0.05	0.50	ND	ND	ND		
Chromium	0.25	0.50	9.56	8.93	14.4		
Cobalt	0.05	0.50	4.69	3.56	6.19		
Copper	0.25	0.50	5.32	2.62	9.32		
Lead	0.10	0.25	1.76	1.22	1.63		
Molybdenum	0.05	0.50	ND	ND	ND		
Nickel	0.05	0.50	7.48	5.84	15.5		
Selenium	0.20	0.50	0.62	0.61	0.82		
Silver	0.40	0.50	ND	ND	ND		
Thallium	0.20	0.50	ND	ND	ND		
Vanadium	0.30	0.50	18.0	17.0	16.9		
Zinc	0.05	0.50	24.6	20.0	23.7		

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	99	80-120								
Barium	96	80-120								
Beryllium	96	80-120								
Cadmium	100	80-120								
Chromium	93	80-120								
Cobalt	102	80-120								
Copper	93	80-120								
Lead	104	80-120								
Molybdenum	98	80-120								
Nickel	98	80-120								
Selenium	101	80-120								
Silver	94	80-120								
Thallium	102	80-120								
Vanadium	94	80-120								
Zinc	102	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042206-2

Our Lab I.D.		169200	169201	169202	169205	
Client Sample I.D.		PE29-3'	PE29-5',10',14'1"	PE29-20,30,40,49,60	PE28-3'	
Date Sampled		04/12/2006	04/12/2006	04/12/2006	04/12/2006	
Date Prepared		04/19/2006	04/19/2006	04/19/2006	04/19/2006	
Preparation Method						
Date Analyzed		04/23/2006	04/23/2006	04/23/2006	04/23/2006	
Matrix		Soil	Soil	Soil	Soil	
Units		mg/kg	mg/kg	mg/kg	mg/kg	
Dilution Factor		1	1	1	1	
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH DRO (C13-C22)	10	ND	ND	ND	ND	
TPH ORO (C22+)	50	ND	ND	ND	ND	

Our Lab I.D.		169200	169201	169202	169205	
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery						
Chlorobenzene	70-120	104	111	102	120	

QUALITY CONTROL REPORT

QC Batch No: 042206-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	104	<1	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042306-1

Our Lab I.D.		169207	169210	169211		
Client Sample I.D.		PE28-20',29'5",40'	PE30-3'	PE30-5',10',14'3"		
Date Sampled		04/12/2006	04/12/2006	04/12/2006		
Date Prepared		04/19/2006	04/19/2006	04/19/2006		
Preparation Method						
Date Analyzed		04/24/2006	04/24/2006	04/24/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	ND	ND		
TPH ORO (C22+)	50	ND	ND	ND		

Our Lab I.D.		169207	169210	169211		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	120	106	120		

QUALITY CONTROL REPORT

QC Batch No: 042306-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	105	<1	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042406-2

Our Lab I.D.		**169206**				
Client Sample I.D.		PE28-5',10',13'11"				
Date Sampled		04/12/2006				
Date Prepared		04/24/2006				
Preparation Method						
Date Analyzed		04/25/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**169206**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	106				

QUALITY CONTROL REPORT

QC Batch No: 042406-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	103	<1	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169200**	**169201**	**169202**	**169205**	**169206**
Sample ID			PE29-3'	PE29-5',10',1	PE29-20,30,4	PE28-3'	PE28-5',10',13
Date Sampled			04/12/2006	4'1" 04/12/2006	0,49,60 04/12/2006	04/12/2006	'11" 04/12/2006
Date Extracted			04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Preparation Method							
Date Analyzed			04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	0.74J	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	1.59J	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	11.8	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169200	169201	169202	169205	169206
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	101	113	105	83	84

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	82	81	1.2	42-122	<30					
4,4'-DDT (DDT)	68	81	17.4	25-160	<30					
Dieldrin	89	97	8.6	36-146	<30					
Endrin	92	102	10.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	79	79	<1	32-127	<30					
Heptachlor	75	75	<1	34-111	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169207**
Sample ID			PE28-20',29'5
Date Sampled			",40' 04/12/2006
Date Extracted			04/17/2006
Preparation Method			
Date Analyzed			04/17/2006
Matrix			Soil
Units			ug/kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
Aldrin	0.23	2.00	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND
Gamma-Chlordane	0.19	2.00	ND
alpha-Chlordane	0.20	2.00	ND
4,4'-DDD (DDD)	0.27	4.00	ND
4,4'-DDE (DDE)	0.22	4.00	ND
4,4'-DDT (DDT)	0.22	4.00	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND
Dieldrin	0.20	4.00	ND
Endosulfan 1	0.20	2.00	ND
Endosulfan 11	0.24	4.00	ND
Endosulfan sulfate	0.27	4.00	ND
Endrin	0.25	4.00	ND
Endrin aldehyde	0.44	4.00	ND
Endrin ketone	0.30	4.00	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND
Heptachlor	0.23	2.00	ND
Heptachlor epoxide	0.23	2.00	ND
Methoxychlor	0.39	17.00	ND
Toxaphene	17	170	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169207				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	90				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	82	81	1.2	42-122	<30					
4,4'-DDT (DDT)	68	81	17.4	25-160	<30					
Dieldrin	89	97	8.6	36-146	<30					
Endrin	92	102	10.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	79	79	<1	32-127	<30					
Heptachlor	75	75	<1	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169210**	**169211**			
Sample ID			PE30-3'	PE30-5',10',1			
Date Sampled			04/12/2006	4'3" 04/12/2006			
Date Extracted			04/19/2006	04/19/2006			
Preparation Method							
Date Analyzed			04/19/2006	04/19/2006			
Matrix			Soil	Soil			
Units			ug/kg	ug/kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Aldrin	0.23	2.00	ND	ND			
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND			
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND			
Gamma-Chlordane	0.19	2.00	0.62J	ND			
alpha-Chlordane	0.20	2.00	0.53J	ND			
4,4'-DDD (DDD)	0.27	4.00	ND	ND			
4,4'-DDE (DDE)	0.22	4.00	ND	ND			
4,4'-DDT (DDT)	0.22	4.00	0.74J	ND			
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND			
Dieldrin	0.20	4.00	ND	ND			
Endosulfan I	0.20	2.00	ND	ND			
Endosulfan II	0.24	4.00	ND	ND			
Endosulfan sulfate	0.27	4.00	ND	ND			
Endrin	0.25	4.00	ND	ND			
Endrin aldehyde	0.44	4.00	ND	ND			
Endrin ketone	0.30	4.00	ND	ND			
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND			
Heptachlor	0.23	2.00	ND	ND			
Heptachlor epoxide	0.23	2.00	ND	ND			
Methoxychlor	0.39	17.00	ND	ND			
Toxaphene	17	170	ND	ND			

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29215	04/13/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169210	169211			
Surrogates	Con.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	102	107			

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	85	1.2	42-122	<30					
4,4'-DDT (DDT)	86	96	11.0	25-160	<30					
Dieldrin	94	101	7.2	36-146	<30					
Endrin	106	114	7.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	84	82	2.4	32-127	<30					
Heptachlor	88	86	2.3	34-111	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041706-1

Our Lab I.D.			169200	169201	169202	169205	169206
Client Sample I.D.			PE29-3'	PE29-5',10',14'1"	PE29-20,30,40,49,60	PE28-3'	PE28-5',10',13'11"
Date Sampled			04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Date Prepared			04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Preparation Method							
Date Analyzed			04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169200	169201	169202	169205	169206
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		101	113	105	83	84

QUALITY CONTROL REPORT

QC Batch No: 041706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	105	104	<1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041706-1

Our Lab I.D.			**169207**
Client Sample I.D.			PE28-20',29'5 ",40'
Date Sampled			04/12/2006
Date Prepared			04/17/2006
Preparation Method			
Date Analyzed			04/17/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.			**169207**
Surrogates	**% Rec.Limit**		**% Rec.**
Surrogate Percent Recovery			
Decachlorobiphenyl	43-169		90

QUALITY CONTROL REPORT

QC Batch No: 041706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	105	104	<1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 041906-1

Our Lab I.D.			169210	169211
Client Sample I.D.			PE30-3'	PE30-5',10',14'3"
Date Sampled			04/12/2006	04/12/2006
Date Prepared			04/19/2006	04/19/2006
Preparation Method				
Date Analyzed			04/19/2006	04/19/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND

Our Lab I.D.		169210	169211
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery			
Decachlorobiphenyl	43-169	102	107

QUALITY CONTROL REPORT

QC Batch No: 041906-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041906-1C

Our Lab I.D.			**169199**
Client Sample I.D.			PE29-3' Encore
Date Sampled			04/12/2006
Date Prepared			04/19/2006
Preparation Method			
Date Analyzed			04/19/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041906-1C

Our Lab I.D.			169199
Client Sample I.D.			PE29-3' Encore
Date Sampled			04/12/2006
Date Prepared			04/19/2006
Preparation Method			
Date Analyzed			04/19/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 041906-1C

Our Lab I.D.			169199
Client Sample I.D.			PE29-3' Encore
Date Sampled			04/12/2006
Date Prepared			04/19/2006
Preparation Method			
Date Analyzed			04/19/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169199
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	98
Dibromofluoromethane	70-120	94
Toluene-d8	70-120	101

QUALITY CONTROL REPORT

QC Batch No: 041906-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	92	86	6.7	75-120	15
Chlorobenzene	92	98	6.3	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	110	114	3.6	75-120	15
MTBE	92	94	2.2	75-120	15
Toluene (Methyl benzene)	98	96	2.1	75-120	15
Trichloroethene (TCE)	99	106	6.8	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-1C

Our Lab I.D.			169203	169204	169208	169209	169213
Client Sample I.D.			PE29-14'1" Encore	PE28-3' Encore	PE28-13'11" Encore	PE30-3' Encore	PE30-14'3" Encore
Date Sampled			04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-1C

Our Lab I.D.			169203	169204	169208	169209	169213
Client Sample I.D.			PE29-14'1" Encore	PE28-3' Encore	PE28-13'11" Encore	PE30-3' Encore	PE30-14'3" Encore
Date Sampled			04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-1C

Our Lab I.D.			169203	169204	169208	169209	169213
Client Sample I.D.			PE29-14'1" Encore	PE28-3' Encore	PE28-13'11" Encore	PE30-3' Encore	PE30-14'3" Encore
Date Sampled			04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			169203	169204	169208	169209	169213
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		101	100	101	106	99
Dibromofluoromethane	70-120		70	89	91	86	89
Toluene-d8	70-120		100	102	101	101	101

QUALITY CONTROL REPORT

QC Batch No: 042006-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	97	97	<1	75-120	15
Chlorobenzene	88	98	10.8	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	108	116	7.1	75-120	15
MTBE	85	96	12.2	75-120	15
Toluene (Methyl benzene)	108	110	1.8	75-120	15
Trichloroethene (TCE)	99	108	8.7	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041706-1

Our Lab I.D.		169200	169201	169202	169205	169206
Client Sample I.D.		PE29-3'	PE29-5',10',14'1"	PE29-20,30,40,49,60	PE28-3'	PE28-5',10',13'11"
Date Sampled		04/12/2006	04/12/2006	04/12/2006	04/12/2006	04/12/2006
Date Prepared		04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Preparation Method						
Date Analyzed		04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		169200	169201	169202	169205	169206
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	50	46	44	53	35
Phenol-d6	10-107	64	61	59	71	50
2,4,6-Tribromophenol	10-123	65	63	57	60	61
Nitrobenzene-d5	35-114	68	62	64	70	79
2-Fluorobiphenyl	18-116	64	60	57	68	54
Terphenyl-d14	33-141	73	79	72	68	69

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 041706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	65	74	12.9	46-118						
Pyrene	73	77	5.3	26-127						

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 041706-1

Our Lab I.D.		**169207**	**169210**	**169211**		
Client Sample I.D.		PE28-20',29'5",40'	PE30-3'	PE30-5',10',14'3"		
Date Sampled		04/12/2006	04/12/2006	04/12/2006		
Date Prepared		04/17/2006	04/18/2006	04/18/2006		
Preparation Method						
Date Analyzed		04/17/2006	04/18/2006	04/18/2006		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Acenaphthene	100	ND	ND	ND		
Acenaphthylene	50	ND	ND	ND		
Anthracene	2	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND		
Benzo(a)pyrene	5	ND	ND	ND		
Benzo(b)fluoranthene	2	ND	ND	ND		
Benzo(ghi)perylene	7	ND	ND	ND		
Benzo(k)fluoranthene	2	ND	ND	ND		
Chrysene	5	ND	ND	ND		
Dibenz(a,h)anthracene	17	ND	ND	ND		
Fluoranthene	5	ND	ND	ND		
Fluorene	10	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND		
Naphthalene	50	ND	ND	ND		
Phenanthrene	4	ND	ND	ND		
Pyrene	10	ND	ND	ND		

Our Lab I.D.		**169207**	**169210**	**169211**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	45	39	35		
Phenol-d6	10-107	64	49	46		
2,4,6-Tribromophenol	10-123	49	48	37		
Nitrobenzene-d5	35-114	56	48	46		
2-Fluorobiphenyl	18-116	47	44	41		
Terphenyl-d14	33-141	73	65	56		

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29215	04/13/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 041706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	65	74	12.9	46-118						
Pyrene	73	77	5.3	26-127						

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Number of Pages 15
Date Received 04/14/2006
Date Reported 04/26/2006

Job Number	Ordered	Client
29236	04/14/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 5 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 32551 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29236

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 - 470 1937	Address:
Fax: 949 470 0943	
Special Instruction:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE25-5'/10'/14'4"	PE25-20'/29'7"/40'/48'7"/60'	Remarks
	169312	PE25-3'	4/14/06	07:35	3	encore	Soil	None			X					
	169313	PE25-3'		07:35	2	Plastic			X	X	X	X				
	169314	PE25-5' (composite)		07:45	1				X	X	X	X	X			
		PE25-10'		07:50	1								X			
		PE25-14'4"		07:57	1								X			
	169315	PE25-20' (comp.)		08:12	1				X	X	X	X		X		
	~~169316~~	PE25-29'7"		08:40	1									X		
	169316	PE25-14'4"		09:15	~~1~~ 3	encore					X					
		PE25-40'		09:35	1	Plastic								X		
		PE25-48'7"		10:10	1									X		

Collected By: Scott Miller Date 4/14/06 Time as above

Relinquished By: Scott Miller Date 4/14/06 Time 4:25

Relinquished By: Date Time

Received For Laboratory: [illegible] Date 4/14/06 Time 4:15

TAT ☒ Normal ☐ Rush

Condition of Sample:

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 32523 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29236

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1937	Long Beach, CA	Address:	
Fax: 949 470-0943			
Special Instruction:	Project ID: 0106.0015.002.001		
	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE25-20'/27'/40'/48'/60'	Remarks
		PE25-60'	4/14/06	10:40	1	Plastic	Soil	None					X		

Collected By: Scott Miles Date 4/14/06 Time as above

Relinquished By: Date Time

Relinquished By: Scott Miles Date 4/14/06 Time 4:15

Received For Laboratory: Date 4/14/06 Time 4:15

Condition of Sample:

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

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Site

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Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29236	04/14/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169313**	**169314**	**169315**		
Sample ID			PE25-3'	PE25-5',10',1	PE25-20,30,4		
Date Sampled			04/14/2006	4'4" 04/14/2006	0,49,60 04/14/2006		
Date Extracted			04/19/2006	04/19/2006	04/19/2006		
Preparation Method							
Date Analyzed			04/19/2006	04/19/2006	04/19/2006		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
AA Metals							
Mercury	0.10	0.20	ND	ND	ND		
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND		
Arsenic	0.10	0.25	ND	ND	1.49		
Barium	0.05	0.50	28.7	25.2	51.8		
Beryllium	0.05	0.50	ND	ND	ND		
Cadmium	0.05	0.50	ND	ND	ND		
Chromium	0.25	0.50	8.66	10.6	10.5		
Cobalt	0.05	0.50	3.52	4.19	5.21		
Copper	0.25	0.50	2.49	5.43	6.58		
Lead	0.10	0.25	1.39	1.50	2.44		
Molybdenum	0.05	0.50	ND	ND	ND		
Nickel	0.05	0.50	5.74	9.21	8.15		
Selenium	0.20	0.50	0.71	0.82	0.89		
Silver	0.40	0.50	ND	ND	ND		
Thallium	0.20	0.50	ND	ND	ND		
Vanadium	0.30	0.50	17.0	14.2	23.4		
Zinc	0.05	0.50	18.2	18.1	29.2		

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29236	04/14/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	105	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	96	80-120								
Barium	94	80-120								
Beryllium	94	80-120								
Cadmium	96	80-120								
Chromium	91	80-120								
Cobalt	99	80-120								
Copper	91	80-120								
Lead	99	80-120								
Molybdenum	99	80-120								
Nickel	102	80-120								
Selenium	95	80-120								
Silver	94	80-120								
Thallium	97	80-120								
Vanadium	92	80-120								
Zinc	96	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-1

Our Lab I.D.		**169313**	**169314**	**169315**		
Client Sample I.D.		PE25-3'	PE25-5',10',14'4"	PE25-20,30,40,49,60		
Date Sampled		04/14/2006	04/14/2006	04/14/2006		
Date Prepared		04/21/2006	04/21/2006	04/21/2006		
Preparation Method						
Date Analyzed		04/25/2006	04/25/2006	04/25/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	ND	ND		
TPH ORO (C22+)	50	ND	ND	ND		

Our Lab I.D.		**169313**	**169314**	**169315**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	99	99	107		

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	112	8.4	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29236	04/14/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169313**	**169314**	**169315**		
Sample ID			PE25-3'	PE25-5',10',1	PE25-20,30,4		
Date Sampled			04/14/2006	4'4" 04/14/2006	0,49,60 04/14/2006		
Date Extracted			04/20/2006	04/20/2006	04/20/2006		
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006		
Matrix			Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aldrin	0.23	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND		
Gamma-Chlordane	0.19	2.00	ND	ND	ND		
alpha-Chlordane	0.20	2.00	ND	ND	ND		
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND		
4,4'-DDE (DDE)	0.22	4.00	0.24J	ND	ND		
4,4'-DDT (DDT)	0.22	4.00	1.64J	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND		
Dieldrin	0.20	4.00	ND	ND	ND		
Endosulfan 1	0.20	2.00	ND	ND	ND		
Endosulfan 11	0.24	4.00	ND	ND	ND		
Endosulfan sulfate	0.27	4.00	ND	ND	ND		
Endrin	0.25	4.00	ND	ND	ND		
Endrin aldehyde	0.44	4.00	ND	ND	ND		
Endrin ketone	0.30	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND		
Heptachlor	0.23	2.00	ND	ND	ND		
Heptachlor epoxide	0.23	2.00	ND	ND	ND		
Methoxychlor	0.39	17.00	ND	ND	ND		
Toxaphene	17	170	ND	ND	ND		

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Job Number	Order Date	Client
29236	04/14/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169313	169314	169315		
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	92	95	98		

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	85	1.2	42-122	<30					
4,4'-DDT (DDT)	86	96	11.0	25-160	<30					
Dieldrin	94	101	7.2	36-146	<30					
Endrin	106	114	7.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	84	82	2.4	32-127	<30					
Heptachlor	88	86	2.3	34-111	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042006-1

Our Lab I.D.			169313	169314	169315		
Client Sample I.D.			PE25-3'	PE25-5',10',14'4"	PE25-20,30,40,49,60		
Date Sampled			04/14/2006	04/14/2006	04/14/2006		
Date Prepared			04/20/2006	04/20/2006	04/20/2006		
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006		
Matrix			Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND		
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND		
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND		
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND		
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND		
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND		
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND		

Our Lab I.D.			169313	169314	169315		
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		92	95	98		

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-2C

Our Lab I.D.			**169316**
Client Sample I.D.			PE25-14'4" Encore
Date Sampled			04/14/2006
Date Prepared			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-2C

Our Lab I.D.			169316
Client Sample I.D.			PE25-14'4" Encore
Date Sampled			04/14/2006
Date Prepared			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29236	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042006-2C

Our Lab I.D.			169316
Client Sample I.D.			PE25-14'4" Encore
Date Sampled			04/14/2006
Date Prepared			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.			169316
Surrogates	**% Rec.Limit**		**% Rec.**
Surrogate Percent Recovery			
Bromofluorobenzene	70-120		99
Dibromofluoromethane	70-120		87
Toluene-d8	70-120		102

QUALITY CONTROL REPORT

QC Batch No: 042006-2C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	97	110	12.6	75-120	15
Chlorobenzene	95	89	6.5	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	116	116	<1	75-120	15
MTBE	120	109	9.6	75-120	15
Toluene (Methyl benzene)	116	120	3.4	75-120	15
Trichloroethene (TCE)	106	103	2.9	75-120	15

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ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			**169312**
Client Sample I.D.			PE25-3' Encore
Date Sampled			04/14/2006
Date Prepared			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			169312
Client Sample I.D.			PE25-3' Encore
Date Sampled			04/14/2006
Date Prepared			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			169312
Client Sample I.D.			PE25-3' Encore
Date Sampled			04/14/2006
Date Prepared			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169312
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	98
Dibromofluoromethane	70-120	101
Toluene-d8	70-120	100

QUALITY CONTROL REPORT

QC Batch No: 042106-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	99	101	2.0	75-120	15
Chlorobenzene	90	94	4.3	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	97	96	1.0	75-120	15
MTBE	102	104	1.9	75-120	15
Toluene (Methyl benzene)	115	118	2.6	75-120	15
Trichloroethene (TCE)	97	100	3.0	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: **14**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042006-1

Our Lab I.D.		**169313**	**169314**	**169315**		
Client Sample I.D.		PE25-3'	PE25-5',10',14'4"	PE25-20,30,40,49,60		
Date Sampled		04/14/2006	04/14/2006	04/14/2006		
Date Prepared		04/20/2006	04/20/2006	04/20/2006		
Preparation Method						
Date Analyzed		04/20/2006	04/20/2006	04/20/2006		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Acenaphthene	100	ND	ND	ND		
Acenaphthylene	50	ND	ND	ND		
Anthracene	2	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND		
Benzo(a)pyrene	5	ND	ND	ND		
Benzo(b)fluoranthene	2	ND	ND	ND		
Benzo(ghi)perylene	7	ND	ND	ND		
Benzo(k)fluoranthene	2	ND	ND	ND		
Chrysene	5	ND	ND	ND		
Dibenz(a,h)anthracene	17	ND	ND	ND		
Fluoranthene	5	ND	ND	ND		
Fluorene	10	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND		
Naphthalene	50	ND	ND	ND		
Phenanthrene	4	ND	ND	ND		
Pyrene	10	ND	ND	ND		

Our Lab I.D.		**169313**	**169314**	**169315**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	45	58	49		
Phenol-d6	10-107	47	60	54		
2,4,6-Tribromophenol	10-123	62	48	43		
Nitrobenzene-d5	35-114	50	57	44		
2-Fluorobiphenyl	33-116	48	51	38		
Terphenyl-d14	33-141	83	84	69		

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29236	04/14/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	49	59	18.5	43-118						
Pyrene	60	64	6.5	26-127						

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Number of Pages 12
Date Received 04/14/2006
Date Reported 04/26/2006

Job Number	Ordered	Client
29237	04/14/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 6 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Wendy Lu
Organics Supervisor

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37004 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29237

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction: * Composite with samples	Project ID: 0106.0015.002.001		
E-mail: Collected 4/12/06	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE30-20'/29'8"/40'	PE27-5'/10'/14'1"	PE27-20'/23'1"/40'/48'/60'				Remarks
	169317	PE30-29'8"	4/13/06	07:40	1	Plastic	Soil	None	X	X	X		X	X						*
		PE30-40' COMP		08:33	1	Plastic								X						
		~~PE30-29'8"~~		~~08:54~~	~~3~~	~~encore~~						X								
	169318	PE27-3'		09:45	3	encore						X								
	169319	PE27-3'		09:45	2	Plastic			X	X	X		X							
	169320	PE27-5'	COMPOSITE	10:10	1				X	X	X		X		X					
		PE27-10'		10:15	1										X					
		PE27-14'1"		10:21	1										X					
	169321	PE27-20'	COMP	10:40	1				X	X	X		X			X				
	169322	PE27-14'1"		10:53	3	encore						X								

Collected By: [signature]	Date 4/13/06	Time as above	Relinquished By: [signature]	Date 4/13/06	Time 18:00
Relinquished By: [signature]	Date 4/14/06	Time 9:15	Received For Laboratory: [signature]	Date 4/14/06	Time 9:15
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

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COC# № 37003 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29237

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	6015 Ext	8081A/8082	8260B	8310	PE27-29'11"/40'/48'/60'						Remarks
		PE27-29'11"	4/13/06	11:10	1	Plastic	Soil	None	X	X	X		X	X						
		PE27-40'		12:00	1									X						
		PE27-48'		13:50	1									X						
		PE27-60'		16:25	1									X						

Collected By: [signature]	Date 4/13/06	Time as above	Relinquished By: [signature]	Date 4/13/06	Time 18:00
Relinquished By: [signature]	Date 4/14/06	Time 4:15	Received For Laboratory: [signature]	Date 4/14/06	Time 4:15
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

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Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29237	04/14/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169317**	**169319**	**169320**	**169321**
Sample ID			PE30-20',29'8	PE27-3'	PE27-5',10',1	PE27-20,30,4
Date Sampled			",40' 04/13/2006	04/13/2006	4'1" 04/13/2006	0,48,60 04/13/2006
Date Extracted			04/19/2006	04/19/2006	04/19/2006	04/19/2006
Preparation Method						
Date Analyzed			04/19/2006	04/19/2006	04/19/2006	04/19/2006
Matrix			Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
AA Metals						
Mercury	0.10	0.20	ND	ND	ND	ND
ICP Metals						
Antimony	0.15	0.50	ND	ND	ND	ND
Arsenic	0.10	0.25	ND	ND	ND	ND
Barium	0.05	0.50	29.6	35.1	34.5	39.6
Beryllium	0.05	0.50	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND
Chromium	0.25	0.50	10.0	10.0	11.8	9.18
Cobalt	0.05	0.50	4.23	4.16	4.90	4.27
Copper	0.25	0.50	5.45	3.83	6.57	4.97
Lead	0.10	0.25	2.27	1.58	2.91	1.98
Molybdenum	0.05	0.50	ND	ND	ND	ND
Nickel	0.05	0.50	7.47	7.45	10.7	7.04
Selenium	0.20	0.50	0.62	0.68	0.77	0.81
Silver	0.40	0.50	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND
Vanadium	0.30	0.50	17.3	18.4	18.7	17.9
Zinc	0.05	0.50	23.5	22.0	22.4	21.9

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ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29237	04/14/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	105	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	96	80-120								
Barium	94	80-120								
Beryllium	94	80-120								
Cadmium	96	80-120								
Chromium	91	80-120								
Cobalt	99	80-120								
Copper	91	80-120								
Lead	99	80-120								
Molybdenum	99	80-120								
Nickel	102	80-120								
Selenium	95	80-120								
Silver	94	80-120								
Thallium	97	80-120								
Vanadium	92	80-120								
Zinc	96	80-120								

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ANALYTICAL RESULTS

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Long Beach, CA

Page: **4**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29237	04/14/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-1

Our Lab I.D.		**169317**	**169319**	**169320**	**169321**	
Client Sample I.D.		PE30-20',29'8",40'	PE27-3'	PE27-5',10',14'1"	PE27-20,30,40,48,60	
Date Sampled		04/13/2006	04/13/2006	04/13/2006	04/13/2006	
Date Prepared		04/21/2006	04/21/2006	04/21/2006	04/21/2006	
Preparation Method						
Date Analyzed		04/25/2006	04/25/2006	04/25/2006	04/25/2006	
Matrix		Soil	Soil	Soil	Soil	
Units		mg/kg	mg/kg	mg/kg	mg/kg	
Dilution Factor		1	1	1	1	
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	
TPH DRO (C13-C22)	10	ND	ND	ND	ND	
TPH ORO (C22+)	50	ND	ND	ND	ND	

Our Lab I.D.		**169317**	**169319**	**169320**	**169321**	
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery						
Chlorobenzene	70-120	85	98	109	101	

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	112	8.4	75-120	15					

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ANALYTICAL RESULTS

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Site

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Long Beach, CA

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Attn: Greg Dickinson

Page: 5
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29237	04/14/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169317**	**169319**	**169320**	**169321**
Sample ID			PE30-20',29'8	PE27-3'	PE27-5',10',1	PE27-20,30,4
Date Sampled			",40' 04/13/2006	04/13/2006	4'1" 04/13/2006	0,48,60 04/13/2006
Date Extracted			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	1.27J	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	3.22J	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	15.4	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29237	04/14/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169317	169319	169320	169321	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	94	104	83	95	

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	85	1.2	42-122	<30					
4,4'-DDT (DDT)	86	96	11.0	25-160	<30					
Dieldrin	94	101	7.2	36-146	<30					
Endrin	106	114	7.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	84	82	2.4	32-127	<30					
Heptachlor	88	86	2.3	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 7

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29237	04/14/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042006-1

Our Lab I.D.			169317	169319	169320	169321
Client Sample I.D.			PE30-20',29'8",40'	PE27-3'	PE27-5',10',14'1"	PE27-20,30,40,48,60
Date Sampled			04/13/2006	04/13/2006	04/13/2006	04/13/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND

Our Lab I.D.			169317	169319	169320	169321
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169		94	104	83	95

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30

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ANALYTICAL RESULTS

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Long Beach, CA

Page: 8

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29237	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			**169318**	**169322**
Client Sample I.D.			PE27-3' Encore	PE27-14'1" Encore
Date Sampled			04/13/2006	04/13/2006
Date Prepared			04/21/2006	04/21/2006
Preparation Method				
Date Analyzed			04/21/2006	04/21/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29237	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			169318	169322
Client Sample I.D.			PE27-3' Encore	PE27-14'1" Encore
Date Sampled			04/13/2006	04/13/2006
Date Prepared			04/21/2006	04/21/2006
Preparation Method				
Date Analyzed			04/21/2006	04/21/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29237	04/14/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			169318	169322
Client Sample I.D.			PE27-3' Encore	PE27-14'1" Encore
Date Sampled			04/13/2006	04/13/2006
Date Prepared			04/21/2006	04/21/2006
Preparation Method				
Date Analyzed			04/21/2006	04/21/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.			169318	169322
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Bromofluorobenzene	70-120		104	100
Dibromofluoromethane	70-120		106	99
Toluene-d8	70-120		98	102

QUALITY CONTROL REPORT

QC Batch No: 042106-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	99	101	2.0	75-120	15
Chlorobenzene	90	94	4.3	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	97	96	1.0	75-120	15
MTBE	102	104	1.9	75-120	15
Toluene (Methyl benzene)	115	118	2.6	75-120	15
Trichloroethene (TCE)	97	100	3.0	75-120	15

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29237	04/14/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042006-1

Our Lab I.D.		169317	169319	169320	169321	
Client Sample I.D.		PE30-20',29'8",40'	PE27-3'	PE27-5',10',14'1"	PE27-20,30,40,48,60	
Date Sampled		04/13/2006	04/13/2006	04/13/2006	04/13/2006	
Date Prepared		04/20/2006	04/20/2006	04/20/2006	04/20/2006	
Preparation Method						
Date Analyzed		04/20/2006	04/20/2006	04/20/2006	04/20/2006	
Matrix		Soil	Soil	Soil	Soil	
Units		ug/kg	ug/kg	ug/kg	ug/kg	
Dilution Factor		1	1	1	1	
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acenaphthene	100	ND	ND	ND	ND	
Acenaphthylene	50	ND	ND	ND	154	
Anthracene	2	ND	ND	ND	203	
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	298	
Benzo(a)pyrene	5	ND	ND	ND	638	
Benzo(b)fluoranthene	2	ND	ND	ND	462	
Benzo(ghi)perylene	7	ND	ND	ND	173	
Benzo(k)fluoranthene	2	ND	ND	ND	78.5	
Chrysene	5	ND	ND	ND	321	
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	
Fluoranthene	5	ND	23.4	95.7	766	
Fluorene	10	ND	ND	ND	111	
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	
Naphthalene	50	ND	ND	ND	ND	
Phenanthrene	4	ND	ND	ND	810	
Pyrene	10	ND	27.8	90.3	912	

Our Lab I.D.		169317	169319	169320	169321	
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
Surrogate Percent Recovery						
2-Fluorophenol	21-105	39	61	54	47	
Phenol-d6	10-107	46	66	60	50	
2,4,6-Tribromophenol	10-123	42	64	60	50	
Nitrobenzene-d5	35-114	38	62	51	48	
2-Fluorobiphenyl	33-116	36	70	53	42	
Terphenyl-d14	33-141	72	86	94	89	

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29237	04/14/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	49	59	18.5	43-118						
Pyrene	60	64	6.5	26-127						

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Number of Pages 20
Date Received 04/18/2006
Date Reported 04/26/2006

Job Number	Ordered	Client
29255	04/18/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 10 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Wendy Lu
Organics Supervisor

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37103 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29255

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081 A1 8082	8260 B	8310	PE36-5'/10'/14'3"	PE36-20'/29'8"/40'/48'9"					Remarks
1	169412	PE36-3'	4/17/06	07:40	3	encore	Soil	None				X								
2	169413	PE36-3'		07:40	2	Plastic			X	X	X		X							
3	169414	PE36-5' (Composite)		07:55	1	Plastic			X	X	X		X	X						
		PE36-10'		08:00	1									X						
		PE36-14'3"		08:05	1									X						
4	169415	PE36-20' (Composite)		08:25	1				X	X	X		X		X					
		PE36-29'8"		08:45	1										X					
		PE36-40'		09:25	1										X					
		PE36-48'9"		10:00	1										X					
5	169416	PE36-14'3"		09:18	3	encore						X								

Collected By: Scott Miller	Date 4/17/06	Time as above	Relinquished By: Scott Miller	Date 4/17/06	Time 17:00
Relinquished By: [signature]	Date 4/18/06	Time	Received For Laboratory [signature]	Date 4/18/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
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COC# № 37123 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29255

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470-0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE35-5'/10'/14'8"	PE35-20'/29'2"/40'/49'5"/60'					Remarks
6	169417	PE35-3'	4/17/06	11:25	3	encore	Soil	None				X								
7	169418	PE35-3'		11:25	2	Plastic			X	X	X		X							
8	169419	PE35-5'	composite	11:45	1				X	X	X		X	X						
		PE35-10'		11:50	1									X						
		PE35-14'8"		11:58	1									X						
9	169420	PE35-20'	composite	12:12	1				X	X	X		X		X					
		PE35-29'2"		13:15	1										X					
		PE35-40'		14:00	1										X					
		PE35-49'5"		14:40	1										X					
		PE35-60'		15:45	1										X					

Collected By: Scott Miller	Date 4/17/06	Time as above	Relinquished By: Scott Miller	Date 4/17/06 Time 17:00
Relinquished By: [signature]	Date 4/18/06	Time	Received For Laboratory [signature]	Date 4/18/06 Time 1800
Received By:	Date	Time	Condition of Sample:	

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169413**	**169414**	**169415**	**169418**	**169419**
Sample ID			PE36-3'	PE36-5',9',14'	PE36-20,29.7,	PE35-3'	PE35-5',10',14
Date Sampled			04/17/2006	3" 04/17/2006	40,48.8 04/17/2006	04/17/2006	'8" 04/17/2006
Date Extracted			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	1.34	0.58	ND	0.54
Arsenic	0.10	0.25	ND	1.43	ND	ND	ND
Barium	0.05	0.50	39.2	74.4	77.9	46.8	62.6
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	11.9	15.8	13.0	13.9	10.8
Cobalt	0.05	0.50	4.51	6.41	5.89	5.30	6.10
Copper	0.25	0.50	4.96	15.4	8.63	6.25	7.06
Lead	0.10	0.25	1.85	8.39	5.33	1.68	4.82
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	8.59	11.7	9.64	9.43	9.81
Selenium	0.20	0.50	0.70	0.94	0.64	ND	0.66
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	21.5	27.0	26.5	24.0	21.0
Zinc	0.05	0.50	24.2	35.4	36.2	28.6	29.2

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	107	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	98	80-120								
Barium	99	80-120								
Beryllium	96	80-120								
Cadmium	100	80-120								
Chromium	93	80-120								
Cobalt	102	80-120								
Copper	94	80-120								
Lead	102	80-120								
Molybdenum	101	80-120								
Nickel	105	80-120								
Selenium	98	80-120								
Silver	97	80-120								
Thallium	100	80-120								
Vanadium	94	80-120								
Zinc	100	80-120								

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ANALYTICAL RESULTS

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Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169420**				
Sample ID			PE35-20,29,4				
Date Sampled			0,49,60 04/17/2006				
Date Extracted			04/20/2006				
Preparation Method							
Date Analyzed			04/21/2006				
Matrix			Soil				
Units			mg/Kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
AA Metals							
Mercury	0.10	0.20	ND				
ICP Metals							
Antimony	0.15	0.50	0.56				
Arsenic	0.10	0.25	1.03				
Barium	0.05	0.50	87.4				
Beryllium	0.05	0.50	ND				
Cadmium	0.05	0.50	ND				
Chromium	0.25	0.50	16.0				
Cobalt	0.05	0.50	8.04				
Copper	0.25	0.50	10.2				
Lead	0.10	0.25	4.40				
Molybdenum	0.05	0.50	ND				
Nickel	0.05	0.50	12.2				
Selenium	0.20	0.50	0.57				
Silver	0.40	0.50	ND				
Thallium	0.20	0.50	ND				
Vanadium	0.30	0.50	35.9				
Zinc	0.05	0.50	43.3				

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Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	107	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	98	80-120								
Barium	99	80-120								
Beryllium	96	80-120								
Cadmium	100	80-120								
Chromium	93	80-120								
Cobalt	102	80-120								
Copper	94	80-120								
Lead	102	80-120								
Molybdenum	101	80-120								
Nickel	105	80-120								
Selenium	98	80-120								
Silver	97	80-120								
Thallium	100	80-120								
Vanadium	94	80-120								
Zinc	100	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-2

Our Lab I.D.		169413	169414	169415	169418	169419
Client Sample I.D.		PE36-3'	PE36-5',9',14' 3"	PE36-20,29.7, 40,48.8	PE35-3'	PE35-5',10',14 '8"
Date Sampled		04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Date Prepared		04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Preparation Method						
Date Analyzed		04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	105	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		169413	169414	169415	169418	169419
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	99	112	113	99	120

QUALITY CONTROL REPORT

QC Batch No: 042506-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	103	1.9	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-2

Our Lab I.D.		**169420**				
Client Sample I.D.		PE35-20,29,40,49,60				
Date Sampled		04/17/2006				
Date Prepared		04/21/2006				
Preparation Method						
Date Analyzed		04/26/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**169420**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	111				

QUALITY CONTROL REPORT

QC Batch No: 042506-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	103	1.9	75-120	15					

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			169413	169414	169415	169418	169419
Sample ID			PE36-3'	PE36-5',9',14'	PE36-20,29.7,	PE35-3'	PE35-5',10',14
Date Sampled			04/17/2006	3" 04/17/2006	40,48.8 04/17/2006	04/17/2006	'8" 04/17/2006
Date Extracted			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	0.53J	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	0.91J	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	2.91J	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169413	169414	169415	169418	169419
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	110	90	100	110	101

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	85	1.2	42-122	<30					
4,4'-DDT (DDT)	86	96	11.0	25-160	<30					
Dieldrin	94	101	7.2	36-146	<30					
Endrin	106	114	7.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	84	82	2.4	32-127	<30					
Heptachlor	88	86	2.3	34-111	<30					

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Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			169420
Sample ID			PE35-20,29,4
Date Sampled			0,49,60 04/17/2006
Date Extracted			04/20/2006
Preparation Method			
Date Analyzed			04/20/2006
Matrix			Soil
Units			ug/kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
Aldrin	0.23	2.00	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND
Gamma-Chlordane	0.19	2.00	ND
alpha-Chlordane	0.20	2.00	ND
4,4'-DDD (DDD)	0.27	4.00	ND
4,4'-DDE (DDE)	0.22	4.00	ND
4,4'-DDT (DDT)	0.22	4.00	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND
Dieldrin	0.20	4.00	ND
Endosulfan 1	0.20	2.00	ND
Endosulfan 11	0.24	4.00	ND
Endosulfan sulfate	0.27	4.00	ND
Endrin	0.25	4.00	ND
Endrin aldehyde	0.44	4.00	ND
Endrin ketone	0.30	4.00	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND
Heptachlor	0.23	2.00	ND
Heptachlor epoxide	0.23	2.00	ND
Methoxychlor	0.39	17.00	ND
Toxaphene	17	170	ND

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Job Number	Order Date	Client
29255	04/18/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169420				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	85				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	85	1.2	42-122	<30					
4,4'-DDT (DDT)	86	96	11.0	25-160	<30					
Dieldrin	94	101	7.2	36-146	<30					
Endrin	106	114	7.3	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	84	82	2.4	32-127	<30					
Heptachlor	88	86	2.3	34-111	<30					

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ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042006-1

Our Lab I.D.			169413	169414	169415	169418	169419
Client Sample I.D.			PE36-3'	PE36-5',9',14' 3"	PE36-20,29.7, 40,48.8	PE35-3'	PE35-5',10',14 '8"
Date Sampled			04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169413	169414	169415	169418	169419
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		110	90	100	110	101

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042006-1

Our Lab I.D.			169420
Client Sample I.D.			PE35-20,29,40,49,60
Date Sampled			04/17/2006
Date Prepared			04/20/2006
Preparation Method			
Date Analyzed			04/20/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.		169420
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Decachlorobiphenyl	43-169	85

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30

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Environmental Testing Services
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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: **14**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			**169412**	**169416**	**169417**	**169421**
Client Sample I.D.			PE36-3' Encore	PE36-14'3" Encore	PE35-3' Encore	PE35-14'8" Encore
Date Sampled			04/17/2006	04/17/2006	04/17/2006	04/17/2006
Date Prepared			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Preparation Method						
Date Analyzed			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			169412	169416	169417	169421
Client Sample I.D.			PE36-3' Encore	PE36-14'3" Encore	PE35-3' Encore	PE35-14'8" Encore
Date Sampled			04/17/2006	04/17/2006	04/17/2006	04/17/2006
Date Prepared			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Preparation Method						
Date Analyzed			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042106-1B

Our Lab I.D.			169412	169416	169417	169421
Client Sample I.D.			PE36-3' Encore	PE36-14'3" Encore	PE35-3' Encore	PE35-14'8" Encore
Date Sampled			04/17/2006	04/17/2006	04/17/2006	04/17/2006
Date Prepared			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Preparation Method						
Date Analyzed			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND

Our Lab I.D.			169412	169416	169417	169421
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Bromofluorobenzene	70-120		99	97	96	97
Dibromofluoromethane	70-120		102	101	102	102
Toluene-d8	70-120		101	101	101	101

QUALITY CONTROL REPORT

QC Batch No: 042106-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	99	101	2.0	75-120	15
Chlorobenzene	90	94	4.3	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	97	96	1.0	75-120	15
MTBE	102	104	1.9	75-120	15
Toluene (Methyl benzene)	115	118	2.6	75-120	15
Trichloroethene (TCE)	97	100	3.0	75-120	15

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042006-1

Our Lab I.D.		169413	169414	169415	169418	169419
Client Sample I.D.		PE36-3'	PE36-5',9',14' 3"	PE36-20,29.7, 40,48.8	PE35-3'	PE35-5',10',14 '8"
Date Sampled		04/17/2006	04/17/2006	04/17/2006	04/17/2006	04/17/2006
Date Prepared		04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed		04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		169413	169414	169415	169418	169419
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	41	41	46	65	60
Phenol-d6	10-107	45	43	51	67	61
2,4,6-Tribromophenol	10-123	57	46	51	62	56
Nitrobenzene-d5	35-114	48	46	50	71	65
2-Fluorobiphenyl	18-116	46	42	45	71	66
Terphenyl-d14	33-141	92	104	92	96	88

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	49	59	18.5	43-118						
Pyrene	60	64	6.5	26-127						

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ANALYTICAL RESULTS

Ordered By

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Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042006-1

Our Lab I.D.		**169420**
Client Sample I.D.		PE35-20,29,40,49,60
Date Sampled		04/17/2006
Date Prepared		04/20/2006
Preparation Method		
Date Analyzed		04/20/2006
Matrix		Soil
Units		ug/kg
Dilution Factor		1
Analytes	**PQL**	**Results**
Acenaphthene	100	ND
Acenaphthylene	50	ND
Anthracene	2	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND
Benzo(a)pyrene	5	ND
Benzo(b)fluoranthene	2	ND
Benzo(ghi)perylene	7	ND
Benzo(k)fluoranthene	2	ND
Chrysene	5	ND
Dibenz(a,h)anthracene	17	ND
Fluoranthene	5	ND
Fluorene	10	ND
Indeno(1,2,3-cd)pyrene	5	ND
Naphthalene	50	ND
Phenanthrene	4	ND
Pyrene	10	ND

Our Lab I.D.		**169420**
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
2-Fluorophenol	21-105	54
Phenol-d6	10-107	58
2,4,6-Tribromophenol	10-123	55
Nitrobenzene-d5	35-114	58
2-Fluorobiphenyl	18-116	53
Terphenyl-d14	33-141	95

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29255	04/18/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	49	59	18.5	43-118						
Pyrene	60	64	6.5	26-127						

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Ordered By

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Attn Greg Dickinson

Number of Pages	20
Date Received	04/19/2006
Date Reported	04/26/2006

Job Number	Ordered	Client
29266	04/19/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 10 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Arnolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37118 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29266

Company: Pacific Edge Engineering		Report To: PM	
Address: 26691 Plaza Suite 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE37-5'/10'/14'6"	PE37-20'/28'8"/40'/49'2"					Remarks
1	169455	PE37-3'	4/18/06	07:30	3	encore	Soil	None				X								
2	169456	PE37-3'		07:30	2	Plastic			X	X	X		X							
3	169457	PE37-5'	Composite	07:45	1				X	X	X		X	X						
		PE37-10'		07:50	1									X						
		PE37 14'6"		07:55	1									X						
4	169458	PE37-20'		08:12	1				X	X	X		X		X					
		PE37-28'8"		08:35	1										X					
		PE37-40'		09:25	1										X					
		PE37-49'2"		10:00	1										X					
5	169459	PE37-14'6"		09:00	3	encore						X								

Collected By: Brett Miles	Date 4/18/06	Time as above	Relinquished By: Brett Miles	Date 4/19/06	Time 1500
Relinquished By:	Date	Time	Received For Laboratory Mosey	Date 4/19/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT ☒ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 37112 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29266

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1737 Fax: 949 470-0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE38-5'/9'8"/14'4"	PE38-20'/29'4"/40'/49'6"/60'					Remarks
6	169460	PE38-3'	4/18/06	11:10	3	encore	Soil	None				X								
7	169461	PE38-3'		11:10	2	Plastic			X	X	X		X							
8	169462	PE38-5'	Composite	11:20	1				X	X	X		X	X						
		PE38-9'8"		11:25	1									X						
		PE38-14'4"		11:33	1									X						
9	169463	PE38-20'		11:48	1				X	X	X		X		X					
		PE38-29'4"		13:00	1										X					
		PE38-40'		13:40	1										X					
		PE38-49'6"		14:12	1										X					
		PE38-60'		15:15	1										X					

Collected By: Scott Miller	Date 4/18/06 Time as above	Relinquished By: Scott Miller	Date 4/19/06 Time 1800
Relinquished By:	Date Time	Received For Laboratory: Mobe	Date 4/19/06 Time 1800
Received By:	Date Time	Condition of Sample:	

TAT: ☒ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

White - Report, Yellow - Laboratory, Pink - Client

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COC# № 37107 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29266

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1937 Fax: 949 470 0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	8260B	Remarks
10	169464	PE38-14'4"	4/18/06	12:40	3	encore	Soil	None	X	

Collected By: Scott Miller	Date 4/18/06	Time as above	Relinquished By: Scott Miller	Date 4/19/06	Time 1500
Relinquished By:	Date	Time	Received For Laboratory [illegible]	Date 4/19/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
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Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169456	169457	169458	169461	169462
Sample ID			PE37-3'	PE37-5',10',1	PE37-20,28.7,	PE38-3'	PE38-5',9'8",1
Date Sampled			04/18/2006	4'6" 04/18/2006	40,49.2 04/18/2006	04/18/2006	4'4" 04/18/2006
Date Extracted			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Preparation Method							
Date Analyzed			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	0.67	0.59	ND	ND
Arsenic	0.10	0.25	ND	0.95	ND	ND	ND
Barium	0.05	0.50	35.5	38.9	63.3	34.8	38.6
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	10.8	14.7	11.7	11.8	11.1
Cobalt	0.05	0.50	4.24	5.74	5.71	5.91	5.00
Copper	0.25	0.50	3.79	7.29	7.66	4.72	5.73
Lead	0.10	0.25	1.70	2.28	3.83	1.19	2.60
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	6.81	10.1	8.83	8.15	8.13
Selenium	0.20	0.50	0.78	0.73	0.69	0.73	0.72
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	21.3	27.4	25.9	20.5	23.5
Zinc	0.05	0.50	20.9	30.4	30.7	24.5	26.3

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	107	80-120								
ICP Metals										
Antimony	98	80-120								
Arsenic	98	80-120								
Barium	95	80-120								
Beryllium	95	80-120								
Cadmium	100	80-120								
Chromium	91	80-120								
Cobalt	101	80-120								
Copper	91	80-120								
Lead	102	80-120								
Molybdenum	100	80-120								
Nickel	103	80-120								
Selenium	98	80-120								
Silver	96	80-120								
Thallium	100	80-120								
Vanadium	94	80-120								
Zinc	98	80-120								

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ANALYTICAL RESULTS

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Page: **4**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169463**
Sample ID			PE38-20,29,4
Date Sampled			0,50,60 04/18/2006
Date Extracted			04/21/2006
Preparation Method			
Date Analyzed			04/21/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	0.75
Arsenic	0.10	0.25	ND
Barium	0.05	0.50	72.0
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	16.4
Cobalt	0.05	0.50	5.86
Copper	0.25	0.50	9.26
Lead	0.10	0.25	5.36
Molybdenum	0.05	0.50	0.64
Nickel	0.05	0.50	11.2
Selenium	0.20	0.50	0.77
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	27.8
Zinc	0.05	0.50	35.1

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	107	80-120								
ICP Metals										
Antimony	98	80-120								
Arsenic	98	80-120								
Barium	95	80-120								
Beryllium	95	80-120								
Cadmium	100	80-120								
Chromium	91	80-120								
Cobalt	101	80-120								
Copper	91	80-120								
Lead	102	80-120								
Molybdenum	100	80-120								
Nickel	103	80-120								
Selenium	98	80-120								
Silver	96	80-120								
Thallium	100	80-120								
Vanadium	94	80-120								
Zinc	98	80-120								

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Site

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Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-2

Our Lab I.D.		169456	169457	169458	169461	169462
Client Sample I.D.		PE37-3'	PE37-5',10',14'6"	PE37-20,28.7,40,49.2	PE38-3'	PE38-5',9'8",14'4"
Date Sampled		04/18/2006	04/18/2006	04/18/2006	04/18/2006	04/18/2006
Date Prepared		04/24/2006	04/24/2006	04/24/2006	04/24/2006	04/24/2006
Preparation Method						
Date Analyzed		04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		169456	169457	169458	169461	169462
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	86	83	103	100	103

QUALITY CONTROL REPORT

QC Batch No: 042506-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	103	1.9	75-120	15					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-2

Our Lab I.D.		**169463**				
Client Sample I.D.		PE38-20,29,40,50,60				
Date Sampled		04/18/2006				
Date Prepared		04/24/2006				
Preparation Method						
Date Analyzed		04/26/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**169463**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	89				

QUALITY CONTROL REPORT

QC Batch No: 042506-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	103	1.9	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			169456	169457	169458	169461	169462
Sample ID			PE37-3'	PE37-5',10',1	PE37-20,28.7,	PE38-3'	PE38-5',9'8",1
Date Sampled			04/18/2006	4'6" 04/18/2006	40,49.2 04/18/2006	04/18/2006	4'4" 04/18/2006
Date Extracted			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	0.22J	ND	ND	0.22J	0.22J
4,4'-DDT (DDT)	0.22	4.00	1.45J	ND	ND	0.56J	0.45J
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169456	169457	169458	169461	169462
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	108	85	92	105	98

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	93	94	1.1	42-122	<30					
4,4'-DDT (DDT)	101	88	13.8	25-160	<30					
Dieldrin	110	101	8.5	36-146	<30					
Endrin	124	114	8.4	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	91	92	1.1	32-127	<30					
Heptachlor	87	87	<1	34-111	<30					

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ANALYTICAL RESULTS

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Page: **10**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169463**
Sample ID			PE38-20,29,4
Date Sampled			0,50,60 04/18/2006
Date Extracted			04/20/2006
Preparation Method			
Date Analyzed			04/20/2006
Matrix			Soil
Units			ug/kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
Aldrin	0.23	2.00	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND
Gamma-Chlordane	0.19	2.00	ND
alpha-Chlordane	0.20	2.00	ND
4,4'-DDD (DDD)	0.27	4.00	ND
4,4'-DDE (DDE)	0.22	4.00	ND
4,4'-DDT (DDT)	0.22	4.00	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND
Dieldrin	0.20	4.00	ND
Endosulfan 1	0.20	2.00	ND
Endosulfan 11	0.24	4.00	ND
Endosulfan sulfate	0.27	4.00	ND
Endrin	0.25	4.00	ND
Endrin aldehyde	0.44	4.00	ND
Endrin ketone	0.30	4.00	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND
Heptachlor	0.23	2.00	ND
Heptachlor epoxide	0.23	2.00	ND
Methoxychlor	0.39	17.00	ND
Toxaphene	17	170	ND

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ANALYTICAL RESULTS

Page: 11
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29266	04/19/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169463				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	118				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	93	94	1.1	42-122	<30					
4,4'-DDT (DDT)	101	88	13.8	25-160	<30					
Dieldrin	110	101	8.5	36-146	<30					
Endrin	124	114	8.4	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	91	92	1.1	32-127	<30					
Heptachlor	87	87	<1	34-111	<30					

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Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 12

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042006-1

Our Lab I.D.			169456	169457	169458	169461	169462
Client Sample I.D.			PE37-3'	PE37-5',10',14'6"	PE37-20,28.7,40,49.2	PE38-3'	PE38-5',9'8",14'4"
Date Sampled			04/18/2006	04/18/2006	04/18/2006	04/18/2006	04/18/2006
Date Prepared			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method							
Date Analyzed			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169456	169457	169458	169461	169462
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		108	85	92	105	98

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	111	121	8.6	39-150	<30

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ANALYTICAL RESULTS

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Site
1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042006-1

Our Lab I.D.			169463
Client Sample I.D.			PE38-20,29,40,50,60
Date Sampled			04/18/2006
Date Prepared			04/20/2006
Preparation Method			
Date Analyzed			04/20/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.		169463
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Decachlorobiphenyl	43-169	118

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	111	121	8.6	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042406-1B

Our Lab I.D.			169455	169459	169460	169464
Client Sample I.D.			PE37-3' Encore	PE37-14'6" Encore	PE38-3' Encore	PE38-14'4" Encore
Date Sampled			04/18/2006	04/18/2006	04/18/2006	04/18/2006
Date Prepared			04/24/2006	04/24/2006	04/24/2006	04/24/2006
Preparation Method						
Date Analyzed			04/24/2006	04/24/2006	04/24/2006	04/24/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042406-1B

Our Lab I.D.			169455	169459	169460	169464
Client Sample I.D.			PE37-3' Encore	PE37-14'6" Encore	PE38-3' Encore	PE38-14'4" Encore
Date Sampled			04/18/2006	04/18/2006	04/18/2006	04/18/2006
Date Prepared			04/24/2006	04/24/2006	04/24/2006	04/24/2006
Preparation Method						
Date Analyzed			04/24/2006	04/24/2006	04/24/2006	04/24/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042406-1B

Our Lab I.D.			169455	169459	169460	169464
Client Sample I.D.			PE37-3' Encore	PE37-14'6" Encore	PE38-3' Encore	PE38-14'4" Encore
Date Sampled			04/18/2006	04/18/2006	04/18/2006	04/18/2006
Date Prepared			04/24/2006	04/24/2006	04/24/2006	04/24/2006
Preparation Method						
Date Analyzed			04/24/2006	04/24/2006	04/24/2006	04/24/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND

Our Lab I.D.		169455	169459	169460	169464
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Bromofluorobenzene	70-120	102	97	99	96
Dibromofluoromethane	70-120	93	95	99	93
Toluene-d8	70-120	98	98	100	99

QUALITY CONTROL REPORT

QC Batch No: 042406-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	110	110	<1	75-120	15
Chlorobenzene	92	94	2.2	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	101	101	<1	75-120	15
MTBE	94	95	1.1	75-120	15
Toluene (Methyl benzene)	106	106	<1	75-120	15
Trichloroethene (TCE)	84	86	2.4	75-120	15

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ANALYTICAL RESULTS

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1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042006-1

Our Lab I.D.		169456	169457	169458	169461	169462
Client Sample I.D.		PE37-3'	PE37-5',10',14'6"	PE37-20,28.7,40,49.2	PE38-3'	PE38-5',9'8",14'4"
Date Sampled		04/18/2006	04/18/2006	04/18/2006	04/18/2006	04/18/2006
Date Prepared		04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Preparation Method						
Date Analyzed		04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	11.7	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	17.1	ND	ND	ND	ND

Our Lab I.D.		169456	169457	169458	169461	169462
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	54	47	50	43	49
Phenol-d6	10-107	56	48	58	46	52
2,4,6-Tribromophenol	10-123	60	41	51	60	54
Nitrobenzene-d5	35-114	59	54	51	51	54
2-Fluorobiphenyl	18-116	57	45	43	47	45
Terphenyl-d14	33-141	90	83	80	97	84

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	MS % REC	MS DUP % REC	RPD %							
Acenaphthene	49	59	18.5							
Pyrene	60	64	6.5							

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ANALYTICAL RESULTS

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Page: 19

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042006-1

Our Lab I.D.		**169463**				
Client Sample I.D.		PE38-20,29,40,50,60				
Date Sampled		04/18/2006				
Date Prepared		04/20/2006				
Preparation Method						
Date Analyzed		04/20/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Acenaphthene	100	ND				
Acenaphthylene	50	ND				
Anthracene	2	ND				
Benz(a)anthracene (Benzo(a)anthracene)	5	ND				
Benzo(a)pyrene	5	ND				
Benzo(b)fluoranthene	2	ND				
Benzo(ghi)perylene	7	ND				
Benzo(k)fluoranthene	2	ND				
Chrysene	5	ND				
Dibenz(a,h)anthracene	17	ND				
Fluoranthene	5	ND				
Fluorene	10	ND				
Indeno(1,2,3-cd)pyrene	5	ND				
Naphthalene	50	ND				
Phenanthrene	4	ND				
Pyrene	10	ND				

Our Lab I.D.		**169463**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	55				
Phenol-d6	10-107	60				
2,4,6-Tribromophenol	10-123	58				
Nitrobenzene-d5	35-114	64				
2-Fluorobiphenyl	18-116	56				
Terphenyl-d14	33-141	85				

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29266	04/19/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042006-1

Analytes	MS % REC	MS DUP % REC	RPD %							
Acenaphthene	49	59	18.5							
Pyrene	60	64	6.5							

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Number of Pages 12
Date Received 04/19/2006
Date Reported 04/27/2006

Job Number	Ordered	Client
29299	04/19/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 5 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Wendy Lu
Organics Supervisor

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37106 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29299

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction: * Save For 50' and 60' Sample	P.O.#:
E-mail: to be delivered 4/20/06	
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A / 8082	8260B	8310	PE23-5'/10'/13'11"	PE23-20'/29'5"/40'					Remarks
1	169651	PE23-3'	4/19/06	07:35	3	encore	Soil	None				X								
2	169652	PE23-3'		07:35	2	Plastic			X	X	X		X							
3	169653	PE23-5' (Composite)		08:00	1				X	X	X		X	X						
		PE23-10'		08:10	1									X						
		PE23-13'11"		08:15	1									X						
4	169654	PE23-20' (Comp)		08:40	1				X	X	X		X		X					*
		PE23-29'5"		09:00	1										X					*
		PE23-40'		09:50	1										X					*
5	169655	PE23-13'11"		09:20	3	encore						X								
	169654	PE 23-50' (Comp)													X					*
		PE 23-60'													X					*

Collected By: Brett Miles	Date 4/19/06	Time as above	Relinquished By: Brett Miles	Date 4/19/06	Time 1500
Relinquished By:	Date	Time	Received For Laboratory: [illegible]	Date 4/19/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29299	04/19/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169652**	**169653**	**169654**		
Sample ID			PE23-3'	PE23-5',10',1	PE23-20,29,4		
Date Sampled			04/19/2006	3'11" 04/19/2006	0,50,60 04/19/2006		
Date Extracted			04/25/2006	04/25/2006	04/25/2006		
Preparation Method							
Date Analyzed			04/25/2006	04/25/2006	04/25/2006		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
AA Metals							
Mercury	0.10	0.20	ND	ND	ND		
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND		
Arsenic	0.10	0.25	ND	ND	ND		
Barium	0.05	0.50	58.5	59.2	52.0		
Beryllium	0.05	0.50	ND	ND	ND		
Cadmium	0.05	0.50	ND	ND	ND		
Chromium	0.25	0.50	14.9	11.0	16.6		
Cobalt	0.05	0.50	4.69	3.81	5.53		
Copper	0.25	0.50	5.29	4.92	7.05		
Lead	0.10	0.25	2.14	2.58	2.45		
Molybdenum	0.05	0.50	ND	ND	ND		
Nickel	0.05	0.50	7.88	6.52	10.8		
Selenium	0.20	0.50	0.60	0.56	0.55		
Silver	0.40	0.50	ND	ND	ND		
Thallium	0.20	0.50	ND	ND	ND		
Vanadium	0.30	0.50	27.3	17.6	26.1		
Zinc	0.05	0.50	28.0	21.8	31.3		

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29299	04/19/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	113	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	98	80-120								
Barium	99	80-120								
Beryllium	98	80-120								
Cadmium	99	80-120								
Chromium	94	80-120								
Cobalt	102	80-120								
Copper	93	80-120								
Lead	101	80-120								
Molybdenum	100	80-120								
Nickel	104	80-120								
Selenium	97	80-120								
Silver	96	80-120								
Thallium	101	80-120								
Vanadium	95	80-120								
Zinc	102	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042606-1

Our Lab I.D.		**169652**	**169653**	**169654**		
Client Sample I.D.		PE23-3'	PE23-5',10',13'11"	PE23-20,29,40,50,60		
Date Sampled		04/19/2006	04/19/2006	04/19/2006		
Date Prepared		04/24/2006	04/24/2006	04/24/2006		
Preparation Method						
Date Analyzed		04/24/2006	04/24/2006	04/24/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	ND	ND		
TPH ORO (C22+)	50	ND	ND	ND		

Our Lab I.D.		**169652**	**169653**	**169654**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	109	109	110		

QUALITY CONTROL REPORT

QC Batch No: 042606-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	92	100	8.3	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29299	04/19/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169652**	**169653**	**169654**		
Sample ID			PE23-3'	PE23-5',10',1	PE23-20,29,4		
Date Sampled			04/19/2006	3'11" 04/19/2006	0,50,60 04/19/2006		
Date Extracted			04/25/2006	04/25/2006	04/25/2006		
Preparation Method							
Date Analyzed			04/25/2006	04/25/2006	04/25/2006		
Matrix			Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aldrin	0.23	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND		
Gamma-Chlordane	0.19	2.00	ND	ND	ND		
alpha-Chlordane	0.20	2.00	ND	ND	ND		
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND		
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND		
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND		
Dieldrin	0.20	4.00	ND	ND	ND		
Endosulfan I	0.20	2.00	ND	ND	ND		
Endosulfan II	0.24	4.00	ND	ND	ND		
Endosulfan sulfate	0.27	4.00	ND	ND	ND		
Endrin	0.25	4.00	ND	ND	ND		
Endrin aldehyde	0.44	4.00	ND	ND	ND		
Endrin ketone	0.30	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND		
Heptachlor	0.23	2.00	ND	ND	ND		
Heptachlor epoxide	0.23	2.00	ND	ND	ND		
Methoxychlor	0.39	17.00	ND	ND	ND		
Toxaphene	17	170	ND	ND	ND		

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29299	04/19/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169652	169653	169654		
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	81	91	89		

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	87	88	1.1	42-122	<30					
4,4'-DDT (DDT)	78	96	20.7	25-160	<30					
Dieldrin	97	107	9.8	36-146	<30					
Endrin	101	115	13.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	82	84	2.4	32-127	<30					
Heptachlor	79	81	2.5	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042506-1

Our Lab I.D.			169652	169653	169654
Client Sample I.D.			PE23-3'	PE23-5',10',13'11"	PE23-20,29,40,50,60
Date Sampled			04/19/2006	04/19/2006	04/19/2006
Date Prepared			04/25/2006	04/25/2006	04/25/2006
Preparation Method					
Date Analyzed			04/25/2006	04/25/2006	04/25/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND

Our Lab I.D.			169652	169653	169654
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169		81	91	89

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	107	117	8.9	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042406-1B

Our Lab I.D.			**169651**	**169655**
Client Sample I.D.			PE23-3' Encore	PE23-13'11" Encore
Date Sampled			04/19/2006	04/19/2006
Date Prepared			04/24/2006	04/24/2006
Preparation Method				
Date Analyzed			04/24/2006	04/24/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042406-1B

Our Lab I.D.			169651	169655
Client Sample I.D.			PE23-3' Encore	PE23-13'11" Encore
Date Sampled			04/19/2006	04/19/2006
Date Prepared			04/24/2006	04/24/2006
Preparation Method				
Date Analyzed			04/24/2006	04/24/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042406-1B

Our Lab I.D.			169651	169655
Client Sample I.D.			PE23-3' Encore	PE23-13'11" Encore
Date Sampled			04/19/2006	04/19/2006
Date Prepared			04/24/2006	04/24/2006
Preparation Method				
Date Analyzed			04/24/2006	04/24/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.			169651	169655
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Bromofluorobenzene	70-120		98	95
Dibromofluoromethane	70-120		98	93
Toluene-d8	70-120		100	100

QUALITY CONTROL REPORT

QC Batch No: 042406-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	110	110	<1	75-120	15
Chlorobenzene	92	94	2.2	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	101	101	<1	75-120	15
MTBE	94	95	1.1	75-120	15
Toluene (Methyl benzene)	106	106	<1	75-120	15
Trichloroethene (TCE)	84	86	2.4	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 11

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042506-1

Our Lab I.D.		169652	169653	169654		
Client Sample I.D.		PE23-3'	PE23-5',10',13'11"	PE23-20,29,40,50,60		
Date Sampled		04/19/2006	04/19/2006	04/19/2006		
Date Prepared		04/25/2006	04/25/2006	04/25/2006		
Preparation Method						
Date Analyzed		04/25/2006	04/25/2006	04/25/2006		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Acenaphthene	100	ND	ND	ND		
Acenaphthylene	50	ND	ND	ND		
Anthracene	2	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND		
Benzo(a)pyrene	5	ND	ND	ND		
Benzo(b)fluoranthene	2	ND	ND	ND		
Benzo(ghi)perylene	7	ND	ND	ND		
Benzo(k)fluoranthene	2	ND	ND	ND		
Chrysene	5	ND	ND	ND		
Dibenz(a,h)anthracene	17	ND	ND	ND		
Fluoranthene	5	ND	ND	ND		
Fluorene	10	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND		
Naphthalene	50	ND	ND	ND		
Phenanthrene	4	ND	ND	ND		
Pyrene	10	ND	ND	ND		

Our Lab I.D.		169652	169653	169654		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	70	68	63		
Phenol-d6	10-107	81	77	71		
2,4,6-Tribromophenol	10-123	96	80	77		
Nitrobenzene-d5	35-114	73	70	57		
2-Fluorobiphenyl	18-116	77	70	64		
Terphenyl-d14	33-141	123	112	100		

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ANALYTICAL RESULTS

Page: 12

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29299	04/19/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	86	85	1.2	43-118						
Pyrene	97	95	2.1	26-127						

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Attn Greg Dickinson

Number of Pages 26
Date Received 04/21/2006
Date Reported 05/02/2006

Job Number	Ordered	Client
29306	04/21/2006	PACFIC

Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 15 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37143 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29306

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction: * Composite with PE-20/30/40 From 4/19/06	P.O.#:
E-mail: ** Hold For PE20-20'/30'/40'/50'/60' to be Collected 4/21	
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	6015 Ext	6081A/8082	8260B	8310	PE20-5'/10'/15'3"	PE23-20/30/40/49'10"/60'		Archive				Remarks
1	169685	PE20-3'	4/20/06	08:08	3	encore	Soil	None				X									
2	169686	PE20-3'		08:08	2	Plastic			X	X	X		X								
3	169687	PE20-5' (Composite)		08:20	1				X	X	X		X	X							
		PE20-10'		08:25	1									X							
		PE20-15'3"		08:28	1									X							
4	169688	PE20-20',30',40',50',60'		08:50	1-5				X	X	X		X				X				**
5	169689	PE20-15'3"		09:15	3	encore						X									
		PE23-49'10" (Comp.)		09:44	1	Plastic			X	X	X		X		X	Job # 29299					*
		PE23-60'		10:44	1	Plastic									X	ID # 169654					*
6	169690	PE22-3'		11:10	3	encore						X									

Collected By: Brett Miller	Date 4/20/06	Time as above	Relinquished By: Brett Miller
Relinquished By: [illegible]	Date 4/21/06	Time	Received For Laboratory [illegible]
Received By:	Date	Time	Condition of Sample:

Relinquished By: Brett Miller Date 4/20/06 Time 17:00
Received For Laboratory [illegible] Date 4/21/06 Time 1530

TAT
☒ Normal
☐ Rush

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

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26691 Plaza, Suite 270
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Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169686	169687	169691	169692	169693
Sample ID			PE20-3'	PE20-5',10',1	PE22-3'	PE22-5',10'5",	PE22-20',29'1
Date Sampled			04/20/2006	5'3" 04/20/2006	04/20/2006	13'10" 04/20/2006	1",40' 04/20/2006
Date Extracted			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method							
Date Analyzed			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND	ND	0.59
Arsenic	0.10	0.25	ND	ND	ND	ND	ND
Barium	0.05	0.50	33.3	25.6	24.6	30.4	36.8
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	9.03	6.70	7.74	7.28	10.0
Cobalt	0.05	0.50	3.48	2.47	3.11	2.70	4.53
Copper	0.25	0.50	3.81	3.38	2.96	3.68	5.65
Lead	0.10	0.25	1.21	0.70	0.87	1.07	1.52
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	6.04	4.20	5.25	5.01	7.20
Selenium	0.20	0.50	ND	ND	ND	ND	ND
Silver	0.40	0.50	ND	ND	0.64	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	18.6	12.1	16.1	13.8	19.1
Zinc	0.05	0.50	20.1	12.8	17.1	14.6	24.3

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ANALYTICAL RESULTS

Page: 3
Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	105	80-120								
ICP Metals										
Antimony	91	80-120								
Arsenic	91	80-120								
Barium	99	80-120								
Beryllium	95	80-120								
Cadmium	91	80-120								
Chromium	93	80-120								
Cobalt	94	80-120								
Copper	96	80-120								
Lead	91	80-120								
Molybdenum	94	80-120								
Nickel	97	80-120								
Selenium	90	80-120								
Silver	99	80-120								
Thallium	91	80-120								
Vanadium	94	80-120								
Zinc	93	80-120								

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ANALYTICAL RESULTS

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Page: **4**
Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169695**	**169697**	**169698**		
Sample ID			PE21-3'	PE21-5',9',14'	PE21-20',30'4		
Date Sampled			04/20/2006	2" 04/20/2006	",40' 04/20/2006		
Date Extracted			04/27/2006	04/27/2006	04/27/2006		
Preparation Method							
Date Analyzed			04/28/2006	04/28/2006	04/28/2006		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
AA Metals							
Mercury	0.10	0.20	ND	ND	ND		
ICP Metals							
Antimony	0.15	0.50	ND	0.96	0.66		
Arsenic	0.10	0.25	ND	2.01	ND		
Barium	0.05	0.50	38.7	70.0	40.7		
Beryllium	0.05	0.50	ND	ND	ND		
Cadmium	0.05	0.50	ND	ND	ND		
Chromium	0.25	0.50	9.24	16.8	10.4		
Cobalt	0.05	0.50	3.75	7.59	5.07		
Copper	0.25	0.50	3.96	19.9	6.46		
Lead	0.10	0.25	ND	4.16	2.02		
Molybdenum	0.05	0.50	ND	ND	ND		
Nickel	0.05	0.50	6.34	14.5	7.93		
Selenium	0.20	0.50	ND	0.73	0.56		
Silver	0.40	0.50	ND	ND	ND		
Thallium	0.20	0.50	ND	ND	ND		
Vanadium	0.30	0.50	17.8	28.6	21.3		
Zinc	0.05	0.50	20.3	37.7	27.6		

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ANALYTICAL RESULTS

Page: 5
Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	105	80-120								
ICP Metals										
Antimony	91	80-120								
Arsenic	91	80-120								
Barium	99	80-120								
Beryllium	95	80-120								
Cadmium	91	80-120								
Chromium	93	80-120								
Cobalt	94	80-120								
Copper	96	80-120								
Lead	91	80-120								
Molybdenum	94	80-120								
Nickel	97	80-120								
Selenium	90	80-120								
Silver	99	80-120								
Thallium	91	80-120								
Vanadium	94	80-120								
Zinc	93	80-120								

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

Page: 6

Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-2

Our Lab I.D.		169686	169687	169691	169692	169693
Client Sample I.D.		PE20-3'	PE20-5',10',15'3"	PE22-3'	PE22-5',10'5", 13'10"	PE22-20',29'11",40'
Date Sampled		04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Date Prepared		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method						
Date Analyzed		04/29/2006	04/29/2006	04/29/2006	04/29/2006	04/29/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		169686	169687	169691	169692	169693
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	116	116	103	99	103

QUALITY CONTROL REPORT

QC Batch No: 042506-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	94	94	<1	75-120	15					

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Telephone: (949)470-1937
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Site

1200 Pier E Street
Long Beach, CA

Page: 7

Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042506-2

Our Lab I.D.		169695	169697	169698		
Client Sample I.D.		PE21-3'	PE21-5',9',14' 2"	PE21-20',30'4 ",40'		
Date Sampled		04/20/2006	04/20/2006	04/20/2006		
Date Prepared		04/27/2006	04/27/2006	04/27/2006		
Preparation Method						
Date Analyzed		04/29/2006	04/29/2006	04/29/2006		
Matrix		Soil	Soil	Soil		
Units		mg/kg	mg/kg	mg/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
TPH DRO (C13-C22)	10	ND	78	ND		
TPH ORO (C22+)	50	ND	ND	ND		

Our Lab I.D.		169695	169697	169698		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
Chlorobenzene	70-120	111	99	103		

QUALITY CONTROL REPORT

QC Batch No: 042506-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	94	94	<1	75-120	15					

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ANALYTICAL RESULTS

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Site

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Telephone: (949)470-1937
Attn: Greg Dickinson

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No: 042506-1

Our Lab I.D.			169686	169687	169691	169692	169693
Sample ID			PE20-3'	PE20-5',10',1	PE22-3'	PE22-5',10'5",	PE22-20',29'1
Date Sampled			04/20/2006	5'3" 04/20/2006	04/20/2006	13'10" 04/20/2006	1",40' 04/20/2006
Date Extracted			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Preparation Method							
Date Analyzed			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	0.43J	ND	0.35J	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan I	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan II	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169686	169687	169691	169692	169693
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	136	137	137	125	131

QUALITY CONTROL REPORT

Batch No: **042506-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	87	88	1.1	42-122	<30					
4,4'-DDT (DDT)	78	96	20.7	25-160	<30					
Dieldrin	97	107	9.8	36-146	<30					
Endrin	101	115	13.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	82	84	2.4	32-127	<30					
Heptachlor	79	81	2.5	34-111	<30					

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ANALYTICAL RESULTS

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No: 042506-1

Our Lab I.D.			169695	169697	169698		
Sample ID			PE21-3'	PE21-5',9',14'	PE21-20',30'4		
Date Sampled			04/20/2006	2" 04/20/2006	",40' 04/20/2006		
Date Extracted			04/25/2006	04/25/2006	04/25/2006		
Preparation Method							
Date Analyzed			04/25/2006	04/25/2006	04/25/2006		
Matrix			Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aldrin	0.23	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND		
Gamma-Chlordane	0.19	2.00	ND	ND	ND		
alpha-Chlordane	0.20	2.00	ND	ND	ND		
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND		
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND		
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND		
Dieldrin	0.20	4.00	ND	ND	ND		
Endosulfan 1	0.20	2.00	ND	ND	ND		
Endosulfan 11	0.24	4.00	ND	ND	ND		
Endosulfan sulfate	0.27	4.00	ND	ND	ND		
Endrin	0.25	4.00	ND	ND	ND		
Endrin aldehyde	0.44	4.00	ND	ND	ND		
Endrin ketone	0.30	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND		
Heptachlor	0.23	2.00	ND	ND	ND		
Heptachlor epoxide	0.23	2.00	ND	ND	ND		
Methoxychlor	0.39	17.00	ND	ND	ND		
Toxaphene	17	170	ND	ND	ND		

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Job Number	Order Date	Client
29306	04/21/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169695	169697	169698		
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	93	80	89		

QUALITY CONTROL REPORT

Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	87	88	1.1	42-122	<30					
4,4'-DDT (DDT)	78	96	20.7	25-160	<30					
Dieldrin	97	107	9.8	36-146	<30					
Endrin	101	115	13.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	82	84	2.4	32-127	<30					
Heptachlor	79	81	2.5	34-111	<30					

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Project ID: 0106-0015.002.001
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ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042506-1

Our Lab I.D.			169686	169687	169691	169692	169693
Client Sample I.D.			PE20-3'	PE20-5',10',15'3"	PE22-3'	PE22-5',10'5",13'10"	PE22-20',29'11",40'
Date Sampled			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Date Prepared			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Preparation Method							
Date Analyzed			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169686	169687	169691	169692	169693
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		136	137	137	125	131

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	107	117	8.9	39-150	<30

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ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042506-1

Our Lab I.D.			169695	169697	169698
Client Sample I.D.			PE21-3'	PE21-5',9',14' 2"	PE21-20',30'4 ",40'
Date Sampled			04/20/2006	04/20/2006	04/20/2006
Date Prepared			04/25/2006	04/25/2006	04/25/2006
Preparation Method					
Date Analyzed			04/25/2006	04/25/2006	04/25/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND

Our Lab I.D.			169695	169697	169698
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169		93	80	89

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	107	117	8.9	39-150	<30

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042606-2B

Our Lab I.D.			169685	169689	169690	169694	169696
Client Sample I.D.			PE20-3' Encore	PE20-15'3" Encore	PE22-3' Encore	PE22-10'5" Encore	PE21-3' Encore
Date Sampled			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Date Prepared			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method							
Date Analyzed			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042606-2B

Our Lab I.D.			169685	169689	169690	169694	169696
Client Sample I.D.			PE20-3' Encore	PE20-15'3" Encore	PE22-3' Encore	PE22-10'5" Encore	PE21-3' Encore
Date Sampled			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Date Prepared			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method							
Date Analyzed			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042606-2B

Our Lab I.D.			169685	169689	169690	169694	169696
Client Sample I.D.			PE20-3' Encore	PE20-15'3" Encore	PE22-3' Encore	PE22-10'5" Encore	PE21-3' Encore
Date Sampled			04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Date Prepared			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method							
Date Analyzed			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			169685	169689	169690	169694	169696
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		103	103	103	105	105
Dibromofluoromethane	70-120		109	100	106	106	110
Toluene-d8	70-120		101	102	102	109	105

QUALITY CONTROL REPORT

QC Batch No: 042606-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	108	102	5.7	75-120	15
Chlorobenzene	106	106	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	93	92	1.1	75-120	15
MTBE	84	92	9.1	75-120	15
Toluene (Methyl benzene)	117	112	4.4	75-120	15
Trichloroethene (TCE)	105	103	1.9	75-120	15

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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ANALYTICAL RESULTS

Ordered By
Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site
1200 Pier E Street
Long Beach, CA

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042606-2B

Our Lab I.D.			**169700**
Client Sample I.D.			PE21-10' Encore
Date Sampled			04/20/2006
Date Prepared			04/27/2006
Preparation Method			
Date Analyzed			04/27/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042606-2B

Our Lab I.D.			169700
Client Sample I.D.			PE21-10' Encore
Date Sampled			04/20/2006
Date Prepared			04/27/2006
Preparation Method			
Date Analyzed			04/27/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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ANALYTICAL RESULTS

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042606-2B

Our Lab I.D.			169700
Client Sample I.D.			PE21-10' Encore
Date Sampled			04/20/2006
Date Prepared			04/27/2006
Preparation Method			
Date Analyzed			04/27/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169700
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	100
Dibromofluoromethane	70-120	118
Toluene-d8	70-120	105

QUALITY CONTROL REPORT

QC Batch No: 042606-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	108	102	5.7	75-120	15
Chlorobenzene	106	106	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	93	92	1.1	75-120	15
MTBE	84	92	9.1	75-120	15
Toluene (Methyl benzene)	117	112	4.4	75-120	15
Trichloroethene (TCE)	105	103	1.9	75-120	15

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ANALYTICAL RESULTS

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Long Beach, CA

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042706-2B

Our Lab I.D.			**169699**
Client Sample I.D.			PE21-9' Encore
Date Sampled			04/20/2006
Date Prepared			04/28/2006
Preparation Method			
Date Analyzed			04/28/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	27J
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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ANALYTICAL RESULTS

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042706-2B

Our Lab I.D.			169699
Client Sample I.D.			PE21-9' Encore
Date Sampled			04/20/2006
Date Prepared			04/28/2006
Preparation Method			
Date Analyzed			04/28/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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ANALYTICAL RESULTS

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042706-2B

Our Lab I.D.			169699
Client Sample I.D.			PE21-9' Encore
Date Sampled			04/20/2006
Date Prepared			04/28/2006
Preparation Method			
Date Analyzed			04/28/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169699
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	115
Dibromofluoromethane	70-120	113
Toluene-d8	70-120	98

QUALITY CONTROL REPORT

QC Batch No: 042706-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	105	106	<1	75-120	15
Chlorobenzene	107	105	1.9	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	82	80	2.5	75-120	15
MTBE	87	88	1.1	75-120	15
Toluene (Methyl benzene)	115	115	<1	75-120	15
Trichloroethene (TCE)	105	108	2.8	75-120	15

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042506-1

Our Lab I.D.		169686	169687	169691	169692	169693
Client Sample I.D.		PE20-3'	PE20-5',10',15'3"	PE22-3'	PE22-5',10'5", 13'10"	PE22-20',29'11",40'
Date Sampled		04/20/2006	04/20/2006	04/20/2006	04/20/2006	04/20/2006
Date Prepared		04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Preparation Method						
Date Analyzed		04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		169686	169687	169691	169692	169693
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	58	48	36	56	46
Phenol-d6	10-107	65	59	45	69	66
2,4,6-Tribromophenol	10-123	56	83	50	95	59
Nitrobenzene-d5	35-114	59	40	45	47	42
2-Fluorobiphenyl	18-116	66	56	43	66	35
Terphenyl-d14	33-141	122	108	93	89	125

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ANALYTICAL RESULTS

Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	86	85	1.2	43-118						
Pyrene	97	95	2.1	26-127						

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ANALYTICAL RESULTS

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1200 Pier E Street
Long Beach, CA

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042506-1

Our Lab I.D.		**169695**	**169697**	**169698**		
Client Sample I.D.		PE21-3'	PE21-5',9',14' 2"	PE21-20',30'4 ",40'		
Date Sampled		04/20/2006	04/20/2006	04/20/2006		
Date Prepared		04/25/2006	04/25/2006	04/25/2006		
Preparation Method						
Date Analyzed		04/25/2006	04/25/2006	04/25/2006		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Acenaphthene	100	ND	ND	ND		
Acenaphthylene	50	ND	ND	ND		
Anthracene	2	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND		
Benzo(a)pyrene	5	ND	ND	ND		
Benzo(b)fluoranthene	2	ND	ND	ND		
Benzo(ghi)perylene	7	ND	ND	ND		
Benzo(k)fluoranthene	2	ND	ND	ND		
Chrysene	5	ND	ND	ND		
Dibenz(a,h)anthracene	17	ND	ND	ND		
Fluoranthene	5	ND	ND	ND		
Fluorene	10	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND		
Naphthalene	50	ND	ND	ND		
Phenanthrene	4	ND	ND	ND		
Pyrene	10	ND	ND	ND		

Our Lab I.D.		**169695**	**169697**	**169698**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	61	68	38		
Phenol-d6	10-107	71	81	52		
2,4,6-Tribromophenol	10-123	71	84	47		
Nitrobenzene-d5	35-114	72	57	35		
2-Fluorobiphenyl	18-116	70	62	38		
Terphenyl-d14	33-141	118	94	84		

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Project ID: 0106-0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29306	04/21/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	86	85	1.2	43-118						
Pyrene	97	95	2.1	26-127						

AMERICAN SCIENTIFIC LABORATORIES, LLC

Environmental Testing Services

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Ordered By

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Attn Greg Dickinson

Number of Pages	26
Date Received	04/24/2006
Date Reported	05/02/2006

Job Number	Ordered	Client
29312	04/24/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 15 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37146 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29312

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction: See page 3/3 for additional	Project ID: 0106.0015.002.001		
E-mail: sample in composite	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081 A/8082	8260 B	8310	PE40-5'/10'/14'11"	PE40 20'/29'8"/40'/48'8"/60'					Remarks
1	169781	PE 40-3'	4/21/06	07:50	3	encore	Soil	None				X								
2	169782	PE40-3'		07:50	2	Plastic			X	X	X		X							
3	169783	PE40-5' (composite)		08:00	1				X	X	X		X	X						
		PE 40-10'		08:05	1									X						
		PE40-14'11"		08:11	1									X						
4	169784	PE40-20' (composite)		08:22	1				X	X	X		X		X					*
		PE40-29'8"		08:41	1										X					
		PE 40-40' PE 99-36		09:25	1										X					
		PE40-48'8"		09:57	1										X					
		PE40-60'		11:21	1										X					

Collected By: [signature]	Date 4/21/06	Time as above	Relinquished By: [signature]	Date 4/21/06	Time 1500
Relinquished By:	Date	Time	Received For Laboratory MOSE	Date 4/21/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

White - Report, Yellow - Laboratory, Pink - Client

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COC# № 37110 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29312

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction: * Hold For test of composite	P.O.#:
E-mail: to be collected 4/24/06	
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street, Long Beach, CA	
Project #: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	8260B	Title 22 Metals	8015 Ext	8081A/8082	8310	PE41-5'/10'5"/14'4"						Remarks
10	169790	PE39-10'	4/21/06	13:45	3	encore	Soil	None	X											
11	169791	PE 41-3'		14:40	3	encore			X											
12	169792	PE41-3'		14:40	2	Plastic				X	X	X	X							
13	169793	PE41-5'		14:41	1					X	X	X	X	X						
		PE41-10'2"		14:47	1									X						
		PE41-14'4"		14:50	1									X						
14	169794	PE41-20', 29' 10", 40', 48' 4"		15:03	1					X	X	X	X		X					*
15	169795	PE 41-14'4"		15:25	3	encore			X											
4	169784	PE40-36		9:00	1	Plastic			Composite with PE40-20/29'8"/40/48'8"/60 and rename PE40-20/29'8"/36/40/48'8"/60											

Collected By: Scott Miller	Date 4/21/06	Time as above	Relinquished By: Scott Miller	Date 4/21/06	Time 17:00
Relinquished By:	Date	Time	Received For Laboratory MOS	Date 4/24/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169782**	**169783**	**169784**	**169787**	**169788**
Sample ID			PE40-3'	PE40-5',10',1	PE40-20 to	PE39-3'	PE39-5',10',14
Date Sampled			04/21/2006	4'11" 04/21/2006	60 04/21/2006	04/21/2006	' 04/21/2006
Date Extracted			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	0.61	0.87	0.84	0.56	ND
Arsenic	0.10	0.25	ND	ND	ND	ND	ND
Barium	0.05	0.50	38.5	58.5	69.4	38.8	25.6
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	12.1	16.3	13.8	13.2	9.66
Cobalt	0.05	0.50	4.16	4.97	6.12	4.46	3.49
Copper	0.25	0.50	8.40	1600	11.4	4.59	4.73
Lead	0.10	0.25	1.63	6.03	8.84	1.37	1.43
Molybdenum	0.05	0.50	ND	0.84	ND	ND	ND
Nickel	0.05	0.50	7.24	13.2	10.8	8.16	6.81
Selenium	0.20	0.50	ND	ND	0.55	ND	ND
Silver	0.40	0.50	ND	0.65	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	20.9	20.0	20.9	20.9	16.0
Zinc	0.05	0.50	24.4	72.3	39.1	24.3	18.9

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	112	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	96	80-120								
Barium	95	80-120								
Beryllium	94	80-120								
Cadmium	95	80-120								
Chromium	92	80-120								
Cobalt	99	80-120								
Copper	92	80-120								
Lead	100	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	94	80-120								
Silver	95	80-120								
Thallium	97	80-120								
Vanadium	91	80-120								
Zinc	98	80-120								

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ANALYTICAL RESULTS

Ordered By

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26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: **4**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169789**	**169792**	**169793**	**169794**
Sample ID			PE39-21,30,3	PE41-3'	PE41-5',10'2",	PE41-20,29.8,
Date Sampled			7.5,49.4 04/21/2006	04/21/2006	14'4" 04/21/2006	40,49.3 04/21/2006
Date Extracted			05/01/2006	05/01/2006	05/01/2006	05/01/2006
Preparation Method						
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
AA Metals						
Mercury	0.10	0.20	ND	ND	ND	ND
ICP Metals						
Antimony	0.15	0.50	0.68	ND	0.55	0.60
Arsenic	0.10	0.25	ND	0.48	ND	ND
Barium	0.05	0.50	83.1	43.5	50.5	75.6
Beryllium	0.05	0.50	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND
Chromium	0.25	0.50	12.3	9.73	11.1	14.1
Cobalt	0.05	0.50	5.89	4.32	4.69	5.87
Copper	0.25	0.50	9.32	5.99	7.53	9.30
Lead	0.10	0.25	10.4	3.02	5.28	10.8
Molybdenum	0.05	0.50	ND	ND	ND	ND
Nickel	0.05	0.50	8.91	6.54	9.37	9.74
Selenium	0.20	0.50	0.69	0.59	0.52	0.78
Silver	0.40	0.50	ND	ND	ND	0.73
Thallium	0.20	0.50	ND	ND	ND	ND
Vanadium	0.30	0.50	25.7	18.5	21.0	26.2
Zinc	0.05	0.50	41.8	25.0	27.9	43.3

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	112	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	96	80-120								
Barium	95	80-120								
Beryllium	94	80-120								
Cadmium	95	80-120								
Chromium	92	80-120								
Cobalt	99	80-120								
Copper	92	80-120								
Lead	100	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	94	80-120								
Silver	95	80-120								
Thallium	97	80-120								
Vanadium	91	80-120								
Zinc	98	80-120								

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 6

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042806-2

Our Lab I.D.		169782	169784	169787	169788	169789
Client Sample I.D.		PE40-3'	PE40-20 to 60	PE39-3'	PE39-5',10',14'	PE39-21,30,37.5,49.4
Date Sampled		04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method						
Date Analyzed		04/29/2006	04/29/2006	04/29/2006	04/29/2006	04/29/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	10
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		169782	169784	169787	169788	169789
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	102	107	101	114	112

QUALITY CONTROL REPORT

QC Batch No: 042806-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	94	94	<1	75-120	15					

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042806-2

Our Lab I.D.		**169792**	**169794**			
Client Sample I.D.		PE41-3'	PE41-20,29.8, 40,49.3			
Date Sampled		04/21/2006	04/21/2006			
Date Prepared		04/27/2006	04/27/2006			
Preparation Method						
Date Analyzed		04/29/2006	04/29/2006			
Matrix		Soil	Soil			
Units		mg/kg	mg/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
TPH DRO (C13-C22)	10	ND	ND			
TPH ORO (C22+)	50	ND	ND			

Our Lab I.D.		**169792**	**169794**			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Chlorobenzene	70-120	104	108			

QUALITY CONTROL REPORT

QC Batch No: 042806-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	94	94	<1	75-120	15					

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ANALYTICAL RESULTS

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1200 Pier E Street
Long Beach, CA

Page: 8

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050106-1

Our Lab I.D.		**169783**	**169793**			
Client Sample I.D.		PE40-5',10',14'11"	PE41-5',10'2",14'4"			
Date Sampled		04/21/2006	04/21/2006			
Date Prepared		04/27/2006	04/27/2006			
Preparation Method						
Date Analyzed		05/01/2006	05/01/2006			
Matrix		Soil	Soil			
Units		mg/kg	mg/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
TPH DRO (C13-C22)	10	44	ND			
TPH ORO (C22+)	50	140	50			

Our Lab I.D.		**169783**	**169793**			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Chlorobenzene	70-120	120	117			

QUALITY CONTROL REPORT

QC Batch No: 050106-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	88	91	3.4	75-120	15					

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ANALYTICAL RESULTS

Ordered By

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Mission Viejo, CA 92691-

Site

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Long Beach, CA

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Attn: Greg Dickinson

Page: 9
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169782**	**169783**	**169784**	**169787**	**169788**
Sample ID			PE40-3'	PE40-5',10',1	PE40-20 to	PE39-3'	PE39-5',10',14
Date Sampled			04/21/2006	4'11" 04/21/2006	60 04/21/2006	04/21/2006	' 04/21/2006
Date Extracted			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Preparation Method							
Date Analyzed			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	1.94J	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	4.48	0.26J	ND	0.22J
4,4'-DDT (DDT)	0.22	4.00	ND	36.1	0.22J	ND	0.25J
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan I	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan II	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169782	169783	169784	169787	169788
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	93	80	78	84	101

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	84	82	2.4	42-122	<30					
4,4'-DDT (DDT)	91	98	7.4	25-160	<30					
Dieldrin	96	96	<1	36-146	<30					
Endrin	106	107	<1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	82	81	1.2	32-127	<30					
Heptachlor	88	87	1.1	34-111	<30					

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ANALYTICAL RESULTS

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Attn: Greg Dickinson

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169789**	**169792**	**169793**	**169794**
Sample ID			PE39-21,30,3	PE41-3'	PE41-5',10'2",	PE41-20,29.8,
Date Sampled			7.5,49.4 04/21/2006	04/21/2006	14'4" 04/21/2006	40,49.3 04/21/2006
Date Extracted			04/26/2006	04/26/2006	04/26/2006	04/26/2006
Preparation Method						
Date Analyzed			04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	0.28J	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	1.78J	ND	ND	0.72J
4,4'-DDT (DDT)	0.22	4.00	1.14J	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29312	04/24/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169789	169792	169793	169794	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	81	80	80	87	

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	84	82	2.4	42-122	<30					
4,4'-DDT (DDT)	91	98	7.4	25-160	<30					
Dieldrin	96	96	<1	36-146	<30					
Endrin	106	107	<1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	82	81	1.2	32-127	<30					
Heptachlor	88	87	1.1	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042606-1

Our Lab I.D.			169782	169783	169784	169787	169788
Client Sample I.D.			PE40-3'	PE40-5',10',14'11"	PE40-20 to 60	PE39-3'	PE39-5',10',14'
Date Sampled			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Preparation Method							
Date Analyzed			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169782	169783	169784	169787	169788
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		93	80	78	84	101

QUALITY CONTROL REPORT

QC Batch No: 042606-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	118	111	6.1	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042606-1

Our Lab I.D.			169789	169792	169793	169794
Client Sample I.D.			PE39-21,30,37.5,49.4	PE41-3'	PE41-5',10'2", 14'4"	PE41-20,29.8, 40,49.3
Date Sampled			04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared			04/26/2006	04/26/2006	04/26/2006	04/26/2006
Preparation Method						
Date Analyzed			04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND

Our Lab I.D.		169789	169792	169793	169794
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169	81	80	80	87

QUALITY CONTROL REPORT

QC Batch No: 042606-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	118	111	6.1	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-1B

Our Lab I.D.			169781	169785	169786	169790	169791
Client Sample I.D.			PE40-3' Encore	PE40-14'11" Encore	PE39-3' Encore	PE39-10' Encore	PE41-3' Encore
Date Sampled			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Preparation Method							
Date Analyzed			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29312	04/24/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-1B

Our Lab I.D.			169781	169785	169786	169790	169791
Client Sample I.D.			PE40-3' Encore	PE40-14'11" Encore	PE39-3' Encore	PE39-10' Encore	PE41-3' Encore
Date Sampled			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Preparation Method							
Date Analyzed			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29312	04/24/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-1B

Our Lab I.D.			169781	169785	169786	169790	169791
Client Sample I.D.			PE40-3' Encore	PE40-14'11" Encore	PE39-3' Encore	PE39-10' Encore	PE41-3' Encore
Date Sampled			04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Preparation Method							
Date Analyzed			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			169781	169785	169786	169790	169791
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		111	111	110	108	110
Dibromofluoromethane	70-120		94	90	93	95	93
Toluene-d8	70-120		102	102	100	102	103

QUALITY CONTROL REPORT

QC Batch No: 042806-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	104	106	1.9	75-120	15
Chlorobenzene	107	103	3.8	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	97	92	5.3	75-120	15
MTBE	82	82	<1	75-120	15
Toluene (Methyl benzene)	110	115	4.4	75-120	15
Trichloroethene (TCE)	105	103	1.9	75-120	15

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ANALYTICAL RESULTS

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Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site
1200 Pier E Street
Long Beach, CA

Page: **18**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-2B

Our Lab I.D.			**169795**
Client Sample I.D.			PE41-14'4" Encore
Date Sampled			04/21/2006
Date Prepared			04/29/2006
Preparation Method			
Date Analyzed			04/29/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	24J
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-2B

Our Lab I.D.			169795
Client Sample I.D.			PE41-14'4" Encore
Date Sampled			04/21/2006
Date Prepared			04/29/2006
Preparation Method			
Date Analyzed			04/29/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	4.6J
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-2B

Our Lab I.D.			169795
Client Sample I.D.			PE41-14'4" Encore
Date Sampled			04/21/2006
Date Prepared			04/29/2006
Preparation Method			
Date Analyzed			04/29/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169795
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	113
Dibromofluoromethane	70-120	102
Toluene-d8	70-120	104

QUALITY CONTROL REPORT

QC Batch No: 042806-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	108	106	1.9	75-120	15
Chlorobenzene	108	106	1.9	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	109	111	1.8	75-120	15
MTBE	103	100	3.0	75-120	15
Toluene (Methyl benzene)	115	113	1.8	75-120	15
Trichloroethene (TCE)	108	106	1.9	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042606-1

Our Lab I.D.		169782	169784	169787	169788	169792
Client Sample I.D.		PE40-3'	PE40-20 to 60	PE39-3'	PE39-5',10',14'	PE41-3'
Date Sampled		04/21/2006	04/21/2006	04/21/2006	04/21/2006	04/21/2006
Date Prepared		04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Preparation Method						
Date Analyzed		04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		169782	169784	169787	169788	169792
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	57	54	52	63	59
Phenol-d6	10-107	73	68	64	81	73
2,4,6-Tribromophenol	10-123	85	66	66	91	76
Nitrobenzene-d5	35-114	73	69	63	74	79
2-Fluorobiphenyl	18-116	59	58	53	80	64
Terphenyl-d14	33-141	123	109	128	128	118

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042606-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	92	92	<1	43-118						
Pyrene	103	104	<1	26-127						

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042606-1

Our Lab I.D.		169793	169794			
Client Sample I.D.		PE41-5',10'2", 14'4"	PE41-20,29.8, 40,49.3			
Date Sampled		04/21/2006	04/21/2006			
Date Prepared		04/26/2006	04/26/2006			
Preparation Method						
Date Analyzed		04/26/2006	04/26/2006			
Matrix		Soil	Soil			
Units		ug/kg	ug/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
Acenaphthene	100	ND	ND			
Acenaphthylene	50	ND	ND			
Anthracene	2	ND	ND			
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND			
Benzo(a)pyrene	5	ND	ND			
Benzo(b)fluoranthene	2	ND	ND			
Benzo(ghi)perylene	7	ND	ND			
Benzo(k)fluoranthene	2	ND	ND			
Chrysene	5	ND	ND			
Dibenz(a,h)anthracene	17	ND	ND			
Fluoranthene	5	ND	42.6			
Fluorene	10	ND	ND			
Indeno(1,2,3-cd)pyrene	5	ND	ND			
Naphthalene	50	ND	ND			
Phenanthrene	4	ND	ND			
Pyrene	10	ND	ND			

Our Lab I.D.		169793	169794			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
2-Fluorophenol	21-105	53	50			
Phenol-d6	10-107	62	63			
2,4,6-Tribromophenol	10-123	68	83			
Nitrobenzene-d5	35-114	62	69			
2-Fluorobiphenyl	18-116	49	61			
Terphenyl-d14	33-141	132	114			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042606-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	92	92	<1	43-118						
Pyrene	103	104	<1	26-127						

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: **25**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29312	04/24/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042606-1

Our Lab I.D.		**169783**	**169789**			
Client Sample I.D.		PE40-5',10',14'11"	PE39-21,30,37.5,49.4			
Date Sampled		04/21/2006	04/21/2006			
Date Prepared		04/26/2006	04/26/2006			
Preparation Method						
Date Analyzed		04/26/2006	04/26/2006			
Matrix		Soil	Soil			
Units		ug/kg	ug/kg			
Dilution Factor		2	2			
Analytes	**PQL**	**Results**	**Results**			
Acenaphthene	200	ND	ND			
Acenaphthylene	100	ND	ND			
Anthracene	4	ND	ND			
Benz(a)anthracene (Benzo(a)anthracene)	10	ND	ND			
Benzo(a)pyrene	10	ND	ND			
Benzo(b)fluoranthene	4	ND	ND			
Benzo(ghi)perylene	14	ND	ND			
Benzo(k)fluoranthene	4	ND	ND			
Chrysene	10	ND	ND			
Dibenz(a,h)anthracene	34	ND	ND			
Fluoranthene	10	ND	ND			
Fluorene	20	ND	ND			
Indeno(1,2,3-cd)pyrene	10	ND	ND			
Naphthalene	100	ND	274			
Phenanthrene	8	ND	ND			
Pyrene	20	ND	ND			

Comment(s):
Sample Diluted due to matrix.

Our Lab I.D.		**169783**	**169789**			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
2-Fluorophenol	21-105	72	31			
Phenol-d6	10-107	97	41			
2,4,6-Tribromophenol	10-123	85	31			
Nitrobenzene-d5	35-114	88	51			
2-Fluorobiphenyl	18-116	84	35			
Terphenyl-d14	33-141	126	64			

QUALITY CONTROL REPORT

QC Batch No: 042606-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	92	92	<1	43-118						
Pyrene	103	104	<1	26-127						

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Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 23
Date Received 04/25/2006
Date Reported 05/02/2006

Job Number	Ordered	Client
29321	04/25/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 10 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37145 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29321

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA, 92691	Invoice To:
Telephone: 949 470 1937 / Fax: 949 470 0943	Address:
Special Instruction:	
E-mail:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street, Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8031 A/8032	8260 B	8310	PE41-20'/29'10"/40'/49'4"	PE45-5'/9'8"/13'9"	PE45-21'11"/29'10"/40'/49'4"				Remarks
		PE41-29'10"	4/24/06	07:45	1	Plastic	Soil	None	X	X	X		X	X						
		PE41-40'	Composite	08:15	1									X						Job # 29312 Sample I.D. #169794
		PE41-49'4"		08:42	1									X						
1	169873	PE45-3'		09:25	3	encore						X								
2	169874	PE45-3'		09:25	2	Plastic			X	X	X		X							
3	169875	PE45-5'	Composite	09:28	1				X	X	X		X		X					
		PE45-9'8"		09:33	1										X					
		PE45-13'9"		09:37	1										X					
4	169876	PE45-21'11"	Comp	09:44	1				X	X	X		X			X				Sample from end noted on tube
		PE45-29'10"		09:57	1											X				

Collected By: Scott Miller	Date 4/24/06	Time as above	Relinquished By: Scott Miller
Relinquished By: [signature]	Date 4/25/06	Time 14:00	Received For Laboratory: Paul R
Received By:	Date	Time	Condition of Sample:

Relinquished By: Date 4/24/06 Time 17:00

Received For Laboratory: Date 4/25/06 Time 1400

TAT ☒ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

AMERICAN SCIENTIFIC LABORATORIES, LLC
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COC# № 32549 GLOBAL ID _____ ELECTRONIC REPORT: ☐ EDF ☐ EDD ASL JOB# 29321

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering
Address: 26691 Plaza #270
Mission Viejo, CA, 92691
Telephone: 949 470 1937
Fax: 949 470 0913
Special Instruction: * Collect Sample From end noted on Sleeve

Project Name: Pier E Redevelopment
Site Address: 1200 Pier E Street
Long Beach, CA
Project ID: 0106.0015.002.001
Project Manager: Greg Dickinson

Report To: PM
Address: SAA
Invoice To:
Address:
P.O.#:

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE45-20'/21'6"/40'/49'11"/60'	PE44-5'/9'8"/16'	PE44-3'/21'6"/40' (CAS)						Remarks
		PE45-40'	4/24/06	10:26	1	Plastic	Soil	None					X									
		PE45-49'11" (Comp)		11:02	1								X									
		PE45-60'		12:30	1								X									
5	169877	PE45-13'9"		10:53	3	encore					X											
6	169878	PE44-3'		13:16	3	encore					X											
7	169879	PE44-3'		13:16	2	Plastic			X	X	X		X									
8	169880	PE44-5'		13:21	1				X	X	X		X		X							
		PE44-9'8" (Composite)		13:25	1										X							
		PE44-16'		13:36	1										X							
9	169881	PE44-21'6" (CAS) (Comp)		13:42	1				X	X	X		X			X						*

Collected By: Scott Miller Date 4/24/06 Time as above
Relinquished By: [signature] Date 4/25/06 Time 14:00
Relinquished By: Scott Miller Date 4/24/06 Time 17:00
Received For Laboratory: [signature] Date 4/25/06 Time 1400
Condition of Sample:

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 37162 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29321

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1737	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE44-20'/29'6"/40'/50'						Remarks
		PE44-29'6"	4/24/06	13:57	1	Plastic	Soil	None						X						
		PE44-40' (composite)		14:28	1									X						
		PE44-50'		14:56	1									X						
10	169882	PE44-16'		14:48	3	encore						X								

Collected By: Scott Miller	Date 4/24/06	Time as above	Relinquished By: Scott Miller	Date 4/24/06	Time 17:00	TAT	
Relinquished By: [signature]	Date 4/25/06	Time 11:00	Received For Laboratory: Paul R	Date 4/25/06	Time 11:00	☒ Normal	
Received By:	Date	Time	Condition of Sample:			☐ Rush	

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169874	169875	169876	169879	169880
Sample ID			PE45-3'	PE45-5',9'8",1	PE45-22,30,4	PE44-3'	PE44-5',9'8",1
Date Sampled			04/24/2006	3'9" 04/24/2006	0,50,60 04/24/2006	04/24/2006	6' 04/24/2006
Date Extracted			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	1.05	ND	0.99	ND	ND
Arsenic	0.10	0.25	3.96	ND	0.56	ND	ND
Barium	0.05	0.50	873	42.6	105	21.2	41.3
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	19.6	9.44	17.4	7.32	11.5
Cobalt	0.05	0.50	5.27	4.28	6.80	3.05	5.06
Copper	0.25	0.50	65.2	5.51	15.2	3.93	5.81
Lead	0.10	0.25	23.9	2.43	16.5	1.37	1.95
Molybdenum	0.05	0.50	1.73	ND	ND	ND	ND
Nickel	0.05	0.50	11.9	7.05	11.5	5.25	8.47
Selenium	0.20	0.50	ND	ND	0.77	ND	ND
Silver	0.40	0.50	ND	ND	0.69	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	22.7	20.0	30.9	13.5	23.0
Zinc	0.05	0.50	99.0	27.4	56.6	16.3	27.1

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	112	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	96	80-120								
Barium	95	80-120								
Beryllium	94	80-120								
Cadmium	95	80-120								
Chromium	92	80-120								
Cobalt	99	80-120								
Copper	92	80-120								
Lead	100	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	94	80-120								
Silver	95	80-120								
Thallium	97	80-120								
Vanadium	91	80-120								
Zinc	98	80-120								

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ANALYTICAL RESULTS

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Page: 4
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**169881**
Sample ID			PE44-21.8,29.
Date Sampled			5,40,50 04/24/2006
Date Extracted			05/01/2006
Preparation Method			
Date Analyzed			05/02/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	1.32
Arsenic	0.10	0.25	4.16
Barium	0.05	0.50	198
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	28.0
Cobalt	0.05	0.50	8.81
Copper	0.25	0.50	26.9
Lead	0.10	0.25	41.8
Molybdenum	0.05	0.50	ND
Nickel	0.05	0.50	16.5
Selenium	0.20	0.50	ND
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	43.1
Zinc	0.05	0.50	102

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	112	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	96	80-120								
Barium	95	80-120								
Beryllium	94	80-120								
Cadmium	95	80-120								
Chromium	92	80-120								
Cobalt	99	80-120								
Copper	92	80-120								
Lead	100	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	94	80-120								
Silver	95	80-120								
Thallium	97	80-120								
Vanadium	91	80-120								
Zinc	98	80-120								

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ANALYTICAL RESULTS

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Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 6

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042806-2

Our Lab I.D.		169874	169875	169876	169879	169880
Client Sample I.D.		PE45-3'	PE45-5',9'8",13'9"	PE45-22,30,40,50,60	PE44-3'	PE44-5',9'8",16'
Date Sampled		04/24/2006	04/24/2006	04/24/2006	04/24/2006	04/24/2006
Date Prepared		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method						
Date Analyzed		04/29/2006	04/29/2006	04/29/2006	04/29/2006	04/29/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		169874	169875	169876	169879	169880
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	101	118	93	108	103

QUALITY CONTROL REPORT

QC Batch No: 042806-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	94	94	<1	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 042806-2

Our Lab I.D.		**169881**				
Client Sample I.D.		PE44-21.8,29.5,40,50				
Date Sampled		04/24/2006				
Date Prepared		04/27/2006				
Preparation Method						
Date Analyzed		04/29/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**169881**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	108				

QUALITY CONTROL REPORT

QC Batch No: 042806-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	94	94	<1	75-120	15					

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Page: 8
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			169874	169875	169876	169879	169880
Sample ID			PE45-3'	PE45-5',9'8",1	PE45-22,30,4	PE44-3'	PE44-5',9'8",1
Date Sampled			04/24/2006	3'9" 04/24/2006	0,50,60 04/24/2006	04/24/2006	6' 04/24/2006
Date Extracted			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method							
Date Analyzed			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	0.86J	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	1.26J	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	14.6	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	0.75J	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169874	169875	169876	169879	169880
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	74	86	98	85	85

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	83	81	2.4	42-122	<30					
4,4'-DDT (DDT)	79	74	6.5	25-160	<30					
Dieldrin	94	94	<1	36-146	<30					
Endrin	100	97	3.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	79	76	3.9	32-127	<30					
Heptachlor	82	79	3.7	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

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Site

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Page: **10**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169881**				
Sample ID			PE44-21.8,29.				
Date Sampled			5,40,50 04/24/2006				
Date Extracted			04/27/2006				
Preparation Method							
Date Analyzed			04/27/2006				
Matrix			Soil				
Units			ug/kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
Aldrin	0.23	2.00	ND				
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND				
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND				
Gamma-Chlordane	0.19	2.00	ND				
alpha-Chlordane	0.20	2.00	ND				
4,4'-DDD (DDD)	0.27	4.00	0.50J				
4,4'-DDE (DDE)	0.22	4.00	1.66J				
4,4'-DDT (DDT)	0.22	4.00	0.91J				
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND				
Dieldrin	0.20	4.00	ND				
Endosulfan I	0.20	2.00	ND				
Endosulfan II	0.24	4.00	ND				
Endosulfan sulfate	0.27	4.00	ND				
Endrin	0.25	4.00	ND				
Endrin aldehyde	0.44	4.00	ND				
Endrin ketone	0.30	4.00	ND				
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND				
Heptachlor	0.23	2.00	ND				
Heptachlor epoxide	0.23	2.00	ND				
Methoxychlor	0.39	17.00	ND				
Toxaphene	17	170	ND				

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ANALYTICAL RESULTS

Page: 11
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29321	04/25/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169881				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	70				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	83	81	2.4	42-122	<30					
4,4'-DDT (DDT)	79	74	6.5	25-160	<30					
Dieldrin	94	94	<1	36-146	<30					
Endrin	100	97	3.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	79	76	3.9	32-127	<30					
Heptachlor	82	79	3.7	34-111	<30					

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Page: **12**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042706-1

Our Lab I.D.			169874	169875	169876	169879	169880
Client Sample I.D.			PE45-3'	PE45-5',9'8",13'9"	PE45-22,30,40,50,60	PE44-3'	PE44-5',9'8",16'
Date Sampled			04/24/2006	04/24/2006	04/24/2006	04/24/2006	04/24/2006
Date Prepared			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method							
Date Analyzed			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.		169874	169875	169876	169879	169880
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	74	86	98	85	85

QUALITY CONTROL REPORT

QC Batch No: 042706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	110	115	4.4	39-150	<30

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 042706-1

Our Lab I.D.			169881
Client Sample I.D.			PE44-21.8,29. 5,40,50
Date Sampled			04/24/2006
Date Prepared			04/27/2006
Preparation Method			
Date Analyzed			04/27/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.		169881
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Decachlorobiphenyl	43-169	70

QUALITY CONTROL REPORT

QC Batch No: 042706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	110	115	4.4	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-1B

Our Lab I.D.			**169873**	**169878**
Client Sample I.D.			PE45-3' Encore	PE44-3' Encore
Date Sampled			04/24/2006	04/24/2006
Date Prepared			04/28/2006	04/28/2006
Preparation Method				
Date Analyzed			04/28/2006	04/28/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-1B

Our Lab I.D.			169873	169878
Client Sample I.D.			PE45-3' Encore	PE44-3' Encore
Date Sampled			04/24/2006	04/24/2006
Date Prepared			04/28/2006	04/28/2006
Preparation Method				
Date Analyzed			04/28/2006	04/28/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-1B

Our Lab I.D.			169873	169878
Client Sample I.D.			PE45-3' Encore	PE44-3' Encore
Date Sampled			04/24/2006	04/24/2006
Date Prepared			04/28/2006	04/28/2006
Preparation Method				
Date Analyzed			04/28/2006	04/28/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.		169873	169878
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery			
Bromofluorobenzene	70-120	119	109
Dibromofluoromethane	70-120	101	96
Toluene-d8	70-120	100	103

QUALITY CONTROL REPORT

QC Batch No: 042806-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	104	106	1.9	75-120	15
Chlorobenzene	107	103	3.8	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	97	92	5.3	75-120	15
MTBE	82	82	<1	75-120	15
Toluene (Methyl benzene)	110	115	4.4	75-120	15
Trichloroethene (TCE)	105	103	1.9	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-2B

Our Lab I.D.			**169877**	**169882**
Client Sample I.D.			PE45-13'9" Encore	PE44-16' Encore
Date Sampled			04/24/2006	04/24/2006
Date Prepared			04/29/2006	04/29/2006
Preparation Method				
Date Analyzed			04/29/2006	04/29/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29321	04/25/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-2B

Our Lab I.D.			**169877**	**169882**
Client Sample I.D.			PE45-13'9" Encore	PE44-16' Encore
Date Sampled			04/24/2006	04/24/2006
Date Prepared			04/29/2006	04/29/2006
Preparation Method				
Date Analyzed			04/29/2006	04/29/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29321	04/25/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 042806-2B

Our Lab I.D.			169877	169882
Client Sample I.D.			PE45-13'9" Encore	PE44-16' Encore
Date Sampled			04/24/2006	04/24/2006
Date Prepared			04/29/2006	04/29/2006
Preparation Method				
Date Analyzed			04/29/2006	04/29/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	7J
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.		169877	169882
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery			
Bromofluorobenzene	70-120	109	109
Dibromofluoromethane	70-120	102	102
Toluene-d8	70-120	102	101

QUALITY CONTROL REPORT

QC Batch No: 042806-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	108	106	1.9	75-120	15
Chlorobenzene	108	106	1.9	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	109	111	1.8	75-120	15
MTBE	103	100	3.0	75-120	15
Toluene (Methyl benzene)	115	113	1.8	75-120	15
Trichloroethene (TCE)	108	106	1.9	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042706-1

Our Lab I.D.		169875	169876	169879	169880	169881
Client Sample I.D.		PE45-5',9'8",13'9"	PE45-22,30,40,50,60	PE44-3'	PE44-5',9'8",16'	PE44-21.8,29.5,40,50
Date Sampled		04/24/2006	04/24/2006	04/24/2006	04/24/2006	04/24/2006
Date Prepared		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Preparation Method						
Date Analyzed		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	19.8
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	30.9
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	11.0	ND	ND	ND	23.8
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	10.0	61.1	ND	ND	55.1

Our Lab I.D.		169875	169876	169879	169880	169881
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	55	55	49	49	47
Phenol-d6	10-107	72	66	61	60	54
2,4,6-Tribromophenol	10-123	59	68	72	39	47
Nitrobenzene-d5	35-114	60	62	66	55	60
2-Fluorobiphenyl	18-116	50	51	57	43	46
Terphenyl-d14	33-141	109	97	88	94	72

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	84	79	6.1	43-118						
Pyrene	94	97	3.1	26-127						

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: **22**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 042706-1

Our Lab I.D.		**169874**				
Client Sample I.D.		PE45-3'				
Date Sampled		04/24/2006				
Date Prepared		04/27/2006				
Preparation Method						
Date Analyzed		04/27/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		2				
Analytes	**PQL**	**Results**				
Acenaphthene	200	ND				
Acenaphthylene	100	ND				
Anthracene	4	27.9				
Benz(a)anthracene (Benzo(a)anthracene)	10	ND				
Benzo(a)pyrene	10	ND				
Benzo(b)fluoranthene	4	ND				
Benzo(ghi)perylene	14	ND				
Benzo(k)fluoranthene	4	ND				
Chrysene	10	ND				
Dibenz(a,h)anthracene	34	ND				
Fluoranthene	10	158				
Fluorene	20	ND				
Indeno(1,2,3-cd)pyrene	10	ND				
Naphthalene	100	ND				
Phenanthrene	8	59.0				
Pyrene	20	146				

Comment(s):
169874: Dilution due to matrix.

Our Lab I.D.		**169874**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	35				
Phenol-d6	10-107	46				
2,4,6-Tribromophenol	10-123	33				
Nitrobenzene-d5	35-114	51				
2-Fluorobiphenyl	18-116	36				
Terphenyl-d14	33-141	46				

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29321	04/25/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 042706-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	84	79	6.1	43-118						
Pyrene	94	97	3.1	26-127						

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Ordered By

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Attn Greg Dickinson

Number of Pages 32
Date Received 04/26/2006
Date Reported 05/08/2006

Job Number	Ordered	Client
29338	04/26/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 15 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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ASL JOB# 29338

COC# № 37113 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering
Address: 26691 Plaza #270
Mission Viejo, CA 92691
Telephone: 949 470 1937
Fax: 949 470 0943
Special Instruction:
E-mail:

Project Name: Pier E Redevelopment
Site Address: 1200 Pier E Street
Long Beach, CA
Project ID: 0106.0015.002.001
Project Manager: Greg Dickinson

Report To: PM
Address: SAA
Invoice To:
Address:
P.O.#:

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Container(s) Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	6260 B	8310	PE 43-5'/9'11"/13'11"	PE 43-20'/29'1"/40'/49'10"						Remarks
1	169926	PE43-3'	4/25/06	07:25	3	encore	Soil	None				X									
2	169927	PE43-3'		07:25	2	Plastic			X	X	X		X								
3	169928	PE43-5' (Composite)		07:32	1				X	X	X		X	X							
		PE43-9'11" (Composite)		07:40	1									X							
		PE43-13'11" (Composite)		07:48	1									X							
4	169929	PE43-20' (Composite)		07:56	1				X	X	X		X		X						Sample from end noted on tube
		PE43-29'1"		08:20	1										X						
		PE43-40'		08:50	1										X						
		PE43-49'10"		09:21	1										X						
5	169930	PE43-13'11"		09:16	3	encore						X									

Collected By: Scott Miles Date 4/25/06 Time as above
Relinquished By: [signature] Date 4/26/06 Time
Received By: Date Time

Relinquished By: Scott Miles Date 4/25/06 Time 17:00
Received For Laboratory: [signature] Date 4/26/06 Time 1510
Condition of Sample:

TAT: ☒ Normal ☐ Rush

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			169927	169928	169929	169932	169933
Sample ID			PE43-3'	PE43-5',9'11",	PE43-20,29.1,	PE33-3'	PE33-5',10',14
Date Sampled			04/25/2006	13'11" 04/25/2006	40,49.8 04/25/2006	04/25/2006	'1" 04/25/2006
Date Extracted			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	ND	0.96	ND	ND
Arsenic	0.10	0.25	ND	ND	0.84	ND	ND
Barium	0.05	0.50	25.2	45.0	110	36.1	86.1
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	8.19	12.8	19.2	11.6	17.8
Cobalt	0.05	0.50	2.68	5.70	6.41	4.06	5.63
Copper	0.25	0.50	3.73	7.88	15.2	4.10	9.74
Lead	0.10	0.25	1.26	3.28	19.5	1.40	7.60
Molybdenum	0.05	0.50	ND	ND	ND	ND	0.87
Nickel	0.05	0.50	4.77	8.78	11.5	6.82	13.6
Selenium	0.20	0.50	0.62	0.69	0.70	ND	ND
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	12.1	25.6	29.0	21.3	26.4
Zinc	0.05	0.50	14.9	33.0	59.5	21.7	39.1

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ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	103	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	94	80-120								
Barium	94	80-120								
Beryllium	94	80-120								
Cadmium	95	80-120								
Chromium	94	80-120								
Cobalt	98	80-120								
Copper	93	80-120								
Lead	96	80-120								
Molybdenum	99	80-120								
Nickel	100	80-120								
Selenium	93	80-120								
Silver	93	80-120								
Thallium	96	80-120								
Vanadium	94	80-120								
Zinc	107	80-120								

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ANALYTICAL RESULTS

Ordered By

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Site

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Page: **4**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No: 050406-3 / 050406-3

Our Lab I.D.			**169937**	**169938**	**169939**		
Sample ID			PE34-3'	PE34-5',10',1	PE34-20,29.6,		
Date Sampled			04/25/2006	6' 04/25/2006	40,49.6 04/25/2006		
Date Extracted			05/02/2006	05/02/2006	05/02/2006		
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006		
Matrix			Soil	Soil	Soil		
Units			mg/Kg	mg/Kg	mg/Kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
AA Metals							
Mercury	0.10	0.20	ND	ND	ND		
ICP Metals							
Antimony	0.15	0.50	ND	0.73	ND		
Arsenic	0.10	0.25	ND	ND	2.91		
Barium	0.05	0.50	31.1	44.8	87.9		
Beryllium	0.05	0.50	ND	ND	ND		
Cadmium	0.05	0.50	ND	ND	ND		
Chromium	0.25	0.50	9.98	13.4	13.6		
Cobalt	0.05	0.50	3.57	4.85	5.84		
Copper	0.25	0.50	3.49	4.53	9.19		
Lead	0.10	0.25	2.17	2.50	5.54		
Molybdenum	0.05	0.50	ND	ND	ND		
Nickel	0.05	0.50	6.30	8.05	8.80		
Selenium	0.20	0.50	0.59	0.67	ND		
Silver	0.40	0.50	ND	ND	ND		
Thallium	0.20	0.50	ND	ND	ND		
Vanadium	0.30	0.50	17.1	24.3	27.6		
Zinc	0.05	0.50	20.1	27.4	36.5		

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ANALYTICAL RESULTS

Page: 5
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No: 050406-3 / 050406-3

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	103	80-120								
ICP Metals										
Antimony	94	80-120								
Arsenic	94	80-120								
Barium	94	80-120								
Beryllium	94	80-120								
Cadmium	95	80-120								
Chromium	94	80-120								
Cobalt	98	80-120								
Copper	93	80-120								
Lead	96	80-120								
Molybdenum	99	80-120								
Nickel	100	80-120								
Selenium	93	80-120								
Silver	93	80-120								
Thallium	96	80-120								
Vanadium	94	80-120								
Zinc	107	80-120								

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

Page: 6

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050206-1

Our Lab I.D.		**169927**	**169928**	**169929**	**169932**	**169933**
Client Sample I.D.		PE43-3'	PE43-5',9'11", 13'11"	PE43-20,29.1, 40,49.8	PE33-3'	PE33-5',10',14 '1"
Date Sampled		04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Date Prepared		05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method						
Date Analyzed		05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		**169927**	**169928**	**169929**	**169932**	**169933**
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	99	98	99	120	96

QUALITY CONTROL REPORT

QC Batch No: 050206-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	100	3.0	75-120	15					

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050206-1

Our Lab I.D.		**169938**	**169939**			
Client Sample I.D.		PE34-5',10',16'	PE34-20,29.6,40,49.6			
Date Sampled		04/25/2006	04/25/2006			
Date Prepared		05/02/2006	05/02/2006			
Preparation Method						
Date Analyzed		05/02/2006	05/02/2006			
Matrix		Soil	Soil			
Units		mg/kg	mg/kg			
Dilution Factor		1	1			
Analytes	**PQL**	**Results**	**Results**			
TPH DRO (C13-C22)	10	ND	ND			
TPH ORO (C22+)	50	ND	ND			

Our Lab I.D.		**169938**	**169939**			
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Chlorobenzene	70-120	98	120			

QUALITY CONTROL REPORT

QC Batch No: 050206-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	100	3.0	75-120	15					

AMERICAN SCIENTIFIC LABORATORIES, LLC
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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

Page: 8

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050206-2

Our Lab I.D.		**169937**
Client Sample I.D.		PE34-3'
Date Sampled		04/25/2006
Date Prepared		05/02/2006
Preparation Method		
Date Analyzed		05/03/2006
Matrix		Soil
Units		mg/kg
Dilution Factor		1
Analytes	**PQL**	**Results**
TPH DRO (C13-C22)	10	ND
TPH ORO (C22+)	50	ND

Our Lab I.D.		**169937**
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Chlorobenzene	70-120	96

QUALITY CONTROL REPORT

QC Batch No: 050206-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Diesel	111	108	2.7	75-120	15

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ANALYTICAL RESULTS

Ordered By

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Telephone: (949)470-1937
Attn: Greg Dickinson

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			169927	169928	169929	169932	169933
Sample ID			PE43-3'	PE43-5',9'11",	PE43-20,29.1,	PE33-3'	PE33-5',10',14
Date Sampled			04/25/2006	13'11" 04/25/2006	40,49.8 04/25/2006	04/25/2006	'1" 04/25/2006
Date Extracted			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	0.28J
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	1.14J
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169927	169928	169929	169932	169933
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	96	81	88	92	98

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	84	2.4	42-122	<30					
4,4'-DDT (DDT)	98	103	5.0	25-160	<30					
Dieldrin	97	97	<1	36-146	<30					
Endrin	106	108	1.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	83	82	1.2	32-127	<30					
Heptachlor	89	88	1.1	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**169937**	**169938**	**169939**		
Sample ID			PE34-3'	PE34-5',10',1	PE34-20,29.6,		
Date Sampled			04/25/2006	6' 04/25/2006	40,49.6 04/25/2006		
Date Extracted			05/02/2006	05/02/2006	05/02/2006		
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006		
Matrix			Soil	Soil	Soil		
Units			ug/kg	ug/kg	ug/kg		
Detection Limit Multiplier			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Aldrin	0.23	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND		
Gamma-Chlordane	0.19	2.00	ND	ND	ND		
alpha-Chlordane	0.20	2.00	ND	ND	ND		
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND		
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND		
4,4'-DDT (DDT)	0.22	4.00	0.64J	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND		
Dieldrin	0.20	4.00	ND	ND	ND		
Endosulfan 1	0.20	2.00	ND	ND	ND		
Endosulfan 11	0.24	4.00	ND	ND	ND		
Endosulfan sulfate	0.27	4.00	ND	ND	ND		
Endrin	0.25	4.00	ND	ND	ND		
Endrin aldehyde	0.44	4.00	ND	ND	ND		
Endrin ketone	0.30	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND		
Heptachlor	0.23	2.00	ND	ND	ND		
Heptachlor epoxide	0.23	2.00	ND	ND	ND		
Methoxychlor	0.39	17.00	ND	ND	ND		
Toxaphene	17	170	ND	ND	ND		

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		169937	169938	169939		
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	98	105	94		

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	86	84	2.4	42-122	<30					
4,4'-DDT (DDT)	98	103	5.0	25-160	<30					
Dieldrin	97	97	<1	36-146	<30					
Endrin	106	108	1.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	83	82	1.2	32-127	<30					
Heptachlor	89	88	1.1	34-111	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050206-1

Our Lab I.D.			169927	169928	169929	169932	169933
Client Sample I.D.			PE43-3'	PE43-5',9'11", 13'11"	PE43-20,29.1, 40,49.8	PE33-3'	PE33-5',10',14 '1"
Date Sampled			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Date Prepared			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			169927	169928	169929	169932	169933
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		96	81	88	92	98

QUALITY CONTROL REPORT

QC Batch No: 050206-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	94	105	11.1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050206-1

Our Lab I.D.			169937	169938	169939
Client Sample I.D.			PE34-3'	PE34-5',10',16'	PE34-20,29.6,40,49.6
Date Sampled			04/25/2006	04/25/2006	04/25/2006
Date Prepared			05/02/2006	05/02/2006	05/02/2006
Preparation Method					
Date Analyzed			05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND

Our Lab I.D.			169937	169938	169939
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169		98	105	94

QUALITY CONTROL REPORT

QC Batch No: 050206-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	94	105	11.1	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050206-1B

Our Lab I.D.			169926	169930	169931	169935	169936
Client Sample I.D.			PE43-3' Encore	PE43-13'11" Encore	PE33-3' Encore	PE33-14'1" Encore	PE34-3' Encore
Date Sampled			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Date Prepared			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050206-1B

Our Lab I.D.			169926	169930	169931	169935	169936
Client Sample I.D.			PE43-3' Encore	PE43-13'11" Encore	PE33-3' Encore	PE33-14'1" Encore	PE34-3' Encore
Date Sampled			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Date Prepared			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050206-1B

Our Lab I.D.			169926	169930	169931	169935	169936
Client Sample I.D.			PE43-3' Encore	PE43-13'11" Encore	PE33-3' Encore	PE33-14'1" Encore	PE34-3' Encore
Date Sampled			04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Date Prepared			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			169926	169930	169931	169935	169936
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		103	106	102	104	108
Dibromofluoromethane	70-120		96	95	100	98	100
Toluene-d8	70-120		101	100	104	102	100

QUALITY CONTROL REPORT

QC Batch No: 050206-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	111	108	2.7	75-120	15
Chlorobenzene	100	96	4.1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	93	86	7.8	75-120	15
MTBE	87	86	1.2	75-120	15
Toluene (Methyl benzene)	98	98	<1	75-120	15
Trichloroethene (TCE)	95	93	2.1	75-120	15

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ANALYTICAL RESULTS

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Attn: Greg Dickinson

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Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050206-1B

Our Lab I.D.			169940
Client Sample I.D.			PE34-10' Encore
Date Sampled			04/25/2006
Date Prepared			05/02/2006
Preparation Method			
Date Analyzed			05/02/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29338	04/26/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050206-1B

Our Lab I.D.			169940
Client Sample I.D.			PE34-10' Encore
Date Sampled			04/25/2006
Date Prepared			05/02/2006
Preparation Method			
Date Analyzed			05/02/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050206-1B

Our Lab I.D.			169940
Client Sample I.D.			PE34-10' Encore
Date Sampled			04/25/2006
Date Prepared			05/02/2006
Preparation Method			
Date Analyzed			05/02/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		169940
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	104
Dibromofluoromethane	70-120	100
Toluene-d8	70-120	100

QUALITY CONTROL REPORT

QC Batch No: 050206-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	111	108	2.7	75-120	15
Chlorobenzene	100	96	4.1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	93	86	7.8	75-120	15
MTBE	87	86	1.2	75-120	15
Toluene (Methyl benzene)	98	98	<1	75-120	15
Trichloroethene (TCE)	95	93	2.1	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		169927	169928	169929	169932	169933
Sample ID		PE43-3'	PE43-5',9'11", 13'11"	PE43-20,29.1, 40,49.8	PE33-3'	PE33-5',10',14 '1"
Date Sampled		04/25/2006	04/25/2006	04/25/2006	04/25/2006	04/25/2006
Date Extracted		05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method						
Date Analyzed		05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	16.2	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	25.3	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	15.9	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Comment(s):

169933 : Low surrogate recevery due to Matrix.

Our Lab I.D.		169927	169928	169929	169932	169933
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	50	63	51	44	17
Phenol-d6	10-107	59	77	62	51	26
2,4,6-Tribromophenol	10-123	65	77	70	65	53
Nitrobenzene-d5	35-114	65	78	72	56	29

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		169927	169928	169929	169932	169933
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
2-Fluorobiphenyl	18-116	59	75	65	53	25
Terphenyl-d14	33-141	110	119	99	121	101

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	67	75	11.3	43-118						
Pyrene	110	102	7.5	26-127						

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 050206-1

Our Lab I.D.		**169937**	**169938**	**169939**		
Client Sample I.D.		PE34-3'	PE34-5',10',16'	PE34-20,29.6,40,49.6		
Date Sampled		04/25/2006	04/25/2006	04/25/2006		
Date Prepared		05/02/2006	05/02/2006	05/02/2006		
Preparation Method						
Date Analyzed		05/02/2006	05/02/2006	05/02/2006		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	**PQL**	**Results**	**Results**	**Results**		
Acenaphthene	100	ND	ND	ND		
Acenaphthylene	50	ND	ND	ND		
Anthracene	2	ND	ND	ND		
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND		
Benzo(a)pyrene	5	ND	ND	ND		
Benzo(b)fluoranthene	2	ND	ND	ND		
Benzo(ghi)perylene	7	ND	ND	ND		
Benzo(k)fluoranthene	2	ND	ND	ND		
Chrysene	5	ND	ND	ND		
Dibenz(a,h)anthracene	17	ND	ND	ND		
Fluoranthene	5	ND	ND	31.0		
Fluorene	10	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND		
Naphthalene	50	ND	ND	ND		
Phenanthrene	4	ND	ND	ND		
Pyrene	10	ND	ND	ND		

Our Lab I.D.		**169937**	**169938**	**169939**		
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**		
Surrogate Percent Recovery						
2-Fluorophenol	21-105	46	56	50		
Phenol-d6	10-107	60	69	63		
2,4,6-Tribromophenol	10-123	83	92	86		
Nitrobenzene-d5	35-114	55	80	64		
2-Fluorobiphenyl	18-116	60	68	66		
Terphenyl-d14	33-141	109	119	109		

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 050206-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	67	75	11.3	43-118						
Pyrene	110	102	7.5	26-127						

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Project ID: 0106.0015.002.001
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Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No: 050506-1 / 050506-1

Our Lab I.D.			**170400**
Sample ID			PE33-20,28.9,
Date Sampled			40,46 04/25/2006
Date Extracted			05/05/2006
Preparation Method			
Date Analyzed			05/05/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	0.83
Arsenic	0.10	0.25	ND
Barium	0.05	0.50	89.3
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	17.3
Cobalt	0.05	0.50	6.99
Copper	0.25	0.50	10.9
Lead	0.10	0.25	8.04
Molybdenum	0.05	0.50	ND
Nickel	0.05	0.50	11.0
Selenium	0.20	0.50	ND
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	31.4
Zinc	0.05	0.50	42.4

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No: 050506-1 / 050506-1

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	99	80-120								
Arsenic	102	80-120								
Barium	101	80-120								
Beryllium	101	80-120								
Cadmium	99	80-120								
Chromium	100	80-120								
Cobalt	104	80-120								
Copper	99	80-120								
Lead	105	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	99	80-120								
Silver	100	80-120								
Thallium	103	80-120								
Vanadium	99	80-120								
Zinc	104	80-120								

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050706-1

Our Lab I.D.		**170400**				
Client Sample I.D.		PE33-20,28.9, 40,46				
Date Sampled		04/25/2006				
Date Prepared		05/05/2006				
Preparation Method						
Date Analyzed		05/08/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**170400**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	120				

QUALITY CONTROL REPORT

QC Batch No: 050706-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	96	95	1.0	75-120	15					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**170400**
Sample ID			PE33-20,28.9, 40,46
Date Sampled			04/25/2006
Date Extracted			05/04/2006
Preparation Method			
Date Analyzed			05/04/2006
Matrix			Soil
Units			ug/kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
Aldrin	0.23	2.00	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND
Gamma-Chlordane	0.19	2.00	ND
alpha-Chlordane	0.20	2.00	ND
4,4'-DDD (DDD)	0.27	4.00	ND
4,4'-DDE (DDE)	0.22	4.00	ND
4,4'-DDT (DDT)	0.22	4.00	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND
Dieldrin	0.20	4.00	ND
Endosulfan 1	0.20	2.00	ND
Endosulfan 11	0.24	4.00	ND
Endosulfan sulfate	0.27	4.00	ND
Endrin	0.25	4.00	ND
Endrin aldehyde	0.44	4.00	ND
Endrin ketone	0.30	4.00	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND
Heptachlor	0.23	2.00	ND
Heptachlor epoxide	0.23	2.00	ND
Methoxychlor	0.39	17.00	ND
Toxaphene	17	170	ND

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29338	04/26/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170400				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	87				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	67	69	2.9	42-122	<30					
4,4'-DDT (DDT)	71	83	15.6	25-160	<30					
Dieldrin	79	87	9.6	36-146	<30					
Endrin	81	90	10.5	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	64	66	3.1	32-127	<30					
Heptachlor	63	66	4.7	34-111	<30					

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By
Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-
Telephone: (949)470-1937
Attn: Greg Dickinson

Site
1200 Pier E Street
Long Beach, CA

Page: 30

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050406-1

Our Lab I.D.			170400
Client Sample I.D.			PE33-20,28.9, 40,46
Date Sampled			04/25/2006
Date Prepared			05/04/2006
Preparation Method			
Date Analyzed			05/04/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.		170400
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Decachlorobiphenyl	43-169	87

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	90	92	2.2	39-150	<30

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ANALYTICAL RESULTS

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Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 31

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 050406-1

Our Lab I.D.		**170400**				
Client Sample I.D.		PE33-20,28.9, 40,46				
Date Sampled		04/25/2006				
Date Prepared		05/04/2006				
Preparation Method						
Date Analyzed		05/04/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Acenaphthene	100	ND				
Acenaphthylene	50	ND				
Anthracene	2	ND				
Benz(a)anthracene (Benzo(a)anthracene)	5	ND				
Benzo(a)pyrene	5	ND				
Benzo(b)fluoranthene	2	ND				
Benzo(ghi)perylene	7	ND				
Benzo(k)fluoranthene	2	ND				
Chrysene	5	ND				
Dibenz(a,h)anthracene	17	ND				
Fluoranthene	5	ND				
Fluorene	10	ND				
Indeno(1,2,3-cd)pyrene	5	ND				
Naphthalene	50	ND				
Phenanthrene	4	ND				
Pyrene	10	ND				

Our Lab I.D.		**170400**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	63				
Phenol-d6	10-107	78				
2,4,6-Tribromophenol	10-123	91				
Nitrobenzene-d5	35-114	91				
2-Fluorobiphenyl	18-116	87				
Terphenyl-d14	33-141	128				

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29338	04/26/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	MS % REC	MS DUP % REC	RPD %							
Acenaphthene	65	74	12.9							
Pyrene	87	93	6.7							

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Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 34
Date Received 04/27/2006
Date Reported 05/08/2006

Job Number	Ordered	Client
29357	04/27/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 16 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37134 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29357

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street
Telephone: 949 470 1937	Long Beach, CA
Fax: 949 470 0943	Address: SAA
Special Instruction:	Invoice To:
	Address:
E-mail:	Project ID: 0106.0015.002.001
	Project Manager: Greg Dickinson
	P.O.#:

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE 24-5'/9'/13'8"	PE 24-20'/29'6"/40'					Remarks
1	170048	PE24-3'	4/26/06	07:30	3	encore	Soil	None				X								
2	170049	PE24-3'		07:30	2	Plastic			X	X	X		X							
3	170050	PE 24-5' (Composite)		07:44	1				X	X	X		X	X						
		PE24-9'		07:49	1									X						Collect Sample From and Note
		PE24-13'8"		07:54	1									X						
4	170051	PE24-20' (Composite)		08:06	1				X	X	X		X		X					Hold
		PE24-29'6"		08:24	1										X					
		PE24-40'		09:00	1										X					
5	170052	PE24-13'8"		08:42	3	encore						X								
6	170053	PE26-3'		09:45	3	encore						X								

Collected By: Scott Miller	Date 4/26/06	Time as above	Relinquished By: Scott Miller Date 4/26/06 Time 17:30
Relinquished By: [illegible]	Date 4/27/06	Time 1400	Received For Laboratory [illegible] Date 4/27/06 Time 1400
Received By:	Date	Time	Condition of Sample:

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 37149 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29357

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	3015 Ext	8081A/8082	8260B	8310	PE26-5'/10'4"/14'	PE26-20'/29'6"/40'					Remarks
7	170054	PE26-3'	4/26/06	09:45	2	Plastic	Soil	None	X	X	X		X							
8	170055	PE26-5'	Composite	09:47	1				X	X	X		X	X						
		PE26-10'4"		09:51	1									X						
		PE26-14'		09:57	1									X						
9	170056	PE26-20'	Composite	10:08	1				X	X	X		X		X					Hold
		PE26-29'6"		10:27	1										X					
		PE26-40'		11:01	1										X					
10	170057	PE26-14'		10:36	3	encore						X								
11	170058	PE31-3'		12:45	3	encore						X								
12	170059	PE31-3'		12:45	2	Plastic			X	X	X		X							

Collected By: Scott Miller	Date 4/26/06	Time see above	Relinquished By: Scott Miller Date 4/26/06 Time 17:00
Relinquished By: [signature]	Date 4/27/06	Time 1400	Received For Laboratory [signature] Date 4/27/06 Time 1400
Received By:	Date	Time	Condition of Sample:

TAT ☒ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 37151 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29357

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1931 Fax: 949 470 0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals 6015 Ext	8031A/8082	8260B	8310	PE31-5'/10'/13'10"	PE31-20'/29'4"/40'/50'					Remarks
13	170060	PE31-5'	4/26/06	12:50	1	Plastic	Soil	None	X	X	X	X	X						
		PE31-10'	Composite	~~13:01~~ 12:54	1								X						
		PE31-13'10"		13:01	1								X						
14	170061	PE31-20'		13:14	1				X	X	X	X		X					
		PE31-29'4"	Composite	13:30	1									X					
		PE31-40'		14:06	1									X					
		PE31-50'		14:33	1									X					
		PE31-60'		15:27	1									X					
15	170062	PE31-13'10"		14:00	3	encore					X								
16	170063	PE24-9'		7:44	3	encore					X								

Collected By: Scott Miller	Date 4/26/06	Time as above	Relinquished By: Scott Miller	Date 4/26/06	Time 17:00
Relinquished By: [signature]	Date 4/27/06	Time 1400	Received For Laboratory [signature]	Date 4/27/06	Time 1400
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 37531 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29357

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To:	ANALYSIS REQUESTED
Address:	Project Name:	Address:	
	Site Address:	Invoice To:	
Telephone: Fax:		Address:	
Special Instruction:	Project ID:		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 metals	8015m Ext.	8081A/8082	8310 PAH	PE26-20'/29'6"/40'/45'11"	PE24-20'/29'6"/40'/49'10"						Remarks
	170401	PE 26-20'	4-26-06		1	plastic	soil		X	X	X	X	X							
		26-29'6"	↓		1	↓	↓						X							
		26-40'			1								X							
		26-45'11"			1								X							
	170404	PE 24-20'	4-26-06		1	↓	↓		X	X	X	X		X						
		29'6"	↓		1	↓	↓							X						
		40'			1									X						
		49'10"			1									X						

Collected By:	Date	Time	Relinquished By:	Date	Time
Relinquished By:	Date	Time	Received For Laboratory	Date 5.2.06	Time
Received By:	Date	Time	Condition of Sample:		

TAT ☐ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170054**
Sample ID			PE 26-3'
Date Sampled			04/26/2006
Date Extracted			05/02/2006
Preparation Method			
Date Analyzed			05/03/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	ND
Arsenic	0.10	0.25	ND
Barium	0.05	0.50	32.1
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	9.82
Cobalt	0.05	0.50	3.55
Copper	0.25	0.50	3.48
Lead	0.10	0.25	1.24
Molybdenum	0.05	0.50	ND
Nickel	0.05	0.50	6.21
Selenium	0.20	0.50	ND
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	17.9
Zinc	0.05	0.50	20.4

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ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	103	80-120								
ICP Metals										
Antimony	93	80-120								
Arsenic	94	80-120								
Barium	95	80-120								
Beryllium	92	80-120								
Cadmium	94	80-120								
Chromium	92	80-120								
Cobalt	98	80-120								
Copper	92	80-120								
Lead	99	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	93	80-120								
Silver	94	80-120								
Thallium	97	80-120								
Vanadium	91	80-120								
Zinc	97	80-120								

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ANALYTICAL RESULTS

Ordered By

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Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: **4**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170049**	**170050**	**170055**	**170059**	**170060**
Sample ID			PE 24-3'	PE	PE	PE31-3'	PE
Date Sampled			04/26/2006	24-5',9',13'8" 04/26/2006	26-5',10'4",14' 04/26/2006	04/26/2006	31-5',10',13'10" 04/26/2006
Date Extracted			05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method							
Date Analyzed			05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND	ND	ND
Arsenic	0.10	0.25	ND	ND	ND	ND	ND
Barium	0.05	0.50	32.1	44.9	29.0	34.4	31.3
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	10.7	10.5	8.71	9.80	11.0
Cobalt	0.05	0.50	3.59	3.99	3.21	3.34	5.58
Copper	0.25	0.50	2.40	5.05	4.21	3.27	7.10
Lead	0.10	0.25	1.17	1.45	1.36	1.27	2.37
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	6.16	6.50	5.62	4.43	11.8
Selenium	0.20	0.50	ND	ND	ND	ND	0.71
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	20.6	18.9	14.2	17.0	16.3
Zinc	0.05	0.50	19.1	20.1	16.4	19.3	22.5

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	101	80-120								
ICP Metals										
Antimony	93	80-120								
Arsenic	93	80-120								
Barium	94	80-120								
Beryllium	93	80-120								
Cadmium	94	80-120								
Chromium	91	80-120								
Cobalt	97	80-120								
Copper	91	80-120								
Lead	97	80-120								
Molybdenum	97	80-120								
Nickel	99	80-120								
Selenium	92	80-120								
Silver	93	80-120								
Thallium	95	80-120								
Vanadium	91	80-120								
Zinc	96	80-120								

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170061**				
Sample ID			PE				
Date Sampled			31-20,29,40,50,60 04/26/2006				
Date Extracted			05/02/2006				
Preparation Method							
Date Analyzed			05/03/2006				
Matrix			Soil				
Units			mg/Kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
AA Metals							
Mercury	0.10	0.20	ND				
ICP Metals							
Antimony	0.15	0.50	0.52				
Arsenic	0.10	0.25	ND				
Barium	0.05	0.50	42.7				
Beryllium	0.05	0.50	ND				
Cadmium	0.05	0.50	ND				
Chromium	0.25	0.50	11.3				
Cobalt	0.05	0.50	4.62				
Copper	0.25	0.50	5.94				
Lead	0.10	0.25	2.05				
Molybdenum	0.05	0.50	ND				
Nickel	0.05	0.50	7.50				
Selenium	0.20	0.50	0.57				
Silver	0.40	0.50	ND				
Thallium	0.20	0.50	ND				
Vanadium	0.30	0.50	20.3				
Zinc	0.05	0.50	25.1				

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	101	80-120								
ICP Metals										
Antimony	93	80-120								
Arsenic	93	80-120								
Barium	94	80-120								
Beryllium	93	80-120								
Cadmium	94	80-120								
Chromium	91	80-120								
Cobalt	97	80-120								
Copper	91	80-120								
Lead	97	80-120								
Molybdenum	97	80-120								
Nickel	99	80-120								
Selenium	92	80-120								
Silver	93	80-120								
Thallium	95	80-120								
Vanadium	91	80-120								
Zinc	96	80-120								

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170401**	**170404**			
Sample ID			PE26-20,29.5,	PE24-20,29.5,			
Date Sampled			40,45.9 04/26/2006	40,44.8 04/26/2006			
Date Extracted			05/05/2006	05/05/2006			
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
AA Metals							
Mercury	0.10	0.20	ND	ND			
ICP Metals							
Antimony	0.15	0.50	ND	ND			
Arsenic	0.10	0.25	ND	ND			
Barium	0.05	0.50	45.0	35.9			
Beryllium	0.05	0.50	ND	ND			
Cadmium	0.05	0.50	ND	ND			
Chromium	0.25	0.50	13.0	11.7			
Cobalt	0.05	0.50	4.64	4.49			
Copper	0.25	0.50	7.04	6.14			
Lead	0.10	0.25	2.82	2.29			
Molybdenum	0.05	0.50	ND	2.29			
Nickel	0.05	0.50	7.89	7.15			
Selenium	0.20	0.50	ND	0.53			
Silver	0.40	0.50	ND	ND			
Thallium	0.20	0.50	ND	ND			
Vanadium	0.30	0.50	21.4	20.1			
Zinc	0.05	0.50	24.9	24.5			

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	99	80-120								
Arsenic	102	80-120								
Barium	101	80-120								
Beryllium	101	80-120								
Cadmium	99	80-120								
Chromium	100	80-120								
Cobalt	104	80-120								
Copper	99	80-120								
Lead	105	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	99	80-120								
Silver	100	80-120								
Thallium	103	80-120								
Vanadium	99	80-120								
Zinc	104	80-120								

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 050306-2

Our Lab I.D.		**170049**				
Sample ID		PE 24-3'				
Date Sampled		04/26/2006				
Date Extracted		05/02/2006				
Preparation Method						
Date Analyzed		05/04/2006				
Matrix		Soil				
Units		mg/kg				
Detection Limit Multiplier		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**170049**				
Surrogates	**Con.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	102				

QUALITY CONTROL REPORT

Batch No: 050306-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	101	108	6.7	75-120	15					

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 050406-1

Our Lab I.D.		**170050**				
Sample ID		PE 24-5',9',13'8"				
Date Sampled		04/26/2006				
Date Extracted		05/02/2006				
Preparation Method						
Date Analyzed		05/04/2006				
Matrix		Soil				
Units		mg/kg				
Detection Limit Multiplier		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**170050**				
Surrogates	**Con.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	120				

QUALITY CONTROL REPORT

Batch No: 050406-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	101	101	<1	75-120	15					

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 050406-2

Our Lab I.D.		170054	170055	170059	170060	170061
Sample ID		PE 26-3'	PE 26-5',10'4",14'	PE31-3'	PE 31-5',10',13'10"	PE 31-20,29,40,50,60
Date Sampled		04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Date Extracted		05/02/2006	05/02/2006	05/02/2006	05/02/2006	05/02/2006
Preparation Method						
Date Analyzed		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		170054	170055	170059	170060	170061
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	88	92	90	93	91

QUALITY CONTROL REPORT

Batch No: 050406-2

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	120	114	5.1	75-120	15					

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 050706-1

Our Lab I.D.		**170401**	**170404**			
Sample ID		PE26-20,29.5, 40,45.9	PE24-20,29.5, 40,44.8			
Date Sampled		04/26/2006	04/26/2006			
Date Extracted		05/05/2006	05/05/2006			
Preparation Method						
Date Analyzed		05/08/2006	05/08/2006			
Matrix		Soil	Soil			
Units		mg/kg	mg/kg			
Detection Limit Multiplier		1	1			
Analytes	**PQL**	**Results**	**Results**			
TPH DRO (C13-C22)	10	ND	ND			
TPH ORO (C22+)	50	ND	ND			

Our Lab I.D.		**170401**	**170404**			
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Chlorobenzene	70-120	90	90			

QUALITY CONTROL REPORT

Batch No: 050706-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	96	95	1.0	75-120	15					

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**170049**	**170050**	**170054**	**170055**	**170059**
Sample ID			PE 24-3'	PE	PE 26-3'	PE	PE31-3'
Date Sampled			04/26/2006	24-5',9',13'8" 04/26/2006	04/26/2006	26-5',10'4",14" 04/26/2006	04/26/2006
Date Extracted			05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Preparation Method							
Date Analyzed			05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170049	170050	170054	170055	170059
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	81	83	82	87	83

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	65	68	4.5	42-122	<30					
4,4'-DDT (DDT)	67	76	12.6	25-160	<30					
Dieldrin	77	84	8.7	36-146	<30					
Endrin	85	93	9.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	63	65	3.1	32-127	<30					
Heptachlor	63	66	4.7	34-111	<30					

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**170060**	**170061**			
Sample ID			PE	PE			
Date Sampled			31-5',10',13'10" 04/26/2006	31-20,29,40,50,60 04/26/2006			
Date Extracted			05/03/2006	05/03/2006			
Preparation Method							
Date Analyzed			05/03/2006	05/03/2006			
Matrix			Soil	Soil			
Units			ug/kg	ug/kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Aldrin	0.23	2.00	ND	ND			
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND			
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND			
Gamma-Chlordane	0.19	2.00	ND	ND			
alpha-Chlordane	0.20	2.00	ND	ND			
4,4'-DDD (DDD)	0.27	4.00	ND	ND			
4,4'-DDE (DDE)	0.22	4.00	ND	ND			
4,4'-DDT (DDT)	0.22	4.00	ND	ND			
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND			
Dieldrin	0.20	4.00	ND	ND			
Endosulfan I	0.20	2.00	ND	ND			
Endosulfan II	0.24	4.00	ND	ND			
Endosulfan sulfate	0.27	4.00	ND	ND			
Endrin	0.25	4.00	ND	ND			
Endrin aldehyde	0.44	4.00	ND	ND			
Endrin ketone	0.30	4.00	ND	ND			
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND			
Heptachlor	0.23	2.00	ND	ND			
Heptachlor epoxide	0.23	2.00	ND	ND			
Methoxychlor	0.39	17.00	ND	ND			
Toxaphene	17	170	ND	ND			

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29357	04/27/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170060	170061			
Surrogates	Con.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	84	93			

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	65	68	4.5	42-122	<30					
4,4'-DDT (DDT)	67	76	12.6	25-160	<30					
Dieldrin	77	84	8.7	36-146	<30					
Endrin	85	93	9.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	63	65	3.1	32-127	<30					
Heptachlor	63	66	4.7	34-111	<30					

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Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**170401**	**170404**			
Sample ID			PE26-20,29.5,	PE24-20,29.5,			
Date Sampled			40,45.9 04/26/2006	40,44.8 04/26/2006			
Date Extracted			05/04/2006	05/04/2006			
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006			
Matrix			Soil	Soil			
Units			ug/kg	ug/kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Aldrin	0.23	2.00	ND	ND			
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND			
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND			
Gamma-Chlordane	0.19	2.00	ND	ND			
alpha-Chlordane	0.20	2.00	ND	ND			
4,4'-DDD (DDD)	0.27	4.00	ND	ND			
4,4'-DDE (DDE)	0.22	4.00	ND	ND			
4,4'-DDT (DDT)	0.22	4.00	ND	ND			
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND			
Dieldrin	0.20	4.00	ND	ND			
Endosulfan I	0.20	2.00	ND	ND			
Endosulfan II	0.24	4.00	ND	ND			
Endosulfan sulfate	0.27	4.00	ND	ND			
Endrin	0.25	4.00	ND	ND			
Endrin aldehyde	0.44	4.00	ND	ND			
Endrin ketone	0.30	4.00	ND	ND			
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND			
Heptachlor	0.23	2.00	ND	ND			
Heptachlor epoxide	0.23	2.00	ND	ND			
Methoxychlor	0.39	17.00	ND	ND			
Toxaphene	17	170	ND	ND			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170401	170404			
Surrogates	Con.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	95	93			

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	67	69	2.9	42-122	<30					
4,4'-DDT (DDT)	71	83	15.6	25-160	<30					
Dieldrin	79	87	9.6	36-146	<30					
Endrin	81	90	10.5	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	64	66	3.1	32-127	<30					
Heptachlor	63	66	4.7	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050306-1

Our Lab I.D.			170049	170050	170054	170055	170059
Client Sample I.D.			PE 24-3'	PE 24-5',9',13'8"	PE 26-3'	PE 26-5',10'4",14'	PE31-3'
Date Sampled			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Date Prepared			05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Preparation Method							
Date Analyzed			05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.		170049	170050	170054	170055	170059
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	81	83	82	87	83

QUALITY CONTROL REPORT

QC Batch No: 050306-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	90	105	15.4	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050306-1

Our Lab I.D.			170060	170061
Client Sample I.D.			PE 31-5',10',13'10"	PE 31-20,29,40,50,60
Date Sampled			04/26/2006	04/26/2006
Date Prepared			05/03/2006	05/03/2006
Preparation Method				
Date Analyzed			05/03/2006	05/03/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND

Our Lab I.D.			170060	170061
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Decachlorobiphenyl	43-169		84	93

QUALITY CONTROL REPORT

QC Batch No: 050306-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	90	105	15.4	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050406-1

Our Lab I.D.			170401	170404
Client Sample I.D.			PE26-20,29.5, 40,45.9	PE24-20,29.5, 40,44.8
Date Sampled			04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND

Our Lab I.D.			170401	170404
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**
Surrogate Percent Recovery				
Decachlorobiphenyl	93		95	95

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	90	92	2.2	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170048	170052	170053	170057	170058
Client Sample I.D.			PE24-3' Encore	PE24-13'8" Encore	PE26-3' Encore	PE26-14' Encore	PE31-3' Encore
Date Sampled			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170048	170052	170053	170057	170058
Client Sample I.D.			PE24-3' Encore	PE24-13'8" Encore	PE26-3' Encore	PE26-14' Encore	PE31-3' Encore
Date Sampled			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29357	04/27/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170048	170052	170053	170057	170058
Client Sample I.D.			PE24-3' Encore	PE24-13'8" Encore	PE26-3' Encore	PE26-14' Encore	PE31-3' Encore
Date Sampled			04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			170048	170052	170053	170057	170058
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		108	107	105	108	106
Dibromofluoromethane	70-120		105	101	104	105	110
Toluene-d8	70-120		101	101	100	102	100

QUALITY CONTROL REPORT

QC Batch No: 050306-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	97	97	<1	75-120	15
Chlorobenzene	118	117	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	94	95	1.1	75-120	15
MTBE	96	90	6.5	75-120	15
Toluene (Methyl benzene)	114	109	4.5	75-120	15
Trichloroethene (TCE)	104	102	1.9	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170062	170063
Client Sample I.D.			PE31-13'10" Encore	PE24-9' Encore
Date Sampled			04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29357	04/27/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170062	170063
Client Sample I.D.			PE31-13'10" Encore	PE24-9' Encore
Date Sampled			04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29357	04/27/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170062	170063
Client Sample I.D.			PE31-13'10" Encore	PE24-9' Encore
Date Sampled			04/26/2006	04/26/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.		170062	170063
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery			
Bromofluorobenzene	70-120	105	113
Dibromofluoromethane	70-120	112	116
Toluene-d8	70-120	102	92

QUALITY CONTROL REPORT

QC Batch No: 050306-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	97	97	<1	75-120	15
Chlorobenzene	118	117	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	94	95	1.1	75-120	15
MTBE	96	90	6.5	75-120	15
Toluene (Methyl benzene)	114	109	4.5	75-120	15
Trichloroethene (TCE)	104	102	1.9	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 29
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		170049	170050	170054	170055	170059
Sample ID		PE 24-3'	PE 24-5',9',13'8"	PE 26-3'	PE 26-5',10'4",14'	PE31-3'
Date Sampled		04/26/2006	04/26/2006	04/26/2006	04/26/2006	04/26/2006
Date Extracted		05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Preparation Method						
Date Analyzed		05/03/2006	05/03/2006	05/03/2006	05/03/2006	05/03/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		170049	170050	170054	170055	170059
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	46	46	48	57	59
Phenol-d6	10-107	57	57	57	70	68
2,4,6-Tribromophenol	10-123	66	66	73	88	65
Nitrobenzene-d5	35-114	70	70	69	83	85
2-Fluorobiphenyl	18-116	54	54	56	69	75

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		170049	170050	170054	170055	170059
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Terphenyl-d14	33-141	122	84	124	120	115

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	66	78	16.7	43-118						
Pyrene	92	93	1.1	26-127						

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ANALYTICAL RESULTS

Ordered By

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26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		**170060**	**170061**			
Sample ID		PE 31-5',10',13'10"	PE 31-20,29,40,50,60			
Date Sampled		04/26/2006	04/26/2006			
Date Extracted		05/03/2006	05/03/2006			
Preparation Method						
Date Analyzed		05/03/2006	05/03/2006			
Matrix		Soil	Soil			
Units		ug/kg	ug/kg			
Detection Limit Multiplier		1	1			
Analytes	**PQL**	**Results**	**Results**			
Acenaphthene	100	ND	ND			
Acenaphthylene	50	ND	ND			
Anthracene	2	ND	ND			
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND			
Benzo(a)pyrene	5	ND	ND			
Benzo(b)fluoranthene	2	ND	ND			
Benzo(ghi)perylene	7	ND	ND			
Benzo(k)fluoranthene	2	ND	ND			
Chrysene	5	ND	ND			
Dibenz(a,h)anthracene	17	ND	ND			
Fluoranthene	5	ND	ND			
Fluorene	10	ND	ND			
Indeno(1,2,3-cd)pyrene	5	ND	ND			
Naphthalene	50	ND	ND			
Phenanthrene	4	ND	ND			
Pyrene	10	ND	ND			

Our Lab I.D.		**170060**	**170061**			
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
2-Fluorophenol	21-105	58	40			
Phenol-d6	10-107	67	50			
2,4,6-Tribromophenol	10-123	77	65			
Nitrobenzene-d5	35-114	84	57			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		**170060**	**170061**			
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
2-Fluorobiphenyl	18-116	82	57			
Terphenyl-d14	33-141	120	118			

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	66	78	16.7	43-118						
Pyrene	92	93	1.1	26-127						

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		170401	170404			
Sample ID		PE26-20,29.5, 40,45.9	PE24-20,29.5, 40,44.8			
Date Sampled		04/26/2006	04/26/2006			
Date Extracted		05/04/2006	05/04/2006			
Preparation Method						
Date Analyzed		05/04/2006	05/04/2006			
Matrix		Soil	Soil			
Units		ug/kg	ug/kg			
Detection Limit Multiplier		1	1			
Analytes	**PQL**	**Results**	**Results**			
Acenaphthene	100	ND	ND			
Acenaphthylene	50	ND	ND			
Anthracene	2	ND	ND			
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND			
Benzo(a)pyrene	5	ND	ND			
Benzo(b)fluoranthene	2	ND	ND			
Benzo(ghi)perylene	7	ND	ND			
Benzo(k)fluoranthene	2	ND	ND			
Chrysene	5	ND	ND			
Dibenz(a,h)anthracene	17	ND	ND			
Fluoranthene	5	6.77	ND			
Fluorene	10	ND	ND			
Indeno(1,2,3-cd)pyrene	5	ND	ND			
Naphthalene	50	ND	ND			
Phenanthrene	4	ND	ND			
Pyrene	10	ND	ND			

Our Lab I.D.		170401	170404			
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
2-Fluorophenol	21-105	58	51			
Phenol-d6	10-107	72	64			
2,4,6-Tribromophenol	10-123	81	67			
Nitrobenzene-d5	35-114	80	72			
2-Fluorobiphenyl	18-116	75	59			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29357	04/27/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		**170401**	**170404**			
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**			
Surrogate Percent Recovery						
Terphenyl-d14	33-141	97	106			

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	65	74	12.9	43-118						
Pyrene	87	93	6.7	26-127						

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Environmental Testing Services

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Ordered By

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Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 20
Date Received 04/28/2006
Date Reported 05/08/2006

Job Number	Ordered	Client
29384	04/28/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 10 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37152 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29384

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1937 Fax: 949 470-0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE 18-5'/9'8"/14'1"	PE-18-20'/29'2"/40'/48'8"/60'					Remarks
1	170219	PE 18-3'	4/27/06	07:35	3	encore	Soil	None				X								
2	170220	PE 18-3'		07:35	2	Plastic			X	X	X		X							
3	170221	PE 18-5'	Composite	07:44	1				X	X	X		X	X						
		PE 18-9'8"		07:51	1									X						
		PE 18-14'1"		07:58	1									X						
4	170222	PE 18-20'	Composite	08:11	1				X	X	X		X		X					
		PE 18-29'2"		08:29	1										X					
		PE 18-40'		09:11	1										X					
		PE 18-48'8"		09:42	1										X					
		PE 18-60'		11:29	1										X					

Collected By: Scott Miller	Date 4/27/06	Time as above	Relinquished By: Scott Miller	Date 4/28/06	Time 1400
Relinquished By:	Date	Time	Received For Laboratory	Date 4/28/06	Time 1430
Received By:	Date	Time	Condition of Sample:		

TAT ☒ Normal ☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# № 37200 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29384

CHAIN OF CUSTODY RECORD

Company:	Pacific Edge Engineering
Address:	26691 Plaza # 270
	Mission Viejo, CA, 92691
Telephone:	949 470 1937
Fax:	949 470 0943
Special Instruction:	
E-mail:	
Project Name:	Pier E Redevelopment
Site Address:	1200 Pier E Street
	Long Beach, CA
Project ID:	0106.0015.002.001
Project Manager:	Greg Dickinson
Report To:	PM
Address:	SAA
Invoice To:	
Address:	
P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8094A/8082	8260B	8310	PE17-5'/10'/13'11"	PE17-20'/28'9"/40'					Remarks
5	170223	PE16-14'1"	4/27/06	09:06	3	encore	Soil	None				X								
6	170224	PE17-3'		12:40	3	encore						X								
7	170225	PE17-3'		12:40	2	Plastic			X	X	X		X							
8	170226	PE17-5'	Composite	13:00	1				X	X	X		X	X						
		PE17-10'		13:04	1									X						
		PE17-13'11"		13:09	1									X						
9	170227	PE17-20'	Composite	13:25	1				X	X	X		X		X					
		PE17-28'9"		13:41	1										X					
		PE17-40'		14:19	1										X					
		PE17-49'10"		14:58	1										X					

Collected By: Scott Miller	Date 4/27/06	Time as above	Relinquished By: Scott Miller Date 4/28/06 Time 1435
Relinquished By:	Date	Time	Received For Laboratory MOB Date 4/28/06 Time 1435
Received By:	Date	Time	Condition of Sample:

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 37208 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29384

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza # 270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937 Fax: 949 470 0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY: Lab ID	SAMPLE DESCRIPTION: Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	8260B	Remarks
10	170228	PE17-13'11"	4/27/06	14:09	3	encore	Soil	None	X	

Collected By: Scott Miles	Date 4/27/06	Time as above	Relinquished By: Scott Miles	Date 4/28/06	Time 1130
Relinquished By:	Date	Time	Received For Laboratory MB	Date 4/28/06	Time 1155
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170220**	**170221**	**170222**	**170225**	**170226**
Sample ID			PE18-3'	PE18-5',9'8",1	PE18-20,29,4	PE17-3'	PE17-5',10',13
Date Sampled			04/27/2006	4'1" 04/27/2006	0,49,60 04/27/2006	04/27/2006	'11" 04/27/2006
Date Extracted			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	0.19J	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	ND	ND	ND	ND
Arsenic	0.10	0.25	ND	ND	1.20	ND	ND
Barium	0.05	0.50	34.3	27.7	73.7	42.3	37.6
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	11.8	8.22	21.3	11.9	11.7
Cobalt	0.05	0.50	4.03	3.26	8.06	4.33	3.78
Copper	0.25	0.50	3.68	5.43	17.3	3.32	5.68
Lead	0.10	0.25	1.74	3.71	5.15	1.37	0.94
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	7.04	5.72	14.2	6.50	7.14
Selenium	0.20	0.50	0.70	0.59	0.51	0.60	0.55
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	20.7	15.1	35.9	24.7	20.7
Zinc	0.05	0.50	23.6	18.6	47.8	25.1	27.2

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	98	80-120								
ICP Metals										
Antimony	95	80-120								
Arsenic	96	80-120								
Barium	97	80-120								
Beryllium	97	80-120								
Cadmium	96	80-120								
Chromium	94	80-120								
Cobalt	100	80-120								
Copper	96	80-120								
Lead	99	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	94	80-120								
Silver	98	80-120								
Thallium	98	80-120								
Vanadium	96	80-120								
Zinc	99	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170227**
Sample ID			PE17-20,28.8, 40,49.8
Date Sampled			04/27/2006
Date Extracted			05/04/2006
Preparation Method			
Date Analyzed			05/04/2006
Matrix			Soil
Units			mg/Kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
AA Metals			
Mercury	0.10	0.20	ND
ICP Metals			
Antimony	0.15	0.50	ND
Arsenic	0.10	0.25	ND
Barium	0.05	0.50	33.6
Beryllium	0.05	0.50	ND
Cadmium	0.05	0.50	ND
Chromium	0.25	0.50	11.1
Cobalt	0.05	0.50	4.27
Copper	0.25	0.50	5.90
Lead	0.10	0.25	1.89
Molybdenum	0.05	0.50	ND
Nickel	0.05	0.50	6.97
Selenium	0.20	0.50	0.68
Silver	0.40	0.50	ND
Thallium	0.20	0.50	ND
Vanadium	0.30	0.50	19.4
Zinc	0.05	0.50	22.5

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	98	80-120								
ICP Metals										
Antimony	95	80-120								
Arsenic	96	80-120								
Barium	97	80-120								
Beryllium	97	80-120								
Cadmium	96	80-120								
Chromium	94	80-120								
Cobalt	100	80-120								
Copper	96	80-120								
Lead	99	80-120								
Molybdenum	99	80-120								
Nickel	101	80-120								
Selenium	94	80-120								
Silver	98	80-120								
Thallium	98	80-120								
Vanadium	96	80-120								
Zinc	99	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050706-1

Our Lab I.D.		170220	170221	170222	170225	170226
Client Sample I.D.		PE18-3'	PE18-5',9'8",14'1"	PE18-20,29,40,49,60	PE17-3'	PE17-5',10',13'11"
Date Sampled		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Date Prepared		05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method						
Date Analyzed		05/08/2006	05/08/2006	05/08/2006	05/08/2006	05/08/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	19	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	60

Our Lab I.D.		170220	170221	170222	170225	170226
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	90	90	91	120	120

QUALITY CONTROL REPORT

QC Batch No: 050706-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	96	95	1.0	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050706-1

Our Lab I.D.		**170227**				
Client Sample I.D.		PE17-20,28.8, 40,49.8				
Date Sampled		04/27/2006				
Date Prepared		05/04/2006				
Preparation Method						
Date Analyzed		05/08/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**170227**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	89				

QUALITY CONTROL REPORT

QC Batch No: 050706-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	96	95	1.0	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			170220	170221	170222	170225	170226
Sample ID			PE18-3'	PE18-5',9'8",1	PE18-20,29,4	PE17-3'	PE17-5',10',13
Date Sampled			04/27/2006	4'1" 04/27/2006	0,49,60 04/27/2006	04/27/2006	'11" 04/27/2006
Date Extracted			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	0.42J
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	1.71J
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170220	170221	170222	170225	170226
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	75	98	84	112	95

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	67	69	2.9	42-122	<30					
4,4'-DDT (DDT)	71	83	15.6	25-160	<30					
Dieldrin	79	87	9.6	36-146	<30					
Endrin	81	90	10.5	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	64	66	3.1	32-127	<30					
Heptachlor	63	66	4.7	34-111	<30					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**170227**
Sample ID			PE17-20,28.8, 40,49.8
Date Sampled			04/27/2006
Date Extracted			05/04/2006
Preparation Method			
Date Analyzed			05/04/2006
Matrix			Soil
Units			ug/kg
Detection Limit Multiplier			1
Analytes	**MDL**	**PQL**	**Results**
Aldrin	0.23	2.00	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND
Gamma-Chlordane	0.19	2.00	ND
alpha-Chlordane	0.20	2.00	ND
4,4'-DDD (DDD)	0.27	4.00	ND
4,4'-DDE (DDE)	0.22	4.00	ND
4,4'-DDT (DDT)	0.22	4.00	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND
Dieldrin	0.20	4.00	ND
Endosulfan I	0.20	2.00	ND
Endosulfan II	0.24	4.00	ND
Endosulfan sulfate	0.27	4.00	ND
Endrin	0.25	4.00	ND
Endrin aldehyde	0.44	4.00	ND
Endrin ketone	0.30	4.00	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND
Heptachlor	0.23	2.00	ND
Heptachlor epoxide	0.23	2.00	ND
Methoxychlor	0.39	17.00	ND
Toxaphene	17	170	ND

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29384	04/28/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170227				
Surrogates	Con.Limit	% Rec.				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	80				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	67	69	2.9	42-122	<30					
4,4'-DDT (DDT)	71	83	15.6	25-160	<30					
Dieldrin	79	87	9.6	36-146	<30					
Endrin	81	90	10.5	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	64	66	3.1	32-127	<30					
Heptachlor	63	66	4.7	34-111	<30					

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Project ID: 0106.0015.002.001
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ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050406-1

Our Lab I.D.			170220	170221	170222	170225	170226
Client Sample I.D.			PE18-3'	PE18-5',9'8",14'1"	PE18-20,29,40,49,60	PE17-3'	PE17-5',10',13'11"
Date Sampled			04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			170220	170221	170222	170225	170226
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		75	98	84	112	95

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	90	92	2.2	39-150	<30

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Ordered By

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26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 13

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050406-1

Our Lab I.D.			170227
Client Sample I.D.			PE17-20,28.8, 40,49.8
Date Sampled			04/27/2006
Date Prepared			05/04/2006
Preparation Method			
Date Analyzed			05/04/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND

Our Lab I.D.		170227
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Decachlorobiphenyl	43-169	80

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	90	92	2.2	39-150	<30

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9800

ANALYTICAL RESULTS

Ordered By
Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-
Telephone: (949)470-1937
Attn: Greg Dickinson

Site
1200 Pier E Street
Long Beach, CA

Page: 14

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170219	170223	170224	170228
Client Sample I.D.			PE18-3' Encore	PE18-14'1" Encore	PE17-3' Encore	PE17-13'11" Encore
Date Sampled			04/27/2006	04/27/2006	04/27/2006	04/27/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method						
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29384	04/28/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170219	170223	170224	170228
Client Sample I.D.			PE18-3' Encore	PE18-14'1" Encore	PE17-3' Encore	PE17-13'11" Encore
Date Sampled			04/27/2006	04/27/2006	04/27/2006	04/27/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method						
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29384	04/28/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050306-2B

Our Lab I.D.			170219	170223	170224	170228
Client Sample I.D.			PE18-3' Encore	PE18-14'1" Encore	PE17-3' Encore	PE17-13'11" Encore
Date Sampled			04/27/2006	04/27/2006	04/27/2006	04/27/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method						
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND

Our Lab I.D.			170219	170223	170224	170228
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Bromofluorobenzene	70-120		107	106	120	104
Dibromofluoromethane	70-120		108	106	116	102
Toluene-d8	70-120		102	102	98	102

QUALITY CONTROL REPORT

QC Batch No: 050306-2B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	97	97	<1	75-120	15
Chlorobenzene	118	117	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	94	95	1.1	75-120	15
MTBE	96	90	6.5	75-120	15
Toluene (Methyl benzene)	114	109	4.5	75-120	15
Trichloroethene (TCE)	104	102	1.9	75-120	15

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 050406-1

Our Lab I.D.		**170220**	**170221**	**170222**	**170225**	**170226**
Client Sample I.D.		PE18-3'	PE18-5',9'8",14'1"	PE18-20,29,40,49,60	PE17-3'	PE17-5',10',13'11"
Date Sampled		04/27/2006	04/27/2006	04/27/2006	04/27/2006	04/27/2006
Date Prepared		05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method						
Date Analyzed		05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		**170220**	**170221**	**170222**	**170225**	**170226**
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	66	62	63	64	76
Phenol-d6	10-107	76	76	73	74	96
2,4,6-Tribromophenol	10-123	84	100	95	78	88
Nitrobenzene-d5	35-114	92	100	90	88	100
2-Fluorobiphenyl	18-116	75	83	79	73	86
Terphenyl-d14	33-141	116	122	134	104	121

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	65	74	12.9	43-118						
Pyrene	87	93	6.7	26-127						

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

Page: **19**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 050406-1

Our Lab I.D.		**170227**
Client Sample I.D.		PE17-20,28.8, 40,49.8
Date Sampled		04/27/2006
Date Prepared		05/04/2006
Preparation Method		
Date Analyzed		05/04/2006
Matrix		Soil
Units		ug/kg
Dilution Factor		1
Analytes	**PQL**	**Results**
Acenaphthene	100	ND
Acenaphthylene	50	ND
Anthracene	2	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND
Benzo(a)pyrene	5	ND
Benzo(b)fluoranthene	2	ND
Benzo(ghi)perylene	7	ND
Benzo(k)fluoranthene	2	ND
Chrysene	5	ND
Dibenz(a,h)anthracene	17	ND
Fluoranthene	5	ND
Fluorene	10	ND
Indeno(1,2,3-cd)pyrene	5	ND
Naphthalene	50	ND
Phenanthrene	4	ND
Pyrene	10	ND

Our Lab I.D.		**170227**
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
2-Fluorophenol	21-105	62
Phenol-d6	10-107	74
2,4,6-Tribromophenol	10-123	94
Nitrobenzene-d5	35-114	84
2-Fluorobiphenyl	18-116	74
Terphenyl-d14	33-141	112

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ANALYTICAL RESULTS

Page: **20**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29384	04/28/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 050406-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	65	74	12.9	43-118						
Pyrene	87	93	6.7	26-127						

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Ordered By

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Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages	25
Date Received	05/01/2006
Date Reported	05/09/2006

Job Number	Ordered	Client
29389	05/01/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 16 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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Environmental Testing Services
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COC# № 36982 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29389

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street
Telephone: 949 470-1937	Long Beach, CA
Fax: 949 470 0943	
Special Instruction:	Project ID: 0106.0015.002.001
E-mail:	Project Manager: Greg Dickinson
Address: SAA	
Invoice To:	
Address:	
P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	4015 Ext	4081A/8082	8260B	8310	PE32-5'/10'/16'	PE32-20'/29'1"/40'					Remarks
1	170245	PE32-3'	4/28/06	07:30	3	encore	Soil	None				X								
2	170246	PE32-3'		07:30	2	Plastic			X	X	X		X							
3	170247	PE32-5'	Composite	07:38	1				X	X	X		X	X						
		PE32-10'		07:39	1									X						
		PE32-16'		07:49	1									X						
4	170248	PE32-20'		07:57	1				X	X	X		X		X					Hold
		PE32-29'1"		08:09	1										X					
		PE32-40'		08:41	1										X					
5	170249	PE32-16'		08:27	3	encore						X								
6	170250	PE19-3'		09:18	3	encore						X								

Collected By: [signature]	Date 4/28/06	Time as above	Relinquished By: [signature] Date 5/1/06 Time 1430
Relinquished By:	Date	Time	Received For Laboratory [signature] Date 5/1/06 Time 1430
Received By:	Date	Time	Condition of Sample:

TAT
☒ Normal
☐ Rush

White - Report, **Yellow** - Laboratory, **Pink** - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 36981 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29389

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937 Fax: 949 470 0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	6015 Ext	8081A/8082	8260B	8310	PE19-5'/10'/16'	PE19 20'/28'10"/40'					Remarks
7	170251	PE19-3'	4/28/06	09:16	2	Plastic	Soil	None	X	X	X		X							
8	170252	PE19-5' (composite)		09:26	1				X	X	X		X	X						
		PE19-10'		09:28	1															
		PE19-16'		09:38	1															
9	170253	PE19-20' (composite)		09:48	1				X	X	X		X		X					Hold
		PE19-28'10"		10:06	1										X					
		PE19-40'		11:06	1										X					
10	170254	PE19-16'		10:02	3	encore						X								
11	170255	PE16-3'		11:50	3	encore						X								
12	170256	PE16-3'		11:50	2	Plastic			X	X	X		X							

Collected By: Brett Miles	Date 4/28/06	Time as above	Relinquished By: Brett Miles	Date 5/1/06	Time 1430
Relinquished By:	Date	Time	Received For Laboratory	Date 5/1/06	Time 1430
Received By:	Date	Time	Condition of Sample:		

TAT ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Samp
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

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Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			170246	170247	170251	170252	170256
Sample ID			PE32-3'	PE32-5',10',1	PE19-3'	PE19-5',10',1	PE16-3'
Date Sampled			04/28/2006	6' 04/28/2006	04/28/2006	6' 04/28/2006	04/28/2006
Date Extracted			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	ND	0.69	ND	0.56	ND
Arsenic	0.10	0.25	ND	ND	ND	1.33	0.50
Barium	0.05	0.50	33.3	49.0	34.5	41.9	27.5
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	11.4	17.2	11.3	23.5	12.6
Cobalt	0.05	0.50	3.78	6.63	3.93	4.61	3.26
Copper	0.25	0.50	4.32	9.47	3.90	12.6	4.97
Lead	0.10	0.25	1.14	3.92	ND	5.52	2.00
Molybdenum	0.05	0.50	ND	ND	ND	2.61	ND
Nickel	0.05	0.50	6.30	16.1	6.15	8.25	6.50
Selenium	0.20	0.50	ND	0.65	0.51	0.50	ND
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	20.0	22.3	19.5	20.9	18.5
Zinc	0.05	0.50	21.6	29.7	21.1	28.6	16.0

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	99	80-120								
Arsenic	102	80-120								
Barium	101	80-120								
Beryllium	101	80-120								
Cadmium	99	80-120								
Chromium	100	80-120								
Cobalt	104	80-120								
Copper	99	80-120								
Lead	105	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	99	80-120								
Silver	100	80-120								
Thallium	103	80-120								
Vanadium	99	80-120								
Zinc	104	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170257**	**170260**			
Sample ID			PE16-5',10'5",	PE1-5',10'1",1			
Date Sampled			16' 04/28/2006	6' 04/28/2006			
Date Extracted			05/04/2006	05/04/2006			
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
AA Metals							
Mercury	0.10	0.20	ND	ND			
ICP Metals							
Antimony	0.15	0.50	0.69	0.52			
Arsenic	0.10	0.25	1.40	1.24			
Barium	0.05	0.50	29.8	63.6			
Beryllium	0.05	0.50	ND	ND			
Cadmium	0.05	0.50	ND	ND			
Chromium	0.25	0.50	10.6	16.9			
Cobalt	0.05	0.50	3.90	6.06			
Copper	0.25	0.50	3.56	9.15			
Lead	0.10	0.25	1.50	3.94			
Molybdenum	0.05	0.50	ND	ND			
Nickel	0.05	0.50	6.37	10.1			
Selenium	0.20	0.50	ND	0.71			
Silver	0.40	0.50	ND	ND			
Thallium	0.20	0.50	ND	ND			
Vanadium	0.30	0.50	19.4	30.4			
Zinc	0.05	0.50	20.4	34.4			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	99	80-120								
Arsenic	102	80-120								
Barium	101	80-120								
Beryllium	101	80-120								
Cadmium	99	80-120								
Chromium	100	80-120								
Cobalt	104	80-120								
Copper	99	80-120								
Lead	105	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	99	80-120								
Silver	100	80-120								
Thallium	103	80-120								
Vanadium	99	80-120								
Zinc	104	80-120								

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170402**	**170403**			
Sample ID			PE32-20,29.1,	PE19-20,28'1			
Date Sampled			40,45.8 04/28/2006	0",40,46 04/28/2006			
Date Extracted			05/04/2006	05/04/2006			
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006			
Matrix			Soil	Soil			
Units			mg/Kg	mg/Kg			
Detection Limit Multiplier			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
AA Metals							
Mercury	0.10	0.20	ND	ND			
ICP Metals							
Antimony	0.15	0.50	ND	0.67			
Arsenic	0.10	0.25	ND	ND			
Barium	0.05	0.50	35.9	70.5			
Beryllium	0.05	0.50	ND	ND			
Cadmium	0.05	0.50	ND	ND			
Chromium	0.25	0.50	11.7	16.7			
Cobalt	0.05	0.50	4.49	5.98			
Copper	0.25	0.50	6.14	11.9			
Lead	0.10	0.25	2.29	3.89			
Molybdenum	0.05	0.50	ND	ND			
Nickel	0.05	0.50	7.15	9.99			
Selenium	0.20	0.50	0.53	ND			
Silver	0.40	0.50	ND	ND			
Thallium	0.20	0.50	ND	ND			
Vanadium	0.30	0.50	20.1	25.9			
Zinc	0.05	0.50	24.5	34.3			

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	99	80-120								
Arsenic	102	80-120								
Barium	101	80-120								
Beryllium	101	80-120								
Cadmium	99	80-120								
Chromium	100	80-120								
Cobalt	104	80-120								
Copper	99	80-120								
Lead	105	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	99	80-120								
Silver	100	80-120								
Thallium	103	80-120								
Vanadium	99	80-120								
Zinc	104	80-120								

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Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: **050806-1**

Our Lab I.D.		**170246**	**170247**	**170251**	**170252**	**170256**
Sample ID		PE32-3'	PE32-5',10',16'	PE19-3'	PE19-5',10',16'	PE16-3'
Date Sampled		04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Extracted		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method						
Date Analyzed		05/08/2006	05/08/2006	05/08/2006	05/08/2006	05/08/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		**170246**	**170247**	**170251**	**170252**	**170256**
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	89	88	86	120	89

QUALITY CONTROL REPORT

Batch No: **050806-1**

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	98	97	1.0	75-120	15					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

Batch No: 050806-1

Our Lab I.D.		**170257**	**170260**	**170402**	**170403**
Sample ID		PE16-5',10'5",16'	PE1-5',10'1",16'	PE32-20,29.1,40,45.8	PE19-20,28'10",40,46
Date Sampled		04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Extracted		05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method					
Date Analyzed		05/08/2006	05/08/2006	05/08/2006	05/08/2006
Matrix		Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg
Detection Limit Multiplier		1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND

Our Lab I.D.		**170257**	**170260**	**170402**	**170403**
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
Chlorobenzene	70-120	120	120	90	87

QUALITY CONTROL REPORT

Batch No: 050806-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Diesel	98	97	1.0	75-120	15

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Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			170246	170247	170251	170252	170256
Sample ID			PE32-3'	PE32-5',10',1	PE19-3'	PE19-5',10',1	PE16-3'
Date Sampled			04/28/2006	6' 04/28/2006	04/28/2006	6' 04/28/2006	04/28/2006
Date Extracted			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170246	170247	170251	170252	170256
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	83	98	89	82	97

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	69	70	1.4	42-122	<30					
4,4'-DDT (DDT)	76	67	12.6	25-160	<30					
Dieldrin	79	81	2.5	36-146	<30					
Endrin	85	89	4.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	67	68	1.5	32-127	<30					
Heptachlor	70	71	1.4	34-111	<30					

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1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			170257	170260	170402	170403
Sample ID			PE16-5',10'5",	PE1-5',10'1",1	PE32-20,29.1,	PE19-20,28'1
Date Sampled			16' 04/28/2006	6' 04/28/2006	40,45.8 04/28/2006	0",40,46 04/28/2006
Date Extracted			05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method						
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170257	170260	170402	170403	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	89	89	92	87	

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	69	70	1.4	42-122	<30					
4,4'-DDT (DDT)	76	67	12.6	25-160	<30					
Dieldrin	79	81	2.5	36-146	<30					
Endrin	85	89	4.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	67	68	1.5	32-127	<30					
Heptachlor	70	71	1.4	34-111	<30					

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ANALYTICAL RESULTS

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Site
1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29389	05/01/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050506-1

Our Lab I.D.			170246	170247	170251	170252	170256
Client Sample I.D.			PE32-3'	PE32-5',10',16'	PE19-3'	PE19-5',10',16'	PE16-3'
Date Sampled			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.		170246	170247	170251	170252	170256
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	83	98	89	82	97

QUALITY CONTROL REPORT

QC Batch No: 050506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	88	107	19.5	39-150	<30

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ANALYTICAL RESULTS

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Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29389	05/01/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050506-1

Our Lab I.D.			170257	170260	170402	170403
Client Sample I.D.			PE16-5',10'5", 16'	PE1-5',10'1",1 6'	PE32-20,29.1, 40,45.8	PE19-20,28'1 0",40,46
Date Sampled			04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method						
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND

Our Lab I.D.			170257	170260	170402	170403
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169		89	89	92	87

QUALITY CONTROL REPORT

QC Batch No: 050506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	88	107	19.5	39-150	<30

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29389	05/01/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050406-1B

Our Lab I.D.			170245	170249	170250	170254	170255
Client Sample I.D.			PE32-3' Encore	PE32-16' Encore	PE19-3' Encore	PE19-16' Encore	PE16-3' Encore
Date Sampled			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	19J	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29389	05/01/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050406-1B

Our Lab I.D.			170245	170249	170250	170254	170255
Client Sample I.D.			PE32-3' Encore	PE32-16' Encore	PE19-3' Encore	PE19-16' Encore	PE16-3' Encore
Date Sampled			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29389	05/01/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050406-1B

Our Lab I.D.			170245	170249	170250	170254	170255
Client Sample I.D.			PE32-3' Encore	PE32-16' Encore	PE19-3' Encore	PE19-16' Encore	PE16-3' Encore
Date Sampled			04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Prepared			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Preparation Method							
Date Analyzed			05/04/2006	05/04/2006	05/04/2006	05/04/2006	05/04/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			170245	170249	170250	170254	170255
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		104	112	103	118	105
Dibromofluoromethane	70-120		103	102	103	100	104
Toluene-d8	70-120		103	101	103	101	104

QUALITY CONTROL REPORT

QC Batch No: 050406-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	94	100	6.2	75-120	15
Chlorobenzene	119	120	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	77	77	<1	75-120	15
MTBE	76	75	1.3	75-120	15
Toluene (Methyl benzene)	106	115	8.1	75-120	15
Trichloroethene (TCE)	103	104	<1	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29389	05/01/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050406-1B

Our Lab I.D.			170259	170261
Client Sample I.D.			PE16-16' Encore	PE1-16' Encore
Date Sampled			04/28/2006	04/28/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND
Benzene	1.02	2.00	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND
Carbon disulfide	5.53	10.00	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND
Chlorobenzene	0.89	10.00	ND	ND
Chloroethane	2.15	30.00	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND
Dibromomethane	2.30	10.00	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND

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ANALYTICAL RESULTS

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Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29389	05/01/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050406-1B

Our Lab I.D.			170259	170261
Client Sample I.D.			PE16-16' Encore	PE1-16' Encore
Date Sampled			04/28/2006	04/28/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND
Ethylbenzene	1.37	2.00	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND
2-Hexanone	3.18	50.00	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND
MTBE	2.90	5.00	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND
Naphthalene	1.14	10.00	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND
Styrene	0.80	10.00	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29389	05/01/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050406-1B

Our Lab I.D.			170259	170261
Client Sample I.D.			PE16-16' Encore	PE1-16' Encore
Date Sampled			04/28/2006	04/28/2006
Date Prepared			05/04/2006	05/04/2006
Preparation Method				
Date Analyzed			05/04/2006	05/04/2006
Matrix			Soil	Soil
Units			ug/kg	ug/kg
Dilution Factor			1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND
Vinyl acetate	10.8	50.0	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND
o-Xylene	1.01	2.00	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND

Our Lab I.D.		170259	170261
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery			
Bromofluorobenzene	70-120	104	105
Dibromofluoromethane	70-120	100	94
Toluene-d8	70-120	103	103

QUALITY CONTROL REPORT

QC Batch No: 050406-1B

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	94	100	6.2	75-120	15
Chlorobenzene	119	120	<1	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	77	77	<1	75-120	15
MTBE	76	75	1.3	75-120	15
Toluene (Methyl benzene)	106	115	8.1	75-120	15
Trichloroethene (TCE)	103	104	<1	75-120	15

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 22
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		170246	170247	170251	170252	170256
Sample ID		PE32-3'	PE32-5',10',16'	PE19-3'	PE19-5',10',16'	PE16-3'
Date Sampled		04/28/2006	04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Extracted		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method						
Date Analyzed		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		170246	170247	170251	170252	170256
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	47	57	59	118	69
Phenol-d6	10-107	117	70	56	105	86
2,4,6-Tribromophenol	10-123	86	75	73	75	86
Nitrobenzene-d5	35-114	103	60	60	101	62
2-Fluorobiphenyl	18-116	84	64	68	73	79

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		170246	170247	170251	170252	170256
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Terphenyl-d14	33-141	81	82	68	70	88

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	86	89	3.4	43-118						
Pyrene	89	78	13.2	26-127						

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: **24**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		**170257**	**170260**	**170402**	**170403**
Sample ID		PE16-5',10'5",16'	PE1-5',10'1",16'	PE32-20,29.1,40,45.8	PE19-20,28'10",40,46
Date Sampled		04/28/2006	04/28/2006	04/28/2006	04/28/2006
Date Extracted		05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method					
Date Analyzed		05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix		Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier		1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND
Fluoranthene	5	ND	5.36	ND	ND
Fluorene	10	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND
Pyrene	10	ND	10.0	ND	ND

Our Lab I.D.		**170257**	**170260**	**170402**	**170403**
Surrogates	**Con.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery					
2-Fluorophenol	21-105	51	47	62	60
Phenol-d6	10-107	63	105	67	66
2,4,6-Tribromophenol	10-123	79	83	60	61
Nitrobenzene-d5	35-114	41	110	41	45
2-Fluorobiphenyl	18-116	63	75	37	41

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ANALYTICAL RESULTS

Page: 25
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29389	05/01/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		170257	170260	170402	170403	
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	
Surrogate Percent Recovery						
Terphenyl-d14	33-141	71	75	70	68	

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	86	89	3.4	43-118						
Pyrene	89	78	13.2	26-127						

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Ordered By

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Attn Greg Dickinson

Number of Pages 23
Date Received 05/02/2006
Date Reported 05/11/2006

Job Number	Ordered	Client
29397	05/02/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 16 samples analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37201 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29397

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PES-5'/10'2"/14'6"	PES-20'/29'6"					Remarks
1	170363	PES-3'	5/1/06	07:40	3	encore	Soil	None				X								
2	170364	PES-3'		07:40	2	Plastic			X	X	X		X							
3	170365	PES-5' (Composite)		08:00	1				X	X	X		X	X						
		PES-10'2"		08:07	1									X						
		PES-14'6"		08:14	1									X						
4	170366	PES-20' (Comp.)		08:30	1				X	X	X		X		X					
		PES-29'6"		08:45	1										X					
5	170367	PES-14'6"		08:43	3	encore						X								
6	170368	PES-3'		09:30	3	encore						X								
7	170369	PES-3'		09:30	2	Plastic			X	X	X		X							

Collected By: Scott Miller	Date 5/1/06	Time as above	Relinquished By: Scott Miller	Date 5/1/06	Time 17:00
Relinquished By: [signature]	Date 5/2/06	Time 15:00	Received For Laboratory [signature]	Date 5/2/06	Time 1500
Received By:	Date	Time	Condition of Sample		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

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Environmental Testing Services
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COC# № 37314 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29397

CHAIN OF CUSTODY RECORD

Company:	Pacific Edge Engineering
Address:	26691 Plaza #270
	Mission Viejo, CA 92691
Telephone:	949 470-1937
Fax:	949 470 0943
Special Instruction:	
E-mail:	
Project Name:	Pier E Redevelopment
Site Address:	1200 Pier E Street
	Long Beach, CA
Project ID:	0106.0015.002.001
Project Manager:	Greg Dickinson
Report To:	PM
Address:	SAA
Invoice To:	
Address:	
P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE15-5'/9'7"/14'	PE42-5'/9'10"/13'7"					Remarks
8	170370	PE15-5'	5/1/06	09:51	1	Plastic	Soil	None	X	X	X		X	X						
		PE15-9'7"	Composite	09:56	1									X						
		PE15-14'		10:00	1									X						
9	170371	PE15-20'		10:12	1				X	X	X		X							
10	170372	PE15-14'		10:22	3	encore						X								
11	170373	PE42-3'		11:03	3	encore						X								
12	170374	PE42-3'		11:03	2	Plastic			X	X	X		X							
13	170375	PE42-5'	Composite	11:08	1				X	X	X		X		X					
		PE42-9'10"		11:12	1										X					
		PE42-13'7"		11:16	1										X					

Collected By: Scott Miller	Date 5/1/06	Time as above	Relinquished By: Scott Miller	Date 5/1/06	Time 17:00
Relinquished By: [signature]	Date 5/2/06	Time 15:00	Received For Laboratory [signature]	Date 5/2/06	Time 1500
Received By:	Date	Time	Condition of Sample		

TAT
☒ Normal
☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
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COC# № 37203 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29397

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	6015 Ext	8081 A/8082	8260 B	8310	PE42-20'/27'/40'/49'7"	PE1-20'/28'4"					Remarks
14	170376	PE42-20'	5/1/06	11:31	1	Plastic	Soil	None	X	X	X		X	X						
		PE42-29'7"	Composite	11:52	1									X						
		PE42-40'		13:14	1									X						
		PE42-49'7"		13:47	1									X						
15	170377	PE42-13'7"		11:48	3	encore						X								
16	170378	PE1-20'	Comp	14:49	1	Plastic			X	X	X		X		X					
		PE1-28'4"		15:09	1										X					

Collected By: Scott Miller	Date 5/1/06	Time as above	Relinquished By: Scott Miller	Date 5/1/06	Time 17:00
Relinquished By: [signature]	Date 5/2/06	Time 15:00	Received For Laboratory [signature]	Date 5/2/06	Time 15:00
Received By:	Date	Time	Condition of Sample:		

TAT: ☒ Normal ☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

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Site

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Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			170364	170365	170366	170369	170370
Sample ID			PE5-3'	PE5-5',10'2",1	PE5-20',29'6"	PE15-3'	PE15-5',9'7",1
Date Sampled			05/01/2006	4'6" 05/01/2006	05/01/2006	05/01/2006	4' 05/01/2006
Date Extracted			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	0.72	0.56	0.63	0.53	0.58
Arsenic	0.10	0.25	0.60	ND	ND	1.42	ND
Barium	0.05	0.50	38.4	49.8	85.6	84.9	30.2
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	10.5	11.7	18.6	24.4	11.5
Cobalt	0.05	0.50	3.33	5.40	7.09	7.22	4.33
Copper	0.25	0.50	4.23	7.63	14.1	16.8	5.22
Lead	0.10	0.25	1.78	2.06	3.25	4.46	1.77
Molybdenum	0.05	0.50	ND	ND	ND	ND	ND
Nickel	0.05	0.50	5.83	8.45	12.6	14.5	7.30
Selenium	0.20	0.50	ND	0.60	ND	ND	ND
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	18.4	23.2	29.6	37.8	18.7
Zinc	0.05	0.50	19.3	26.7	42.0	37.8	20.3

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	107	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	99	80-120								
Barium	100	80-120								
Beryllium	99	80-120								
Cadmium	96	80-120								
Chromium	98	80-120								
Cobalt	102	80-120								
Copper	98	80-120								
Lead	102	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	96	80-120								
Silver	99	80-120								
Thallium	102	80-120								
Vanadium	96	80-120								
Zinc	101	80-120								

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170371**	**170374**	**170375**	**170376**	**170378**
Sample ID			PE15-20'	PE42-3'	PE42-5',9'10", 13'7"	PE42-20,29.6, 40,49.6	PE1-20',28'4"
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Extracted			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
AA Metals							
Mercury	0.10	0.20	ND	ND	ND	ND	ND
ICP Metals							
Antimony	0.15	0.50	0.54	ND	ND	0.87	0.71
Arsenic	0.10	0.25	ND	ND	ND	0.53	ND
Barium	0.05	0.50	60.4	24.2	30.6	79.9	66.1
Beryllium	0.05	0.50	ND	ND	ND	ND	ND
Cadmium	0.05	0.50	ND	ND	ND	ND	ND
Chromium	0.25	0.50	10.6	9.07	10.3	17.4	16.7
Cobalt	0.05	0.50	5.45	2.65	3.80	6.37	6.59
Copper	0.25	0.50	7.28	3.89	4.99	13.0	10.7
Lead	0.10	0.25	4.55	1.60	1.94	11.9	4.89
Molybdenum	0.05	0.50	ND	ND	ND	ND	1.25
Nickel	0.05	0.50	6.55	4.90	6.46	10.6	9.65
Selenium	0.20	0.50	0.58	0.60	ND	0.93	ND
Silver	0.40	0.50	ND	ND	ND	ND	ND
Thallium	0.20	0.50	ND	ND	ND	ND	ND
Vanadium	0.30	0.50	23.4	11.2	17.8	27.7	29.5
Zinc	0.05	0.50	34.6	20.7	22.7	48.0	37.6

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	107	80-120								
ICP Metals										
Antimony	97	80-120								
Arsenic	99	80-120								
Barium	100	80-120								
Beryllium	99	80-120								
Cadmium	96	80-120								
Chromium	98	80-120								
Cobalt	102	80-120								
Copper	98	80-120								
Lead	102	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	96	80-120								
Silver	99	80-120								
Thallium	102	80-120								
Vanadium	96	80-120								
Zinc	101	80-120								

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050906-1

Our Lab I.D.		170364	170365	170366	170369	170370
Client Sample I.D.		PE5-3'	PE5-5',10'2",14'6"	PE5-20',29'6"	PE15-3'	PE15-5',9'7",14'
Date Sampled		05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared		05/08/2006	05/08/2006	05/08/2006	05/08/2006	05/08/2006
Preparation Method		3550B	3550B	3550B	3550B	3550B
Date Analyzed		05/09/2006	05/09/2006	05/09/2006	05/09/2006	05/09/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		170364	170365	170366	170369	170370
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	87	88	120	120	89

QUALITY CONTROL REPORT

QC Batch No: 050906-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	105	1.9	75-120	15					

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050906-1

Our Lab I.D.		170371	170374	170375	170376	170378
Client Sample I.D.		PE15-20'	PE42-3'	PE42-5',9'10", 13'7"	PE42-20,29.6, 40,49.6	PE1-20',28'4"
Date Sampled		05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared		05/08/2006	05/08/2006	05/08/2006	05/08/2006	05/08/2006
Preparation Method		3550B	3550B	3550B	3550B	3550B
Date Analyzed		05/09/2006	05/09/2006	05/09/2006	05/09/2006	05/09/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
TPH DRO (C13-C22)	10	ND	ND	ND	ND	ND
TPH ORO (C22+)	50	ND	ND	ND	ND	ND

Our Lab I.D.		170371	170374	170375	170376	170378
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
Chlorobenzene	70-120	120	89	90	120	90

QUALITY CONTROL REPORT

QC Batch No: 050906-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	103	105	1.9	75-120	15					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			170364	170365	170366	170369	170370
Sample ID			PE5-3'	PE5-5',10'2",1	PE5-20',29'6"	PE15-3'	PE15-5',9'7",1
Date Sampled			05/01/2006	4'6" 05/01/2006	05/01/2006	05/01/2006	4' 05/01/2006
Date Extracted			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170364	170365	170366	170369	170370
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	96	91	87	78	88

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	69	70	1.4	42-122	<30					
4,4'-DDT (DDT)	76	67	12.6	25-160	<30					
Dieldrin	79	81	2.5	36-146	<30					
Endrin	85	89	4.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	67	68	1.5	32-127	<30					
Heptachlor	70	71	1.4	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			170371	170374	170375	170376	170378
Sample ID			PE15-20'	PE42-3'	PE42-5',9'10", 13'7"	PE42-20,29.6, 40,49.6	PE1-20',28'4"
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Extracted			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Detection Limit Multiplier			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aldrin	0.23	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	0.19	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	0.20	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	0.27	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	0.22	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	0.22	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND	ND	ND	ND	ND
Dieldrin	0.20	4.00	ND	ND	ND	ND	ND
Endosulfan 1	0.20	2.00	ND	ND	ND	ND	ND
Endosulfan 11	0.24	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	0.27	4.00	ND	ND	ND	ND	ND
Endrin	0.25	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	0.44	4.00	ND	ND	ND	ND	ND
Endrin ketone	0.30	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND	ND	ND	ND	ND
Heptachlor	0.23	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	0.23	2.00	ND	ND	ND	ND	ND
Methoxychlor	0.39	17.00	ND	ND	ND	ND	ND
Toxaphene	17	170	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

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Job Number	Order Date	Client
29397	05/02/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		170371	170374	170375	170376	170378
Surrogates	Con.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	86	90	96	81	85

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	69	70	1.4	42-122	<30					
4,4'-DDT (DDT)	76	67	12.6	25-160	<30					
Dieldrin	79	81	2.5	36-146	<30					
Endrin	85	89	4.6	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	67	68	1.5	32-127	<30					
Heptachlor	70	71	1.4	34-111	<30					

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050506-1

Our Lab I.D.			170364	170365	170366	170369	170370
Client Sample I.D.			PE5-3'	PE5-5',10'2",14'6"	PE5-20',29'6"	PE15-3'	PE15-5',9'7",14'
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			170364	170365	170366	170369	170370
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		96	91	87	78	88

QUALITY CONTROL REPORT

QC Batch No: 050506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	89	89	<1	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050506-1

Our Lab I.D.			170371	170374	170375	170376	170378
Client Sample I.D.			PE15-20'	PE42-3'	PE42-5',9'10", 13'7"	PE42-20,29.6, 40,49.6	PE1-20',28'4"
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Aroclor-1016 (PCB-1016)	3.60	33.00	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	4.20	67.00	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	2.10	33.00	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	2.10	33.00	ND	ND	ND	ND	ND

Our Lab I.D.			170371	170374	170375	170376	170378
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		86	90	81	81	85

QUALITY CONTROL REPORT

QC Batch No: 050506-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	89	89	<1	39-150	<30

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050506-1C

Our Lab I.D.			170363	170367	170368	170372	170373
Client Sample I.D.			PE5-3' Encore	PE5-14'6" Encore	PE15-3' Encore	PE15-14' Encore	PE42-3' Encore
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acetone	12.7	50.0	ND	ND	ND	ND	ND
Benzene	1.02	2.00	ND	ND	ND	ND	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND	ND	ND	ND	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND	ND	ND	ND	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND	ND	ND	ND	ND
Bromoform (Tribromomethane)	3.39	50.00	ND	ND	ND	ND	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND	ND	ND	ND	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND	ND	ND	ND	ND
n-Butylbenzene	2.05	10.00	ND	ND	ND	ND	ND
sec-Butylbenzene	3.04	10.00	ND	ND	ND	ND	ND
tert-Butylbenzene	1.34	10.00	ND	ND	ND	ND	ND
Carbon disulfide	5.53	10.00	ND	ND	ND	ND	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND	ND	ND	ND	ND
Chlorobenzene	0.89	10.00	ND	ND	ND	ND	ND
Chloroethane	2.15	30.00	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND	ND	ND	ND	ND
Chloroform (Trichloromethane)	1.24	10.00	2J	ND	ND	ND	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND	ND	ND	ND	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND	ND	ND	ND	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND	ND	ND	ND	ND
Dibromochloromethane	0.65	10.00	ND	ND	ND	ND	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND	ND	ND	ND	ND
Dibromomethane	2.30	10.00	ND	ND	ND	ND	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29397	05/02/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050506-1C

Our Lab I.D.			170363	170367	170368	170372	170373
Client Sample I.D.			PE5-3' Encore	PE5-14'6" Encore	PE15-3' Encore	PE15-14' Encore	PE42-3' Encore
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND	ND	ND	ND	ND
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND	ND	ND	ND	ND
Dichlorodifluoromethane	2.07	30.00	ND	ND	ND	ND	ND
1,1-Dichloroethane	1.30	10.00	ND	ND	ND	ND	ND
1,2-Dichloroethane	1.57	10.00	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1.60	10.00	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	2.16	10.00	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.66	10.00	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.92	10.00	ND	ND	ND	ND	ND
2,2-Dichloropropane	1.36	10.00	ND	ND	ND	ND	ND
1,1-Dichloropropene	1.12	10.00	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.98	10.00	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.96	10.00	ND	ND	ND	ND	ND
Ethylbenzene	1.37	2.00	ND	ND	ND	ND	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND	ND	ND	ND	ND
2-Hexanone	3.18	50.00	ND	ND	ND	ND	ND
Isopropylbenzene	1.42	10.00	ND	ND	ND	ND	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND	ND	ND	ND	ND
MTBE	2.90	5.00	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND	ND	ND	ND	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND	ND	ND	ND	ND
Naphthalene	1.14	10.00	ND	ND	ND	ND	ND
n-Propylbenzene	1.14	10.00	ND	ND	ND	ND	ND
Styrene	0.80	10.00	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND	ND	ND	ND	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND	ND	ND	ND	ND
Toluene (Methyl benzene)	0.93	2.00	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND	ND	ND	ND	ND

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ANALYTICAL RESULTS

Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29397	05/02/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050506-1C

Our Lab I.D.			170363	170367	170368	170372	170373
Client Sample I.D.			PE5-3' Encore	PE5-14'6" Encore	PE15-3' Encore	PE15-14' Encore	PE42-3' Encore
Date Sampled			05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method							
Date Analyzed			05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor			1	1	1	1	1
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
1,1,1-Trichloroethane	2.03	10.00	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.74	10.00	ND	ND	ND	ND	ND
Trichloroethene (TCE)	1.15	10.00	ND	ND	ND	ND	ND
Trichlorofluoromethane	3.15	10.00	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1.74	10.00	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND	ND	ND	ND	ND
Vinyl acetate	10.8	50.0	ND	ND	ND	ND	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND	ND	ND	ND	ND
o-Xylene	1.01	2.00	ND	ND	ND	ND	ND
m- & p-Xylenes	1.80	4.00	ND	ND	ND	ND	ND

Our Lab I.D.			170363	170367	170368	170372	170373
Surrogates	**% Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery							
Bromofluorobenzene	70-120		104	103	103	105	104
Dibromofluoromethane	70-120		110	109	114	109	115
Toluene-d8	70-120		100	101	101	100	102

QUALITY CONTROL REPORT

QC Batch No: 050506-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	95	94	1.1	75-120	15
Chlorobenzene	118	112	5.2	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	104	95	9.0	75-120	15
MTBE	100	89	11.6	75-120	15
Toluene (Methyl benzene)	101	101	<1	75-120	15
Trichloroethene (TCE)	105	110	4.7	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050506-1C

Our Lab I.D.			170377
Client Sample I.D.			PE42-13'7"
Date Sampled			05/01/2006
Date Prepared			05/05/2006
Preparation Method			
Date Analyzed			05/05/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Acetone	12.7	50.0	ND
Benzene	1.02	2.00	ND
Bromobenzene (Phenyl bromide)	3.39	10.00	ND
Bromochloromethane (Chlorobromomethane)	0.38	10.00	ND
Bromodichloromethane (Dichlorobromomethane)	0.63	10.00	ND
Bromoform (Tribromomethane)	3.39	50.00	ND
Bromomethane (Methyl bromide)	2.75	30.00	ND
2-Butanone (MEK, Methyl ethyl ketone)	5.83	50.00	ND
n-Butylbenzene	2.05	10.00	ND
sec-Butylbenzene	3.04	10.00	ND
tert-Butylbenzene	1.34	10.00	ND
Carbon disulfide	5.53	10.00	ND
Carbon tetrachloride (Tetrachloromethane)	2.48	10.00	ND
Chlorobenzene	0.89	10.00	ND
Chloroethane	2.15	30.00	ND
2-Chloroethyl vinyl ether	5.53	50.00	ND
Chloroform (Trichloromethane)	1.24	10.00	ND
Chloromethane (Methyl chloride)	1.74	30.00	ND
4-Chlorotoluene (p-Chlorotoluene)	1.34	10.00	ND
2-Chlorotoluene (o-Chlorotoluene)	2.35	10.00	ND
1,2-Dibromo-3-chloropropane (DBCP)	2.69	50.00	ND
Dibromochloromethane	0.65	10.00	ND
1,2-Dibromoethane (EDB, Ethylene dibromide)	2.75	10.00	ND
Dibromomethane	2.30	10.00	ND
1,2-Dichlorobenzene (o-Dichlorobenzene)	1.03	10.00	ND
1,3-Dichlorobenzene (m-Dichlorobenzene)	1.65	10.00	ND

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ANALYTICAL RESULTS

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Project ID:	0106.0015.002.001	ASL Job Number	Submitted	Client
Project Name:	Pier E Redevelopment	29397	05/02/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050506-1C

Our Lab I.D.			170377
Client Sample I.D.			PE42-13'7"
Date Sampled			05/01/2006
Date Prepared			05/05/2006
Preparation Method			
Date Analyzed			05/05/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
1,4-Dichlorobenzene (p-Dichlorobenzene)	2.23	10.00	ND
Dichlorodifluoromethane	2.07	30.00	ND
1,1-Dichloroethane	1.30	10.00	ND
1,2-Dichloroethane	1.57	10.00	ND
1,1-Dichloroethene (1,1-Dichloroethylene)	2.60	10.00	ND
cis-1,2-Dichloroethene	1.60	10.00	ND
trans-1,2-Dichloroethene	2.16	10.00	ND
1,2-Dichloropropane	0.66	10.00	ND
1,3-Dichloropropane	0.92	10.00	ND
2,2-Dichloropropane	1.36	10.00	ND
1,1-Dichloropropene	1.12	10.00	ND
cis-1,3-Dichloropropene	0.98	10.00	ND
trans-1,3-Dichloropropene	0.96	10.00	ND
Ethylbenzene	1.37	2.00	ND
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	2.77	30.00	ND
2-Hexanone	3.18	50.00	ND
Isopropylbenzene	1.42	10.00	ND
p-Isopropyltoluene (4-Isopropyltoluene)	3.86	10.00	ND
MTBE	2.90	5.00	ND
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	3.14	50.00	ND
Methylene chloride (Dichloromethane, DCM)	3.31	50.00	ND
Naphthalene	1.14	10.00	ND
n-Propylbenzene	1.14	10.00	ND
Styrene	0.80	10.00	ND
1,1,1,2-Tetrachloroethane	1.28	10.00	ND
1,1,2,2-Tetrachloroethane	3.25	10.00	ND
Tetrachloroethene (Tetrachloroethylene)	0.93	10.00	ND
Toluene (Methyl benzene)	0.93	2.00	ND
1,2,3-Trichlorobenzene	1.23	10.00	ND
1,2,4-Trichlorobenzene	2.82	10.00	ND
1,1,1-Trichloroethane	2.03	10.00	ND
1,1,2-Trichloroethane	1.74	10.00	ND

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ANALYTICAL RESULTS

		ASL Job Number	Submitted	Client
Project ID:	0106.0015.002.001			
Project Name:	Pier E Redevelopment	29397	05/02/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 050506-1C

Our Lab I.D.			170377
Client Sample I.D.			PE42-13'7"
Date Sampled			05/01/2006
Date Prepared			05/05/2006
Preparation Method			
Date Analyzed			05/05/2006
Matrix			Soil
Units			ug/kg
Dilution Factor			1
Analytes	**MDL**	**PQL**	**Results**
Trichloroethene (TCE)	1.15	10.00	ND
Trichlorofluoromethane	3.15	10.00	ND
1,2,3-Trichloropropane	1.74	10.00	ND
1,2,4-Trimethylbenzene	3.19	10.00	ND
1,3,5-Trimethylbenzene	1.23	10.00	ND
Vinyl acetate	10.8	50.0	ND
Vinyl chloride (Chloroethene)	2.79	30.00	ND
o-Xylene	1.01	2.00	ND
m- & p-Xylenes	1.80	4.00	ND

Our Lab I.D.		170377
Surrogates	**% Rec.Limit**	**% Rec.**
Surrogate Percent Recovery		
Bromofluorobenzene	70-120	105
Dibromofluoromethane	70-120	112
Toluene-d8	70-120	100

QUALITY CONTROL REPORT

QC Batch No: 050506-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
Benzene	95	94	1.1	75-120	15
Chlorobenzene	118	112	5.2	75-120	15
1,1-Dichloroethene (1,1-Dichloroethylene)	104	95	9.0	75-120	15
MTBE	100	89	11.6	75-120	15
Toluene (Methyl benzene)	101	101	<1	75-120	15
Trichloroethene (TCE)	105	110	4.7	75-120	15

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 050506-1

Our Lab I.D.		**170364**	**170365**	**170366**	**170369**	**170370**
Client Sample I.D.		PE5-3'	PE5-5',10'2",14'6"	PE5-20',29'6"	PE15-3'	PE15-5',9'7",14'
Date Sampled		05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method						
Date Analyzed		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	ND
Benzo(a)pyrene	5	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	2	ND	ND	ND	ND	ND
Benzo(ghi)perylene	7	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	2	ND	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	ND	ND	ND
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	ND
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	ND	ND	ND	ND	ND

Our Lab I.D.		**170364**	**170365**	**170366**	**170369**	**170370**
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	57	80	28	53	57
Phenol-d6	10-107	67	99	38	62	74
2,4,6-Tribromophenol	10-123	72	75	83	58	61
Nitrobenzene-d5	35-114	40	94	29	47	46
2-Fluorobiphenyl	18-116	63	68	43	50	47
Terphenyl-d14	33-141	73	70	83	63	82

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 050506-1

Analytes	MS % REC	MS DUP % REC	RPD %							
Acenaphthene	86	89	3.4							
Pyrene	99	97	2.0							

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ANALYTICAL RESULTS

Ordered By

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26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: **22**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 050506-1

Our Lab I.D.		**170371**	**170374**	**170375**	**170376**	**170378**
Client Sample I.D.		PE15-20'	PE42-3'	PE42-5',9'10", 13'7"	PE42-20,29.6, 40,49.6	PE1-20',28'4"
Date Sampled		05/01/2006	05/01/2006	05/01/2006	05/01/2006	05/01/2006
Date Prepared		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Preparation Method						
Date Analyzed		05/05/2006	05/05/2006	05/05/2006	05/05/2006	05/05/2006
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	**PQL**	**Results**	**Results**	**Results**	**Results**	**Results**
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	50	ND	ND	ND	ND	ND
Anthracene	2	ND	ND	ND	ND	ND
Benz(a)anthracene (Benzo(a)anthracene)	5	ND	ND	ND	ND	26.3
Benzo(a)pyrene	5	ND	ND	ND	ND	37.8
Benzo(b)fluoranthene	2	ND	ND	ND	ND	34.3
Benzo(ghi)perylene	7	ND	ND	ND	ND	8.81
Benzo(k)fluoranthene	2	ND	ND	ND	ND	13.3
Chrysene	5	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	17	ND	ND	ND	ND	ND
Fluoranthene	5	9.94	ND	ND	ND	22.2
Fluorene	10	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND	ND	ND	18.2
Naphthalene	50	ND	ND	ND	ND	ND
Phenanthrene	4	ND	ND	ND	ND	ND
Pyrene	10	13.9	ND	ND	ND	35.5

Our Lab I.D.		**170371**	**170374**	**170375**	**170376**	**170378**
Surrogates	**% Rec.Limit**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**
Surrogate Percent Recovery						
2-Fluorophenol	21-105	62	70	56	59	63
Phenol-d6	10-107	72	78	66	71	65
2,4,6-Tribromophenol	10-123	63	79	55	77	82
Nitrobenzene-d5	35-114	57	68	48	49	52
2-Fluorobiphenyl	18-116	55	76	48	54	53
Terphenyl-d14	33-141	81	82	65	77	82

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ANALYTICAL RESULTS

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29397	05/02/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 050506-1

Analytes	MS % REC	MS DUP % REC	RPD %							
Acenaphthene	86	89	3.4							
Pyrene	99	97	2.0							

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Number of Pages 9
Date Received 05/03/2006
Date Reported 05/10/2006

Job Number	Ordered	Client
29420	05/03/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

Some sample IDs have been revised as indicated on attached Excel file.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.

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COC# № 37315 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29420

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering	Report To: PM
Address: 26691 Plaza #270	Address: SAA
Mission Viejo, CA 92691	Invoice To:
Telephone: 949 470 1937	Address:
Fax: 949 470 0943	
Special Instruction:	
E-mail:	P.O.#:
Project Name: Pier E Redevelopment	
Site Address: 1200 Pier E Street, Long Beach, CA	
Project ID: 0106.0015.002.001	
Project Manager: Greg Dickinson	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260 B	8310	PE20-20'/29'1"/40'/49'1"/56'						Remarks
	170493	PE20-20'	5/2/06	08:58	1	Plastic	Soil	None	X	X	X		X	X						
		PE20-29'1"	Composite	09:34	1									X						
		PE20-40'		10:11	1									X						
		PE20-49'1"		10:49	1									X						
		PE20-56'		11:40	1									X						

Collected By: Scott Miller	Date 5/2/06	Time as above	Relinquished By: Scott Miller	Date 5/03/06	Time 1500
Relinquished By:	Date	Time	Received For Laboratory	Date 5/03/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT
☒ Normal
☐ Rush

White - *Report*, **Yellow** - *Laboratory*, **Pink** - *Client*

ASL Sample ID	COC Sample ID	Corrected Sample ID	Date Sam
PE2-20',29.5',50',60'	PE2-20',29'6",40'6",49'	PE2-20,29.5,40.5,49	4/4/2006
PE2-5',9.5',16'	PE2-5',9'6",16'	PE2-5',9'6",16'	4/4/2006
PE3-(20,29'3")	PE3-20',29'3"	PE3-20',29'3"	4/6/2006
PE3-(5,10,15)	PE3-5',10',15'	PE3-5',10',15'	4/6/2006
PE4-(20,30,40,49'4")	PE4-20',30',40',49'4",60'	PE4-20,30,40,49.3,60	4/6/2006
PE4-(5,10,16)	PE4-5',10',16'	PE4-5',10',16'	4/6/2006
PE7-20,30,40,49,60	PE7-20',30',40',49'11",60'	PE7-20,30,40,49.9,60	4/7/2006
PE11-20',30',40',50',60'	PE11-20',29'10",40',50'1",60'	PE11-20,30,40,50,60	4/10/2006
PE9-20,30,40,50,60	PE9-20',30',40',49'11",60'	PE9-20,30,40,49.9,60	4/10/2006
PE29-20,30,40,49,60	PE29-20',29'7",40',49',60'	PE29-20,30,40,49,60	4/12/2006
PE27-20,30,40,48,60	PE27-20',29'11",40',48',60'	PE27-20,30,40,48,60	4/13/2006
PE25-20',30',40',50',60'	PE25-20',29'7",40',48'7",60'	PE25-20,30,40,49,60	4/14/2006
PE35-20,30,40,50,60	PE35-20',29'2",40',49'5",60'	PE35-20,29,40,49,60	4/17/2006
PE36-20,30,40,50	PE36-20',29'8",40',48'9"	PE36-20,29.7,40,48.8	4/17/2006
PE37-20',30',40',50'	PE37-20',28'8",40',49'2"	PE37-20,28.7,40,49.2	4/18/2006
PE38-20,30,40,50,60	PE38-20',29'4",40',49'6",60'	PE38-20,29,40,50,60	4/18/2006
PE23-20',30',40',50',60'	PE23-20',29'5",40',49'10",60'	PE23-20,29,40,50,60	4/19/2006
PE20-20',30',40',50',60'	PE20-20'	PE20-20'	4/20/2006
PE39-21' to 49'5"	PE39-21',29'8",37'6",49'5"	PE39-21,30,37.5,49.4	4/21/2006
PE40-20' to 60'	PE40-20',29'8",36',40',48'8",60'	PE40-20 to 60	4/21/2006
PE41-20' to 49'4"	PE41-20',29'10",40',49'4"	PE41-20,29.8,40,49.3	4/21/2006
PE45-21'11" to 60'	PE45-21'11",29'10",40',49'11",60'	PE45-22,30,40,50,60	4/24/2006
PE45-21'9" to 50'	PE44-21'9",29'6",40',50'	PE44-21.8,29.5,40,50	4/24/2006
PE33-20,28'11",40,46	PE33-20',28'11",40',46'	PE33-20,28.9,40,46	4/25/2006
PE34-20' to 49'7"	PE34-20',29'7",40',49'7"	PE34-20,29.6,40,49.6	4/25/2006
PE43-20,29,40,50	PE43-20',29'1",40',49'10"	PE43-20,29.1,40,49.8	4/25/2006
PE24-20' to 44'10"	PE24-20',29'6",40',44'10"	PE24-20,29.5,40,44.8	4/26/2006
PE26-20' to 45'11"	PE26-20',29'6",40',45'11"	PE26-20,29.5,40,45.9	4/26/2006
PE31-20' to 60'	PE31-20',29'4",40',50',60'	PE31-20,29,40,50,60	4/26/2006
PE17-20' to 49'10"	PE17-20',28'9",40',49'10"	PE17-20,28.8,40,49.8	4/27/2006
PE18-20' to 60'	PE18-20',29'2",40',48'8",60'	PE18-20,29,40,49,60	4/27/2006
PE19-20' to 46'	PE19-20',28'10",40',46'	PE19-20,28'10",40,46	4/28/2006
PE32-20' to 45'10"	PE32-20',29'1",40',45'10"	PE32-20,29.1,40,45.8	4/28/2006
PE42-20' to 49'7"	PE42-20',29'7",40',49'7"	PE42-20,29.6,40,49.6	5/1/2006
PE20-20' to 56'	PE20-20',29'1",40',49'1",56'	PE20-20,29,40,49,56	5/2/2006

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
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Site

1200 Pier E Street
Long Beach, CA

Telephone: (949)470-1937
Attn: Greg Dickinson

Page: 2
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29420	05/03/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

Batch No:

Our Lab I.D.			**170493**				
Sample ID			PE20-20,29,4				
Date Sampled			0,49,56 05/02/2006				
Date Extracted			05/05/2006				
Preparation Method			3050B				
Date Analyzed			05/05/2006				
Matrix			Soil				
Units			mg/Kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
AA Metals							
Mercury	0.10	0.20	ND				
ICP Metals							
Antimony	0.15	0.50	0.54				
Arsenic	0.10	0.25	1.33				
Barium	0.05	0.50	70.1				
Beryllium	0.05	0.50	ND				
Cadmium	0.05	0.50	ND				
Chromium	0.25	0.50	22.0				
Cobalt	0.05	0.50	7.47				
Copper	0.25	0.50	20.0				
Lead	0.10	0.25	6.67				
Molybdenum	0.05	0.50	2.69				
Nickel	0.05	0.50	13.0				
Selenium	0.20	0.50	ND				
Silver	0.40	0.50	ND				
Thallium	0.20	0.50	ND				
Vanadium	0.30	0.50	32.2				
Zinc	0.05	0.50	51.4				

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ANALYTICAL RESULTS

Page: 3
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29420	05/03/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS/LCSD % Limit								
AA Metals										
Mercury	104	80-120								
ICP Metals										
Antimony	99	80-120								
Arsenic	102	80-120								
Barium	101	80-120								
Beryllium	101	80-120								
Cadmium	99	80-120								
Chromium	100	80-120								
Cobalt	104	80-120								
Copper	99	80-120								
Lead	105	80-120								
Molybdenum	105	80-120								
Nickel	106	80-120								
Selenium	99	80-120								
Silver	100	80-120								
Thallium	103	80-120								
Vanadium	99	80-120								
Zinc	104	80-120								

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ANALYTICAL RESULTS

Ordered By

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Site

1200 Pier E Street
Long Beach, CA

Page: **4**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29420	05/03/2006	PACFIC

Method: 8015M/DHSLUFT, TPH DRO AND ORO

QC Batch No: 050806-1

Our Lab I.D.		**170493**				
Client Sample I.D.		PE20-20,29,40,49,56				
Date Sampled		05/02/2006				
Date Prepared		05/05/2006				
Preparation Method		3550B				
Date Analyzed		05/08/2006				
Matrix		Soil				
Units		mg/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DRO (C13-C22)	10	ND				
TPH ORO (C22+)	50	ND				

Our Lab I.D.		**170493**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	85				

QUALITY CONTROL REPORT

QC Batch No: 050806-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	98	97	1.0	75-120	15					

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ANALYTICAL RESULTS

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Page: 5
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29420	05/03/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Batch No:

Our Lab I.D.			**170493**				
Sample ID			PE20-20,29,4				
Date Sampled			0,49,56 05/02/2006				
Date Extracted			05/08/2006				
Preparation Method			3550B				
Date Analyzed			05/08/2006				
Matrix			Soil				
Units			ug/kg				
Detection Limit Multiplier			1				
Analytes	**MDL**	**PQL**	**Results**				
Aldrin	0.23	2.00	ND				
alpha-Hexachlorocyclohexane (Alpha-BHC)	0.27	2.00	ND				
Beta-Hexachlorocyclohexane (Beta-BHC)	0.37	2.00	ND				
Gamma-Chlordane	0.19	2.00	ND				
alpha-Chlordane	0.20	2.00	ND				
4,4'-DDD (DDD)	0.27	4.00	ND				
4,4'-DDE (DDE)	0.22	4.00	ND				
4,4'-DDT (DDT)	0.22	4.00	ND				
delta-Hexachlorocyclohexane (Delta-BHC)	0.15	2.00	ND				
Dieldrin	0.20	4.00	ND				
Endosulfan 1	0.20	2.00	ND				
Endosulfan 11	0.24	4.00	ND				
Endosulfan sulfate	0.27	4.00	ND				
Endrin	0.25	4.00	ND				
Endrin aldehyde	0.44	4.00	ND				
Endrin ketone	0.30	4.00	ND				
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	0.21	2.00	ND				
Heptachlor	0.23	2.00	ND				
Heptachlor epoxide	0.23	2.00	ND				
Methoxychlor	0.39	17.00	ND				
Toxaphene	17	170	ND				

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ANALYTICAL RESULTS

Page: 6
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29420	05/03/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

Our Lab I.D.		**170493**				
Surrogates	**Con.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	88				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	78	77	1.3	42-122	<30					
4,4'-DDT (DDT)	81	90	10.5	25-160	<30					
Dieldrin	90	93	3.3	36-146	<30					
Endrin	97	102	5.0	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	75	74	1.3	32-127	<30					
Heptachlor	77	78	1.3	34-111	<30					

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ANALYTICAL RESULTS

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Page: **7**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
29420	05/03/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 050806

Our Lab I.D.			**170493**				
Client Sample I.D.			PE20-20,29,40,49,56				
Date Sampled			05/02/2006				
Date Prepared			05/08/2006				
Preparation Method			3550B				
Date Analyzed			05/08/2006				
Matrix			Soil				
Units			ug/kg				
Dilution Factor			1				
Analytes	**MDL**	**PQL**	**Results**				
Aroclor-1016 (PCB-1016)	3.60	33.00	ND				
Aroclor-1221 (PCB-1221)	4.20	67.00	ND				
Aroclor-1232 (PCB-1232)	2.10	33.00	ND				
Aroclor-1242 (PCB-1242)	2.10	33.00	ND				
Aroclor-1248 (PCB-1248)	2.10	33.00	ND				
Aroclor-1254 (PCB-1254)	2.10	33.00	ND				
Aroclor-1260 (PCB-1260)	2.10	33.00	ND				

Our Lab I.D.			**170493**				
Surrogates	**% Rec.Limit**		**% Rec.**				
Surrogate Percent Recovery							
Decachlorobiphenyl	43-169		88				

QUALITY CONTROL REPORT

QC Batch No: 050806

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	97	112		39-150	<30					

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ANALYTICAL RESULTS

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Page: **8**
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29420	05/03/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Batch No:

Our Lab I.D.		**170493**				
Sample ID		PE20-20,29,40,49,56				
Date Sampled		**05/02/2006**				
Date Extracted		**05/08/2006**				
Preparation Method		**3550B**				
Date Analyzed		**05/08/2006**				
Matrix		Soil				
Units		ug/kg				
Detection Limit Multiplier		1				
Analytes	**PQL**	**Results**				
Acenaphthene	**100**	**ND**				
Acenaphthylene	**50**	**ND**				
Anthracene	**2**	**36.9**				
Benz(a)anthracene (Benzo(a)anthracene)	**5**	**122**				
Benzo(a)pyrene	**5**	**98.4**				
Benzo(b)fluoranthene	**2**	**88.0**				
Benzo(ghi)perylene	**7**	**47.6**				
Benzo(k)fluoranthene	**2**	**38.8**				
Chrysene	**5**	**115**				
Dibenz(a,h)anthracene	**17**	**ND**				
Fluoranthene	**5**	**284**				
Fluorene	**10**	**ND**				
Indeno(1,2,3-cd)pyrene	**5**	**39.4**				
Naphthalene	**50**	**ND**				
Phenanthrene	**4**	**162**				
Pyrene	**10**	**366**				

Comment(s):

Low % surrogate recovery due to matrix

Our Lab I.D.		**170493**				
Surrogates	**Con.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	**21-105**	**32**				
Phenol-d6	**10-107**	**42**				
2,4,6-Tribromophenol	**10-123**	**78**				
Nitrobenzene-d5	**35-114**	**23**				

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ANALYTICAL RESULTS

Page: 9
Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

Job Number	Order Date	Client
29420	05/03/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

Our Lab I.D.		170493				
Surrogates	**Con.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorobiphenyl	18-116	28				
Terphenyl-d14	33-141	80				

QUALITY CONTROL REPORT

Batch No:

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	86	89	3.4	43-118						
Pyrene	89	78	13.2	26-127						

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Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 2
Date Received 07/14/2006
Date Reported 07/21/2006

Job Number	Ordered	Client
30191	07/14/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

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Additional Request

NEW JOB # 30191

COC# № 37146 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29312

Company: Pacific Edge Engineering		Report To: PM	
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1737	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction: See page 3/3 for additional	Project ID: 0106.0015.002.001		
E-mail: Sample in composite	Project Manager: Greg Dickinson	P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8270	PE40-5'/10'/14'11"	PE40 20'/29'8"/40'/48'8"/60'		Add'l STLC Cu			Remarks
1	169781	PE 40-3'	4/21/06	07:50	3	encore	Soil	None				X								
2	169782	PE40-3'		07:50	2	Plastic			X	X	X		X							
3	169783	PE 40-5'	Composite	08:00	1				X	X	X		X	X			X			175261
		PE 40-10'		08:05	1									X						
		PE 40-14'11"		08:11	1									X						
4	169784	PE40-20'		08:22	1				X	X	X		X		X					*
		PE40-29'8"		08:41	1										X					
		PE 40-40'		09:25	1										X					
		PE 40-48'8"		09:57	1										X					
		PE40-60'		11:21	1										X					

Collected By: [signature]	Date 4/21/06	Time as above	Relinquished By: [signature]	Date 4/21/06	Time 1500
Relinquished By:	Date	Time	Received For Laboratory MOS	Date 4/21/06	Time 1500
Received By:	Date	Time	Condition of Sample: Adobe LER 7-14	Dr: 7-21	

TAT ☒ Normal ☐ Rush

CHAIN OF CUSTODY RECORD

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COC# № 37109 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29312

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 1937 Fax: 949 470 0943	Long Beach, CA	Address:	
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ANALYSIS REQUESTED

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310	PE39 - 5'/10'/14'	PE39 - 20'/21'/25'/29'8"/37'6"	PE40 - 14'11"					Remarks
6	169985	PE 40-14'11"	4/21/06	09:08	3	encore	Soil	None				X									
6	169986	PE39-3'		11:46	3	encore						X									
7	169987	PE39-3'		11:46	2	Plastic			X	X	X		X								
8	169988	PE39-5'		11:54	1				X	X	X		X	X							
		PE39-10'		12:00	1									X							
		PE39-14'		12:50	1									X							
9	169989	PE39-~~20'~~21'		13:00	1				X	X	X		X		X						[illegible]
		PE39-29'8"		13:13	1										X						
		PE39-~~37'6"~~ 37'6"		13:36	1										X						
		PE39-49'5"		14:00	1										X						

Collected By: [signature]	Date 4/21/06	Time as above	Relinquished By: [signature]	Date 4/24/06	Time 1300
Relinquished By:	Date	Time	Received For Laboratory MRO	Date 4/24/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT
☑ Normal
☐ Rush

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COC# № 37110 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 29312

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470 0737 Fax: 949 470 0943	Long Beach, CA	Address:	
Special Instruction: * Hold for test of composite	Project ID: 0106.0015.002.001		
E-mail: to be collected 4/24/06	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	8260B	Title 22 Metals	8015 Ext	8081A/8082	8310	PE41-5'/10'3"/14'4"						Remarks
10	169790	PE39-10'	4/21/06	13:45	3	encore	Soil	None	X											
11	169791	PE41-3'		14:40	3	encore			X											
12	169792	PE41-3'		14:40	2	Plastic				X	X	X	X							
13	169793	PE41-5'		14:41	1					X	X	X	X	X						
		PE41-10'2"		14:47	1									X						
		PE41-14'4"		14:50	1									X						
14	169794	PE41-20' 9' 10' 20' 14'		15:03	1					X	X	X	X		X					*
15	169795	PE41-14'4"		15:25	3	encore			X											
		PE40-36		9:00	1	Plastic			Composite w/ 14 PE40-20/29'8"/40/48'8"/60 and to name PE40-20/29'8"/36/40/48'8"/60											

Collected By: Scott Miller	Date 4/21/06	Time around	Relinquished By: Scott Miller	Date 4/21/06	Time 17:00	TAT
Relinquished By:	Date	Time	Received For Laboratory MOS	Date 4/24/06	Time 1500	☒ Normal
Received By:	Date	Time	Condition of Sample:			☐ Rush

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ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 2

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30191	07/14/2006	PACFIC

Method: 6010B, STLC Copper

QC Batch No: 071906-2

Our Lab I.D.		**175261**				
Client Sample I.D.		PE40-5',10',14'11"				
Date Sampled		04/21/2006				
Date Prepared		07/17/2006				
Preparation Method						
Date Analyzed		07/19/2006				
Matrix		Soil				
Units		mg/L				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
ICP Metals						
Copper (soluble)	0.25	1.40				

QUALITY CONTROL REPORT

QC Batch No: 071906-2

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Copper (soluble)	107	80-120								

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Ordered By

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Mission Viejo, CA 92691-

Telephone (949)470-1937
Attn Greg Dickinson

Number of Pages 12
Date Received 07/06/2006
Date Reported 07/17/2006

Job Number	Ordered	Client
30119	07/06/2006	PACFIC

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment
Site: 1200 Pier E Street
Long Beach, CA

Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

Amolk MOLKY Brar
Laboratory Manager

Rojert G. Araghi
Laboratory Director

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COC# № 37356 GLOBAL ID _____ E REPORT: ☐ PDF ☐ EDF ☐ EDD ASL JOB# 30119

CHAIN OF CUSTODY RECORD

Company: Pacific Edge Engineering		Report To: PM	ANALYSIS REQUESTED
Address: 26691 Plaza #270	Project Name: Pier E Redevelopment	Address: SAA	
Mission Viejo, CA, 92691	Site Address: 1200 Pier E Street	Invoice To:	
Telephone: 949 470-1937	Long Beach, CA	Address:	
Fax: 949 470 0943			
Special Instruction:	Project ID: 0106.0015.002.001		
E-mail:	Project Manager: Greg Dickinson	P.O.#:	

ITEM	LAB USE ONLY Lab ID	SAMPLE DESCRIPTION Sample ID	Date	Time	Container(s) #	Type	Matrix	Preservation	Title 22 Metals	8015 Ext	8081A/8082	8260B	8310							Remarks
	174846	PE 1-45 Drum Comp.	7/5/06	14:25	2	Brass tube	Soil	None	X	X	X		X							
		PE 1-45 Drum Comp.	7/5/06	14:20	3	encore	Soil	None				X								

Collected By: Scott Miller	Date 7/5/06	Time 14:20	Relinquished By:	Date	Time
Relinquished By: Scott Miller	Date 7/6/06	Time 1500	Received For Laboratory	Date 7/6/06	Time 1500
Received By:	Date	Time	Condition of Sample:		

TAT
☒ Normal
☐ Rush

White - Report, Yellow - Laboratory, Pink - Client

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ANALYTICAL RESULTS

Ordered By

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Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 2

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QC Batch No: 070706-5

Our Lab I.D.		**174846**
Client Sample I.D.		PE 1-45 Drum Comp.
Date Sampled		07/05/2006
Date Prepared		07/07/2006
Preparation Method		
Date Analyzed		07/07/2006
Matrix		Soil
Units		mg/Kg
Dilution Factor		1
Analytes	**PQL**	**Results**
AA Metals		
Mercury	0.20	ND
ICP Metals		
Antimony	0.50	ND
Arsenic	0.25	ND
Barium	0.50	35.3
Beryllium	0.50	ND
Cadmium	0.50	ND
Chromium	0.50	11.2
Cobalt	0.50	3.61
Copper	0.50	7.21
Lead	0.25	1.71
Molybdenum	0.50	ND
Nickel	0.50	6.07
Selenium	0.50	0.64
Silver	0.50	ND
Thallium	0.50	ND
Vanadium	0.50	19.2
Zinc	0.50	21.5

QUALITY CONTROL REPORT

QC Batch No: 070706-5

Analytes	LCS % REC	LCS/LCSD % Limit
AA Metals		
Mercury	110	80-120
ICP Metals		
Antimony	90	80-120

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ANALYTICAL RESULTS

Page: 3

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QUALITY CONTROL REPORT

QC Batch No: 070706-5

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Arsenic	93	80-120								
Barium	98	80-120								
Beryllium	96	80-120								
Cadmium	93	80-120								
Chromium	96	80-120								
Cobalt	98	80-120								
Copper	98	80-120								
Lead	98	80-120								
Molybdenum	100	80-120								
Nickel	101	80-120								
Selenium	91	80-120								
Silver	98	80-120								
Thallium	97	80-120								
Vanadium	93	80-120								
Zinc	99	80-120								

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ANALYTICAL RESULTS

Ordered By

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26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: **4**

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8015B, TPH DROs and OROs (Diesel and Oil Range Organics)

QC Batch No: 071506-1

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/10/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		mg/Kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
TPH DROs (C10 to C28)	10	ND				
TPH OROs (C28+)	50	ND				

Our Lab I.D.		**174846**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Chlorobenzene	70-120	85				

QUALITY CONTROL REPORT

QC Batch No: 071506-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Diesel	105	105	<1	75-120	<20					

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ANALYTICAL RESULTS

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Site

1200 Pier E Street
Long Beach, CA

Page: 5

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

QC Batch No: 071006-1

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/10/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Aldrin	2.00	ND				
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND				
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND				
Gamma-Chlordane	2.00	ND				
alpha-Chlordane	2.00	ND				
4,4'-DDD (DDD)	4.00	ND				
4,4'-DDE (DDE)	4.00	ND				
4,4'-DDT (DDT)	4.00	17.5				
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND				
Dieldrin	4.00	ND				
Endosulfan 1	2.00	ND				
Endosulfan 11	4.00	ND				
Endosulfan sulfate	4.00	ND				
Endrin	4.00	ND				
Endrin aldehyde	4.00	ND				
Endrin ketone	4.00	ND				
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND				
Heptachlor	2.00	ND				
Heptachlor epoxide	2.00	ND				
Methoxychlor	17.00	ND				
Toxaphene	170	ND				

Our Lab I.D.		**174846**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	85				

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ANALYTICAL RESULTS

Page: 6

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8081A, Organochlorine Pesticides

QUALITY CONTROL REPORT

QC Batch No: 071006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	93	78	17.5	42-122	<30					
4,4'-DDT (DDT)	109	106	2.8	25-160	<30					
Dieldrin	103	102	<1	36-146	<30					
Endrin	115	116	<1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	86	75	13.7	32-127	<30					
Heptachlor	103	85	19.1	34-111	<30					

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ANALYTICAL RESULTS

Ordered By

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Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 7

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 071006-1

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/10/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Aroclor-1016 (PCB-1016)	33.00	ND				
Aroclor-1221 (PCB-1221)	67.00	ND				
Aroclor-1232 (PCB-1232)	33.00	ND				
Aroclor-1242 (PCB-1242)	33.00	ND				
Aroclor-1248 (PCB-1248)	33.00	ND				
Aroclor-1254 (PCB-1254)	33.00	ND				
Aroclor-1260 (PCB-1260)	33.00	ND				

Our Lab I.D.		**174846**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	85				

QUALITY CONTROL REPORT

QC Batch No: 071006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	105	104	<1	39-150	<30					

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ANALYTICAL RESULTS

Ordered By

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26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

Page: 8

Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 071006-1C

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/10/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Acetone	50.0	ND				
Benzene	2.00	ND				
Bromobenzene (Phenyl bromide)	10.00	ND				
Bromochloromethane (Chlorobromomethane)	10.00	ND				
Bromodichloromethane (Dichlorobromomethane)	10.00	ND				
Bromoform (Tribromomethane)	50.00	ND				
Bromomethane (Methyl bromide)	30.00	ND				
2-Butanone (MEK, Methyl ethyl ketone)	50.00	ND				
n-Butylbenzene	10.00	ND				
sec-Butylbenzene	10.00	ND				
tert-Butylbenzene	10.00	ND				
Carbon disulfide	10.00	ND				
Carbon tetrachloride (Tetrachloromethane)	10.00	ND				
Chlorobenzene	10.00	ND				
Chloroethane	30.00	ND				
2-Chloroethyl vinyl ether	50.00	ND				
Chloroform (Trichloromethane)	10.00	ND				
Chloromethane (Methyl chloride)	30.00	ND				
4-Chlorotoluene (p-Chlorotoluene)	10.00	ND				
2-Chlorotoluene (o-Chlorotoluene)	10.00	ND				
1,2-Dibromo-3-chloropropane (DBCP)	50.00	ND				
Dibromochloromethane	10.00	ND				
1,2-Dibromoethane (EDB, Ethylene dibromide)	10.00	ND				
Dibromomethane	10.00	ND				
1,2-Dichlorobenzene (o-Dichlorobenzene)	10.00	ND				
1,3-Dichlorobenzene (m-Dichlorobenzene)	10.00	ND				
1,4-Dichlorobenzene (p-Dichlorobenzene)	10.00	ND				
Dichlorodifluoromethane	30.00	ND				

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 071006-1C

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/10/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
1,1-Dichloroethane	10.00	ND				
1,2-Dichloroethane	10.00	ND				
1,1-Dichloroethene (1,1-Dichloroethylene)	10.00	ND				
cis-1,2-Dichloroethene	10.00	ND				
trans-1,2-Dichloroethene	10.00	ND				
1,2-Dichloropropane	10.00	ND				
1,3-Dichloropropane	10.00	ND				
2,2-Dichloropropane	10.00	ND				
1,1-Dichloropropene	10.00	ND				
cis-1,3-Dichloropropene	10.00	ND				
trans-1,3-Dichloropropene	10.00	ND				
Ethylbenzene	2.0	ND				
Hexachlorobutadiene (1,3-Hexachlorobutadiene)	30.00	ND				
2-Hexanone	50.00	ND				
Isopropylbenzene	10.00	ND				
p-Isopropyltoluene (4-Isopropyltoluene)	10.00	ND				
MTBE	5.00	ND				
4-Methyl-2-pentanone (MIBK, Methyl isobutyl ketone)	50.00	ND				
Methylene chloride (Dichloromethane, DCM)	50.00	ND				
Naphthalene	10.00	ND				
n-Propylbenzene	10.00	ND				
Styrene	10.00	ND				
1,1,1,2-Tetrachloroethane	10.00	ND				
1,1,2,2-Tetrachloroethane	10.00	ND				
Tetrachloroethene (Tetrachloroethylene)	10.00	ND				
Toluene (Methyl benzene)	2.0	ND				
1,2,3-Trichlorobenzene	10.00	ND				
1,2,4-Trichlorobenzene	10.00	ND				
1,1,1-Trichloroethane	10.00	ND				
1,1,2-Trichloroethane	10.00	ND				
Trichloroethene (TCE)	10.00	ND				
Trichlorofluoromethane	10.00	ND				
1,2,3-Trichloropropane	10.00	ND				
1,2,4-Trimethylbenzene	10.00	ND				

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8260B, Volatile Organic Compounds

QC Batch No: 071006-1C

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/10/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
1,3,5-Trimethylbenzene	10.00	ND				
Vinyl acetate	50.0	ND				
Vinyl chloride (Chloroethene)	30.00	ND				
o-Xylene	2.0	ND				
m- & p-Xylenes	4.00	ND				

Our Lab I.D.		**174846**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
Bromofluorobenzene	70-120	105				
Dibromofluoromethane	70-120	91				
Toluene-d8	70-120	96				

QUALITY CONTROL REPORT

QC Batch No: 071006-1C

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit					
Benzene	103	104	<1	75-120	15					
Chlorobenzene	90	98	8.5	75-120	15					
1,1-Dichloroethene (1,1-Dichloroethylene)	81	94	14.9	75-120	15					
MTBE	96	102	6.1	75-120	15					
Toluene (Methyl benzene)	109	108	<1	75-120	15					
Trichloroethene (TCE)	90	100	10.5	75-120	15					

AMERICAN SCIENTIFIC LABORATORIES, LLC
Environmental Testing Services
2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

ANALYTICAL RESULTS

Ordered By

Pacific Edge Engineering, Inc.
26691 Plaza, Suite 270
Mission Viejo, CA 92691-

Telephone: (949)470-1937
Attn: Greg Dickinson

Site

1200 Pier E Street
Long Beach, CA

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 071006-1

Our Lab I.D.		**174846**				
Client Sample I.D.		PE 1-45 Drum Comp.				
Date Sampled		07/05/2006				
Date Prepared		07/07/2006				
Preparation Method						
Date Analyzed		07/10/2006				
Matrix		Soil				
Units		ug/kg				
Dilution Factor		1				
Analytes	**PQL**	**Results**				
Acenaphthene	100	ND				
Acenaphthylene	50	ND				
Anthracene	2	ND				
Benz(a)anthracene (Benzo(a)anthracene)	5	ND				
Benzo(a)pyrene	5	ND				
Benzo(b)fluoranthene	2	ND				
Benzo(ghi)perylene	7	ND				
Benzo(k)fluoranthene	2	ND				
Chrysene	5	ND				
Dibenz(a,h)anthracene	17	ND				
Fluoranthene	5	ND				
Fluorene	10	ND				
Indeno(1,2,3-cd)pyrene	5	ND				
Naphthalene	50	ND				
Phenanthrene	4	ND				
Pyrene	10	ND				

Our Lab I.D.		**174846**				
Surrogates	**% Rec.Limit**	**% Rec.**				
Surrogate Percent Recovery						
2-Fluorophenol	21-105	68				
Phenol-d6	10-107	66				
2,4,6-Tribromophenol	10-123	42				
Nitrobenzene-d5	35-114	66				
2-Fluorobiphenyl	18-116	53				
Terphenyl-d14	33-141	46				

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ANALYTICAL RESULTS

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Project ID: 0106.0015.002.001
Project Name: Pier E Redevelopment

ASL Job Number	Submitted	Client
30119	07/06/2006	PACFIC

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

QC Batch No: 071006-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Acenaphthene	51	60	16.2	43-118						
Pyrene	74	82	10.3	26-127						

Appendix D

Elutriate Analytical Reports

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

July 19, 2006

Greg Dickinson
Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Subject: **Calscience Work Order No.: 06-06-0747**
Client Reference: POLB Elutriate Testing

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 6/12/2006 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

for

Calscience Environmental
Laboratories, Inc.
Virendra Patel
Project Manager

Calscience
Environmental
Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 06-06-0747

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the elutriate samples.

Sample Condition on Receipt

Sixty-two (62) sediment samples in acetate sleeves of varying length were transferred to the laboratory on June 2, 2006, following strict chain-of-custody procedures. The temperature of the sediment samples upon receipt at the laboratory was 2.8°C. The samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers, and stored in refrigeration units pending elutriate preparation.

The seawater sample (Site Water) was transferred to the laboratory in three five-gallon plastic pails. The seawater was received at the laboratory on May 26, 2006. The temperature of the seawater samples upon receipt at the laboratory was 13.6°C. The seawater samples were placed in coolers pending the elutriate preparation.

Elutriate Preparation

The sediment samples were composited into the following four samples in accordance with verbal instructions from the client: PE3, PE20, PE 27, and PE40. Compositing was performed using the cone and quartering techniques presented in ASTM D 6323-98 and EPA Draft Technical Guidance for RCRA Waste Sampling.

The elutriate samples were prepared in accordance with the Effluent Elutriate Test Procedure in the Inland Testing Manual. Prior to use, all labware was thoroughly cleaned in accordance with standard laboratory operating procedures (detergent wash, acid bath, rinse, flush with D.I. water). The elutriate sample was prepared using a commercial grade stainless steel mixer. A slurry concentration of 150 g/L (dry weight basis) was used. The following volumes of sediment and seawater from the proposed dredging site were placed in the mixer:

Sediment Composite:	PE 3	PE20	PE27	PE40
Sediment Volume (liters)	0.73	0.75	0.77	0.94
Seawater Volume (liters)	9.27	9.25	9.23	9.06

At room temperature, each slurry mixture was stirred vigorously for 5 minutes. Following mixing, the slurry was aerated using compressed air delivered to the bottom of the mixing bowl. The slurry was aerated vigorously for one hour, then allowed to settle for twenty-four hours. The supernatant was then extracted using a syringe and collected in clean containers. Approximately four liters of clear supernatant were decanted from the settled mixture.

The supernatant was then either filtered or centrifuged to determine the dissolved concentration of each constituent. Supernatant intended for pesticide/PCB testing were placed in a centrifuge (disposable glass centrifuge tubes) and spun for 30 minutes. Samples for the remaining constituents were filtered using a 0.45 micron filter. The supernatant was then placed in new glass or plastic containers (depending on the analysis) pending chemical analysis.

Once the elutriate samples were ready, the samples was logged in to LIMS, given laboratory identification numbers, and stored in refrigeration units pending analysis. The elutriate samples were analyzed for PAHs, organochlorine pesticides and PCBs, metals, and TPH extractables. Analysis of a site water sample for these same constituents was also performed as part of this analytical effort (sample Site Water). The site water was prepared in a manner consistent with the elutriates.

Data Summary

Holding times

All holding time requirements were met.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

Concentrations of target analytes in the method blanks were found to be below reporting limits for all testing.

Laboratory Control Samples

Laboratory Control Sample (LCS/LCSD) analyses were performed for each applicable method at the required frequencies. All parameters were within control limits for each method.

Matrix Spikes

Matrix spike (MS/MSD) analyses were performed for all parameters. The samples spiked were project elutriate samples. All recoveries were in control.

Surrogates

Surrogate recoveries for all samples were within acceptable control limits.

Acronyms

PAHs- Polynuclear Aromatic Hydrocarbons
PCBs- Polychlorinated Biphenyls
TPH- Total Petroleum Hydrocarbons
LCS/LCSD- Laboratory Control Sample/Laboratory Control Sample Duplicate
MS/MSD- Matrix Spike/Matrix Spike Duplicate
RPD- Relative Percent Difference

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received:	06/12/06
Work Order No:	06-06-0747
Preparation:	EPA 3005A Filt. / EPA 7470A Filt.
Method:	EPA 6010B / EPA 7470A
Units:	mg/L

Project: POLB Elutriate Testing

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE3	**06-06-0747-1**	**06/12/06**	**Aqueous**	**06/13/06**	**06/14/06**	**060613L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 6/14/2006 3:39:16 PM with batch 060613L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	0.00435	0.0150	0.00209	1	J,B	Mercury	ND	0.000500	0.0000672	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	0.00196	0.00500	0.000800	1	J
Barium	0.240	0.010	0.000719	1		Nickel	0.0159	0.0050	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	0.000964	0.00500	0.000350	1	J	Silver	0.00185	0.00500	0.000400	1	J
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	0.00783	0.00500	0.000696	1	B	Vanadium	0.00530	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	0.0268	0.0100	0.000848	1	
Lead	ND	0.0100	0.00236	1							

PE20	**06-06-0747-2**	**06/12/06**	**Aqueous**	**06/13/06**	**06/14/06**	**060613L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 6/14/2006 3:41:30 PM with batch 060613L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000672	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	ND	0.00500	0.000800	1	
Barium	0.0679	0.0100	0.000719	1		Nickel	0.00508	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	0.00175	0.00500	0.000400	1	J
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	0.00383	0.00500	0.000696	1	J,B	Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	0.00508	0.0100	0.000848	1	J
Lead	ND	0.0100	0.00236	1							

PE27	**06-06-0747-3**	**06/12/06**	**Aqueous**	**06/13/06**	**06/14/06**	**060613L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 6/14/2006 3:43:40 PM with batch 060613L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	0.00366	0.0150	0.00209	1	J,B	Mercury	ND	0.000500	0.0000672	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	ND	0.00500	0.000800	1	
Barium	0.0845	0.0100	0.000719	1		Nickel	0.00711	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	0.00114	0.00500	0.000400	1	J
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	0.00406	0.00500	0.000696	1	J,B	Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	0.0143	0.0100	0.000848	1	
Lead	ND	0.0100	0.00236	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received: 06/12/06
Work Order No: 06-06-0747
Preparation: EPA 3005A Filt. / EPA 7470A Filt.
Method: EPA 6010B / EPA 7470A
Units: mg/L

Project: POLB Elutriate Testing

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE40	**06-06-0747-4**	**06/12/06**	**Aqueous**	**06/13/06**	**06/14/06**	**060613L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 6/15/2006 4:08:50 PM with batch 060613L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000672	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	ND	0.00500	0.000800	1	
Barium	0.257	0.010	0.000719	1		Nickel	0.00428	0.00500	0.00137	1	J
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	0.00141	0.00500	0.000400	1	J
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	0.00285	0.00500	0.000696	1	J,B	Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	0.0340	0.0100	0.000848	1	
Lead	ND	0.0100	0.00236	1							

Seawater blank	**06-06-0747-5**	**06/12/06**	**Aqueous**	**06/13/06**	**06/16/06**	**060613L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.
-Mercury was analyzed on 6/15/2006 4:15:30 PM with batch 060613L04

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	ND	0.0150	0.00209	1		Mercury	ND	0.000500	0.0000672	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	ND	0.00500	0.000800	1	
Barium	0.00784	0.0100	0.000719	1	J	Nickel	0.00153	0.00500	0.00137	1	J
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	0.000740	0.00500	0.000400	1	J
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	0.00208	0.00500	0.000696	1	J,B	Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	0.00343	0.0100	0.000848	1	J
Lead	ND	0.0100	0.00236	1							

Method Blank	**099-04-008-2,514**	**N/A**	**Aqueous**	**06/13/06**	**06/14/06**	**060613L04**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual
Mercury	ND	0.000500	0.0000672	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3005A Filt. / EPA 7470A Filt.
		Method:	EPA 6010B / EPA 7470A
		Units:	mg/L
Project: POLB Elutriate Testing			Page 3 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**097-01-003-6,194**	**N/A**	**Aqueous**	**06/13/06**	**06/14/06**	**060613L04F**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Antimony	0.00280	0.0150	0.00209	1	J	Lead	ND	0.0100	0.00236	1	
Arsenic	ND	0.0100	0.00308	1		Molybdenum	ND	0.00500	0.000800	1	
Barium	ND	0.0100	0.000719	1		Nickel	ND	0.00500	0.00137	1	
Beryllium	ND	0.00100	0.000176	1		Selenium	ND	0.0150	0.00295	1	
Cadmium	ND	0.00500	0.000350	1		Silver	ND	0.00500	0.000400	1	
Chromium	ND	0.00500	0.000350	1		Thallium	ND	0.0150	0.00233	1	
Cobalt	0.000713	0.00500	0.000696	1	J	Vanadium	ND	0.00500	0.000314	1	
Copper	ND	0.00500	0.00134	1		Zinc	ND	0.0100	0.000848	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510C
		Method:	DHS LUFT

Project: POLB Elutriate Testing

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE3	**06-06-0747-1**	**06/12/06**	**Aqueous**	**06/14/06**	**06/15/06**	**060614B04**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	140	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	116	68-140	

PE20	**06-06-0747-2**	**06/12/06**	**Aqueous**	**06/14/06**	**06/15/06**	**060614B04**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	134	68-140	

PE27	**06-06-0747-3**	**06/12/06**	**Aqueous**	**06/14/06**	**06/15/06**	**060614B04**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	103	68-140	

PE40	**06-06-0747-4**	**06/12/06**	**Aqueous**	**06/14/06**	**06/15/06**	**060614B04**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	116	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510C
		Method:	DHS LUFT

Project: POLB Elutriate Testing

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Seawater blank	**06-06-0747-5**	**06/12/06**	**Aqueous**	**06/14/06**	**06/15/06**	**060614B04**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	131	68-140	

Method Blank	098-03-039-1,472	N/A	Aqueous	06/14/06	06/15/06	060614B04

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	109	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8310
		Units:	ug/L

Project: POLB Elutriate Testing

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE3	**06-06-0747-1**	**06/12/06**	**Aqueous**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	1.1	1.1		Benzo (a) Anthracene	ND	1.1	1.1	
Acenaphthylene	ND	1.1	1.1		Chrysene	ND	1.1	1.1	
Acenaphthene	ND	1.1	1.1		Benzo (b) Fluoranthene	ND	1.1	1.1	
Fluorene	ND	1.1	1.1		Benzo (k) Fluoranthene	ND	1.1	1.1	
Phenanthrene	ND	1.1	1.1		Benzo (a) Pyrene	ND	0.22	1.1	
Anthracene	ND	1.1	1.1		Dibenz (a,h) Anthracene	ND	1.1	1.1	
Fluoranthene	ND	1.1	1.1		Benzo (g,h,i) Perylene	ND	1.1	1.1	
Pyrene	ND	1.1	1.1		Indeno (1,2,3-c,d) Pyrene	ND	1.1	1.1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	75	40-160	

PE20	**06-06-0747-2**	**06/12/06**	**Aqueous**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	1.1	1.1		Benzo (a) Anthracene	ND	1.1	1.1	
Acenaphthylene	ND	1.1	1.1		Chrysene	ND	1.1	1.1	
Acenaphthene	ND	1.1	1.1		Benzo (b) Fluoranthene	ND	1.1	1.1	
Fluorene	ND	1.1	1.1		Benzo (k) Fluoranthene	ND	1.1	1.1	
Phenanthrene	ND	1.1	1.1		Benzo (a) Pyrene	ND	0.22	1.1	
Anthracene	ND	1.1	1.1		Dibenz (a,h) Anthracene	ND	1.1	1.1	
Fluoranthene	ND	1.1	1.1		Benzo (g,h,i) Perylene	ND	1.1	1.1	
Pyrene	ND	1.1	1.1		Indeno (1,2,3-c,d) Pyrene	ND	1.1	1.1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	65	40-160	

PE27	**06-06-0747-3**	**06/12/06**	**Aqueous**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	1.1	1.1		Benzo (a) Anthracene	ND	1.1	1.1	
Acenaphthylene	ND	1.1	1.1		Chrysene	ND	1.1	1.1	
Acenaphthene	ND	1.1	1.1		Benzo (b) Fluoranthene	ND	1.1	1.1	
Fluorene	ND	1.1	1.1		Benzo (k) Fluoranthene	ND	1.1	1.1	
Phenanthrene	ND	1.1	1.1		Benzo (a) Pyrene	ND	0.22	1.1	
Anthracene	ND	1.1	1.1		Dibenz (a,h) Anthracene	ND	1.1	1.1	
Fluoranthene	ND	1.1	1.1		Benzo (g,h,i) Perylene	ND	1.1	1.1	
Pyrene	ND	1.1	1.1		Indeno (1,2,3-c,d) Pyrene	ND	1.1	1.1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	64	40-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8310
		Units:	ug/L
Project: POLB Elutriate Testing			Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE40	**06-06-0747-4**	**06/12/06**	**Aqueous**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	1.1	1.1		Benzo (a) Anthracene	ND	1.1	1.1	
Acenaphthylene	ND	1.1	1.1		Chrysene	ND	1.1	1.1	
Acenaphthene	ND	1.1	1.1		Benzo (b) Fluoranthene	ND	1.1	1.1	
Fluorene	ND	1.1	1.1		Benzo (k) Fluoranthene	ND	1.1	1.1	
Phenanthrene	ND	1.1	1.1		Benzo (a) Pyrene	ND	0.22	1.1	
Anthracene	ND	1.1	1.1		Dibenz (a,h) Anthracene	ND	1.1	1.1	
Fluoranthene	ND	1.1	1.1		Benzo (g,h,i) Perylene	ND	1.1	1.1	
Pyrene	ND	1.1	1.1		Indeno (1,2,3-c,d) Pyrene	ND	1.1	1.1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	67	40-160	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Seawater blank	**06-06-0747-5**	**06/12/06**	**Aqueous**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	1.1	1.1		Benzo (a) Anthracene	ND	1.1	1.1	
Acenaphthylene	ND	1.1	1.1		Chrysene	ND	1.1	1.1	
Acenaphthene	ND	1.1	1.1		Benzo (b) Fluoranthene	ND	1.1	1.1	
Fluorene	ND	1.1	1.1		Benzo (k) Fluoranthene	ND	1.1	1.1	
Phenanthrene	ND	1.1	1.1		Benzo (a) Pyrene	ND	0.22	1.1	
Anthracene	ND	1.1	1.1		Dibenz (a,h) Anthracene	ND	1.1	1.1	
Fluoranthene	ND	1.1	1.1		Benzo (g,h,i) Perylene	ND	1.1	1.1	
Pyrene	ND	1.1	1.1		Indeno (1,2,3-c,d) Pyrene	ND	1.1	1.1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	71	40-160	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**099-07-006-145**	**N/A**	**Aqueous**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	1.0	1		Benzo (a) Anthracene	ND	1.0	1	
Acenaphthylene	ND	1.0	1		Chrysene	ND	1.0	1	
Acenaphthene	ND	1.0	1		Benzo (b) Fluoranthene	ND	1.0	1	
Fluorene	ND	1.0	1		Benzo (k) Fluoranthene	ND	1.0	1	
Phenanthrene	ND	1.0	1		Benzo (a) Pyrene	ND	0.20	1	
Anthracene	ND	1.0	1		Dibenz (a,h) Anthracene	ND	1.0	1	
Fluoranthene	ND	1.0	1		Benzo (g,h,i) Perylene	ND	1.0	1	
Pyrene	ND	1.0	1		Indeno (1,2,3-c,d) Pyrene	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual
Decafluorobiphenyl	100	40-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8081A/8082
		Units:	ug/L
Project: POLB Elutriate Testing			Page 1 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE3	**06-06-0747-1**	**06/12/06**	**Aqueous**	**06/16/06**	**06/19/06**	**060616L07**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.11	0.028	1.1		Endosulfan II	ND	0.11	0.024	1.1	
Gamma-BHC	ND	0.11	0.029	1.1		4,4'-DDT	ND	0.11	0.019	1.1	
Beta-BHC	ND	0.11	0.020	1.1		Endosulfan Sulfate	ND	0.11	0.016	1.1	
Heptachlor	ND	0.11	0.011	1.1		Methoxychlor	ND	0.11	0.031	1.1	
Delta-BHC	ND	0.11	0.035	1.1		Chlordane	ND	1.1	0.19	1.1	
Aldrin	ND	0.11	0.023	1.1		Toxaphene	ND	2.2	0.67	1.1	
Heptachlor Epoxide	ND	0.11	0.019	1.1		Endrin Ketone	ND	0.11	0.012	1.1	
Endosulfan I	ND	0.11	0.011	1.1		Aroclor-1016	ND	1.1	0.17	1.1	
Dieldrin	ND	0.11	0.027	1.1		Aroclor-1221	ND	1.1	0.11	1.1	
4,4'-DDE	ND	0.11	0.026	1.1		Aroclor-1232	ND	1.1	0.11	1.1	
Endrin	ND	0.11	0.018	1.1		Aroclor-1242	ND	1.1	0.11	1.1	
Endrin Aldehyde	ND	0.11	0.010	1.1		Aroclor-1248	ND	1.1	0.11	1.1	
2,4'-DDD	ND	0.11	0.058	1.1		Aroclor-1254	ND	1.1	0.11	1.1	
2,4'-DDE	ND	0.11	0.049	1.1		Aroclor-1260	ND	1.1	0.27	1.1	
2,4'-DDT	ND	0.11	0.045	1.1		Aroclor-1262	ND	1.1	0.11	1.1	
4,4'-DDD	ND	0.11	0.026	1.1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	84	50-135		2,4,5,6-Tetrachloro-m-Xylene	86	50-135	

PE20	**06-06-0747-2**	**06/12/06**	**Aqueous**	**06/16/06**	**06/19/06**	**060616L07**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.11	0.028	1.1		Endosulfan II	ND	0.11	0.024	1.1	
Gamma-BHC	ND	0.11	0.029	1.1		4,4'-DDT	ND	0.11	0.019	1.1	
Beta-BHC	ND	0.11	0.020	1.1		Endosulfan Sulfate	ND	0.11	0.016	1.1	
Heptachlor	ND	0.11	0.011	1.1		Methoxychlor	ND	0.11	0.031	1.1	
Delta-BHC	ND	0.11	0.035	1.1		Chlordane	ND	1.1	0.19	1.1	
Aldrin	ND	0.11	0.023	1.1		Toxaphene	ND	2.2	0.67	1.1	
Heptachlor Epoxide	ND	0.11	0.019	1.1		Endrin Ketone	ND	0.11	0.012	1.1	
Endosulfan I	ND	0.11	0.011	1.1		Aroclor-1016	ND	1.1	0.17	1.1	
Dieldrin	ND	0.11	0.027	1.1		Aroclor-1221	ND	1.1	0.11	1.1	
4,4'-DDE	ND	0.11	0.026	1.1		Aroclor-1232	ND	1.1	0.11	1.1	
Endrin	ND	0.11	0.018	1.1		Aroclor-1242	ND	1.1	0.11	1.1	
Endrin Aldehyde	ND	0.11	0.010	1.1		Aroclor-1248	ND	1.1	0.11	1.1	
2,4'-DDD	ND	0.11	0.058	1.1		Aroclor-1254	ND	1.1	0.11	1.1	
2,4'-DDE	ND	0.11	0.049	1.1		Aroclor-1260	ND	1.1	0.27	1.1	
2,4'-DDT	ND	0.11	0.045	1.1		Aroclor-1262	ND	1.1	0.11	1.1	
4,4'-DDD	ND	0.11	0.026	1.1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	84	50-135		2,4,5,6-Tetrachloro-m-Xylene	84	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8081A/8082
		Units:	ug/L
Project: POLB Elutriate Testing			Page 2 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
PE27	**06-06-0747-3**	**06/12/06**	**Aqueous**	**06/16/06**	**06/19/06**	**060616L07**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.11	0.028	1.1		Endosulfan II	ND	0.11	0.024	1.1	
Gamma-BHC	ND	0.11	0.029	1.1		4,4'-DDT	ND	0.11	0.019	1.1	
Beta-BHC	ND	0.11	0.020	1.1		Endosulfan Sulfate	ND	0.11	0.016	1.1	
Heptachlor	ND	0.11	0.011	1.1		Methoxychlor	ND	0.11	0.031	1.1	
Delta-BHC	ND	0.11	0.035	1.1		Chlordane	ND	1.1	0.19	1.1	
Aldrin	ND	0.11	0.023	1.1		Toxaphene	ND	2.2	0.67	1.1	
Heptachlor Epoxide	ND	0.11	0.019	1.1		Endrin Ketone	ND	0.11	0.012	1.1	
Endosulfan I	ND	0.11	0.011	1.1		Aroclor-1016	ND	1.1	0.17	1.1	
Dieldrin	ND	0.11	0.027	1.1		Aroclor-1221	ND	1.1	0.11	1.1	
4,4'-DDE	ND	0.11	0.026	1.1		Aroclor-1232	ND	1.1	0.11	1.1	
Endrin	ND	0.11	0.018	1.1		Aroclor-1242	ND	1.1	0.11	1.1	
Endrin Aldehyde	ND	0.11	0.010	1.1		Aroclor-1248	ND	1.1	0.11	1.1	
2,4'-DDD	ND	0.11	0.058	1.1		Aroclor-1254	ND	1.1	0.11	1.1	
2,4'-DDE	ND	0.11	0.049	1.1		Aroclor-1260	ND	1.1	0.27	1.1	
2,4'-DDT	ND	0.11	0.045	1.1		Aroclor-1262	ND	1.1	0.11	1.1	
4,4'-DDD	ND	0.11	0.026	1.1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	84	50-135		2,4,5,6-Tetrachloro-m-Xylene	80	50-135	

PE40	**06-06-0747-4**	**06/12/06**	**Aqueous**	**06/16/06**	**06/19/06**	**060616L07**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.11	0.028	1.1		Endosulfan II	ND	0.11	0.024	1.1	
Gamma-BHC	ND	0.11	0.029	1.1		4,4'-DDT	ND	0.11	0.019	1.1	
Beta-BHC	ND	0.11	0.020	1.1		Endosulfan Sulfate	ND	0.11	0.016	1.1	
Heptachlor	ND	0.11	0.011	1.1		Methoxychlor	ND	0.11	0.031	1.1	
Delta-BHC	ND	0.11	0.035	1.1		Chlordane	ND	1.1	0.19	1.1	
Aldrin	ND	0.11	0.023	1.1		Toxaphene	ND	2.2	0.67	1.1	
Heptachlor Epoxide	ND	0.11	0.019	1.1		Endrin Ketone	ND	0.11	0.012	1.1	
Endosulfan I	ND	0.11	0.011	1.1		Aroclor-1016	ND	1.1	0.17	1.1	
Dieldrin	ND	0.11	0.027	1.1		Aroclor-1221	ND	1.1	0.11	1.1	
4,4'-DDE	ND	0.11	0.026	1.1		Aroclor-1232	ND	1.1	0.11	1.1	
Endrin	ND	0.11	0.018	1.1		Aroclor-1242	ND	1.1	0.11	1.1	
Endrin Aldehyde	ND	0.11	0.010	1.1		Aroclor-1248	ND	1.1	0.11	1.1	
2,4'-DDD	ND	0.11	0.058	1.1		Aroclor-1254	ND	1.1	0.11	1.1	
2,4'-DDE	ND	0.11	0.049	1.1		Aroclor-1260	ND	1.1	0.27	1.1	
2,4'-DDT	ND	0.11	0.045	1.1		Aroclor-1262	ND	1.1	0.11	1.1	
4,4'-DDD	ND	0.11	0.026	1.1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	69	50-135		2,4,5,6-Tetrachloro-m-Xylene	68	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering		Date Received:	06/12/06
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8081A/8082
		Units:	ug/L
Project: POLB Elutriate Testing			Page 3 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Seawater blank	**06-06-0747-5**	**06/12/06**	**Aqueous**	**06/16/06**	**06/19/06**	**060616L07**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.10	0.025	1		Endosulfan II	ND	0.10	0.022	1	
Gamma-BHC	ND	0.10	0.026	1		4,4'-DDT	ND	0.10	0.017	1	
Beta-BHC	ND	0.10	0.018	1		Endosulfan Sulfate	ND	0.10	0.015	1	
Heptachlor	ND	0.10	0.0096	1		Methoxychlor	ND	0.10	0.028	1	
Delta-BHC	ND	0.10	0.032	1		Chlordane	ND	1.0	0.17	1	
Aldrin	ND	0.10	0.021	1		Toxaphene	ND	2.0	0.61	1	
Heptachlor Epoxide	ND	0.10	0.017	1		Endrin Ketone	ND	0.10	0.011	1	
Endosulfan I	ND	0.10	0.010	1		Aroclor-1016	ND	1.0	0.15	1	
Dieldrin	ND	0.10	0.024	1		Aroclor-1221	ND	1.0	0.10	1	
4,4'-DDE	ND	0.10	0.023	1		Aroclor-1232	ND	1.0	0.10	1	
Endrin	ND	0.10	0.016	1		Aroclor-1242	ND	1.0	0.10	1	
Endrin Aldehyde	ND	0.10	0.0092	1		Aroclor-1248	ND	1.0	0.10	1	
2,4'-DDD	ND	0.10	0.053	1		Aroclor-1254	ND	1.0	0.10	1	
2,4'-DDE	ND	0.10	0.044	1		Aroclor-1260	ND	1.0	0.25	1	
2,4'-DDT	ND	0.10	0.041	1		Aroclor-1262	ND	1.0	0.10	1	
4,4'-DDD	ND	0.10	0.024	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	90	50-135		2,4,5,6-Tetrachloro-m-Xylene	89	50-135	

Method Blank	**099-07-031-7**	**N/A**	**Aqueous**	**06/16/06**	**06/19/06**	**060616L07**

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Alpha-BHC	ND	0.10	0.025	1		Endosulfan II	ND	0.10	0.022	1	
Gamma-BHC	ND	0.10	0.026	1		4,4'-DDT	ND	0.10	0.017	1	
Beta-BHC	ND	0.10	0.018	1		Endosulfan Sulfate	ND	0.10	0.015	1	
Heptachlor	ND	0.10	0.0096	1		Methoxychlor	ND	0.10	0.028	1	
Delta-BHC	ND	0.10	0.032	1		Chlordane	ND	1.0	0.17	1	
Aldrin	ND	0.10	0.021	1		Toxaphene	ND	2.0	0.61	1	
Heptachlor Epoxide	ND	0.10	0.017	1		Endrin Ketone	ND	0.10	0.011	1	
Endosulfan I	ND	0.10	0.010	1		Aroclor-1016	ND	1.0	0.15	1	
Dieldrin	ND	0.10	0.024	1		Aroclor-1221	ND	1.0	0.10	1	
4,4'-DDE	ND	0.10	0.023	1		Aroclor-1232	ND	1.0	0.10	1	
Endrin	ND	0.10	0.016	1		Aroclor-1242	ND	1.0	0.10	1	
Endrin Aldehyde	ND	0.10	0.0092	1		Aroclor-1248	ND	1.0	0.10	1	
4,4'-DDD	ND	0.10	0.024	1		Aroclor-1254	ND	1.0	0.10	1	
2,4'-DDD	ND	0.10	0.053	1		Aroclor-1260	ND	1.0	0.25	1	
2,4'-DDE	ND	0.10	0.044	1		Aroclor-1262	ND	1.0	0.10	1	
2,4'-DDT	ND	0.10	0.041	1							

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	66	50-135		2,4,5,6-Tetrachloro-m-Xylene	83	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received: 06/02/06
Work Order No: 06-06-0145

Project: Archived Sample Transfer

Client Sample Number	Lab Sample Number	Date Collected	Matrix
PE3	**06-06-0145-63**	**06/02/06**	**Solid**

Comment(s): (1) Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Density (1)	2.07	0.00010	1		g/mL	N/A	06/06/06	ASTM D-1475M

PE20	**06-06-0145-64**	**06/02/06**	**Solid**

Comment(s): (1) Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Density (1)	2.03	0.00010	1		g/mL	N/A	06/06/06	ASTM D-1475M

PE27	**06-06-0145-65**	**06/02/06**	**Solid**

Comment(s): (1) Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Density (1)	1.96	0.00010	1		g/mL	N/A	06/06/06	ASTM D-1475M

PE40	**06-06-0145-66**	**06/02/06**	**Solid**

Comment(s): (1) Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Density (1)	1.60	0.00010	1		g/mL	N/A	06/06/06	ASTM D-1475M

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received: N/A
Work Order No: 06-06-0145

Project: Archived Sample Transfer

Matrix: Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Density	ASTM D-1475M	PE40	06/06/06	1.60	1.60	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received:	06/12/06
Work Order No:	06-06-0747
Preparation:	EPA 3005A Filt.
Method:	EPA 6010B

Project POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PE3	**Aqueous**	**ICP 3300**	**06/13/06**	**06/14/06**	**060613S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	108	110	72-132	1	0-10	
Arsenic	103	104	80-140	1	0-11	
Barium	91	93	87-123	2	0-6	
Beryllium	95	97	89-119	2	0-8	
Cadmium	89	90	82-124	1	0-7	
Chromium	97	98	86-122	2	0-8	
Cobalt	96	98	83-125	2	0-7	
Copper	120	123	78-126	2	0-7	
Lead	91	92	84-120	2	0-7	
Molybdenum	95	97	78-126	2	0-7	
Nickel	97	98	84-120	2	0-7	
Selenium	102	104	79-127	3	0-9	
Silver	123	126	86-128	2	0-7	
Thallium	79	80	79-121	2	0-8	
Vanadium	96	97	88-118	2	0-7	
Zinc	107	109	89-131	2	0-8	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received:	06/12/06
Work Order No:	06-06-0747
Preparation:	EPA 3510C
Method:	DHS LUFT

Project POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PE20	**Aqueous**	**GC 23**	**06/14/06**	**06/15/06**	**060614S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	84	87	55-133	3	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received:	06/12/06
Work Order No:	06-06-0747
Preparation:	EPA 7470A Filt.
Method:	EPA 7470A

Project POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PE3	**Aqueous**	**Mercury**	**06/13/06**	**06/14/06**	**060613S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	79	79	71-134	1	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received:	06/12/06
Work Order No:	06-06-0747
Preparation:	EPA 3510B
Method:	EPA 8310

Project POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PE3	**Aqueous**	**HPLC 5**	**06/14/06**	**06/16/06**	**060614S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzo (b) Fluoranthene	89	96	40-160	8	0-20	
Benzo (k) Fluoranthene	92	100	40-160	8	0-20	
Benzo (a) Pyrene	88	92	40-160	4	0-20	
Dibenz (a,h) Anthracene	87	95	40-160	8	0-20	
Benzo (g,h,i) Perylene	91	98	40-160	8	0-20	
Indeno (1,2,3-c,d) Pyrene	91	98	40-160	8	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Pacific Edge Engineering
26691 Plaza, Suite 270
Mission Viego CA 92691, CA 92691-6307

Date Received:	06/12/06
Work Order No:	06-06-0747
Preparation:	EPA 3510B
Method:	EPA 8081A/8082

Project POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
PE40	**Aqueous**	**GC 16**	**06/16/06**	**06/19/06**	**060616S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	88	88	50-135	0	0-25	
Heptachlor	76	76	50-135	0	0-25	
Endosulfan I	74	75	50-135	1	0-25	
Dieldrin	67	68	50-135	1	0-25	
Endrin	75	77	50-135	2	0-25	
4,4'-DDT	84	85	50-135	2	0-25	
Aroclor-1260	111	102	50-135	9	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Pacific Edge Engineering		Date Received:	N/A
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3005A Filt.
		Method:	EPA 6010B

Project: POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-6,194	**Aqueous**	**ICP 3300**	**06/14/06**	**060613-I-04**	**060613L04F**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Antimony	0.500	0.443	89	80-120	
Arsenic	0.500	0.457	91	80-120	
Barium	0.500	0.533	107	80-120	
Beryllium	0.500	0.527	105	80-120	
Cadmium	0.500	0.528	106	80-120	
Chromium	0.500	0.541	108	80-120	
Cobalt	0.500	0.565	113	80-120	
Copper	0.500	0.492	98	80-120	
Lead	0.500	0.538	108	80-120	
Molybdenum	0.500	0.527	105	80-120	
Nickel	0.500	0.566	113	80-120	
Selenium	0.500	0.488	98	80-120	
Silver	0.250	0.258	103	80-120	
Thallium	0.500	0.519	104	80-120	
Vanadium	0.500	0.509	102	80-120	
Zinc	0.500	0.529	106	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Pacific Edge Engineering		Date Received:	N/A
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510C
		Method:	DHS LUFT

Project: POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-039-1,472	**Aqueous**	**GC 23**	**06/14/06**	**06/15/06**	**060614B04**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	86	84	75-117	2	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Pacific Edge Engineering		Date Received:	N/A
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 7470A Filt.
		Method:	EPA 7470A

Project: POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-2,514	**Aqueous**	**Mercury**	**06/13/06**	**06/14/06**	**060613L04**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	91	91	90-122	0	0-14	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Pacific Edge Engineering		Date Received:	N/A
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8310

Project: POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-006-145	**Aqueous**	**HPLC 5**	**06/14/06**	**06/16/06**	**060614L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzo (b) Fluoranthene	98	101	40-160	3	0-20	
Benzo (k) Fluoranthene	102	105	40-160	2	0-20	
Benzo (a) Pyrene	91	95	40-160	4	0-20	
Dibenz (a,h) Anthracene	96	99	40-160	2	0-20	
Benzo (g,h,i) Perylene	100	102	40-160	2	0-20	
Indeno (1,2,3-c,d) Pyrene	100	103	40-160	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Pacific Edge Engineering		Date Received:	N/A
26691 Plaza, Suite 270		Work Order No:	06-06-0747
Mission Viego CA 92691, CA 92691-6307		Preparation:	EPA 3510B
		Method:	EPA 8081A/8082

Project: POLB Elutriate Testing

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-031-7	**Aqueous**	**GC 16**	**06/16/06**	**06/19/06**	**060616L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	77	81	50-135	6	0-25	
Heptachlor	71	73	50-135	3	0-25	
Endosulfan I	70	73	50-135	4	0-25	
Dieldrin	70	72	50-135	2	0-25	
Endrin	67	71	50-135	5	0-25	
4,4'-DDT	74	82	50-135	10	0-25	
Aroclor-1260	107	111	50-135	4	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 06-06-0747

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

0145

Total 62 samples

C.O.C

MOLKY

From: "Greg Dickinson" <grdickinson@pacificedge-eng.com>
To: "'MOLKY'" <molky@asllab.com>
Sent: Tuesday, May 30, 2006 10:30 AM
Subject: Archived Sample Transfer

Molky,

Please transfer the archived samples listed below to [redacted] (714) 895-5494, Attention: Robert Stearns.

1 PE3-17'-18'
2 PE3-18'-18'7"
3 PE3-20'6"-21'
13 4 PE3-21'-21'5"
5 PE3-21'5"-22'4"
6 PE3-24'-25'
7 PE3-25'-26'
8 PE3-26'-26'5"
9 PE3-28'-29'3"

10 PE20-17'-18'
11 PE20-18'-18'6"
12 PE20-20'6"-21'6" (You should have two samples with this sample ID, only transfer one sample)
13 PE20-21'6"-22'1"
14 PE20-24'-25'
15 PE20-25'-25'6"
16 PE20-25'6"-26'1"
17 PE20-28'-28'6"
18 PE20-28'6"-29'1"
14 19 PE20-32'-33'
20 PE20-33'-33'6"
21 PE20-33'6"-34'1"
22 PE20-36'-37'
23 PE20-37'-37'7"
24 PE20-40'6"-41'2"
25 PE20-41'2"-41'9"
26 PE20-44'-45'
27 PE20-45'-46'
28 PE20-48'-48'6"
29 PE20-48'-49'1"
30 PE20-52'-52'11"

31 PE27-17'-18'
32 PE27-18'-18'6"
33 PE27-20'6"-21'
34 PE27-21'-22'
35 PE27-22'-22'6"
5 36 PE27-24'-25'
37 PE27-25'-26'
38 PE27-26'-26'6"
39 PE27-28'-29'
40 PE27-29'-29'11"
41 PE27-32'-33'
42 PE27-33'-33'11"
43 PE27-36'-37'
44 PE27-37'-37'10"
45 PE27-40'6"-41'4"

C.O.C

0145

46 PE27-44'-44'6"
47 PE27-44'6"-45'2"
48 PE27-52'-52'11"
49 PE27-56'-56'8"
50 PE27-56'8"-57'4"
51 PE27-60'6"-61'6"
52 PE27-61'6"-62'2"

53 PE40-5'6"-6'6"
54 PE40-6'6"-7'2"
55 PE40-7'2"-7'10"
56 PE40-8'3"-9'
57 PE40-9'-10'
58 PE40-10'6"-11'1"
59 PE40-12'3"-13'
60 PE40-13'-14'
61 PE40-14'-14'11"
62 PE40-16'-17'

Thanks,

Greg Dickinson
Pacific Edge Engineering, Inc.
26691 Plaza, Ste 270
Mission Viejo, California 92691
949-470-1937
949-470-0943 (fax)
949-230-6079 (cell)

Relinquished June 2, 2006 @ 1320 hrs.
(A.S.L

Received June 2, 2006 @ 1320 hrs.
Bob Stearns, Calscience

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 06 - 0 6 - 0 1 4 5

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: Pacific Edge **DATE:** 6/2/06

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
2.8 °C IR thermometer.
_____ Ambient temperature.

Initial: NC

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ✓

Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓	✓	
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: NC

COMMENTS:

(-56) PE40-8'3"-9' not received.

No collection date/time were listed on COCs or sample's labels.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 5/26/06

Page 1 of 1

LABORATORY CLIENT: Pacific Edge Engineering
ADDRESS: 26691 Plaza #270
CITY: Mission Viejo, CA STATE: ZIP: 92691
TEL: 949 470 1937 E-MAIL:

CLIENT PROJECT NAME / NUMBER: Pier E Redevelopment
PROJECT CONTACT: Greg Dickinson
SAMPLER(S): (PRINT) Scott Miles
COELT LOG CODE
P.O. NO.:
LAB USE ONLY: 05-1036
COOLER RECEIPT TEMP = °C

TURNAROUND TIME:
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF)	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or	BTEX / MTBE (8260B) or	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	CAC, T22 METALS (6010B) / 747	PNAs (8310) or (8270C)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)	Seawater for elutriate				
	Not Applicable		5/26/06	10:50	SW	2														X				

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Scott Miles			
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
		1/40 Gus 5/26/06	

DISTRIBUTION: White with final report, Green and Yellow to Client.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 06 - 05 - 1656

Cooler 6 of 6

SAMPLE RECEIPT FORM

CLIENT: Pacific Edge DATE: 5.26.06

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
13.6 °C IR thermometer.
_____ Ambient temperature.

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS:

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date June 12, 2006

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LABORATORY CLIENT: Pacific Edge Engineering
ADDRESS: 26691 Plaza, Ste. 270
CITY: Mission Viejo STATE: CA ZIP: 92691-6307
TEL: 949-470-1937 E-MAIL:

CLIENT PROJECT NAME / NUMBER: POLB Elutriate Testing
PROJECT CONTACT: Greg Dickinson
SAMPLER(S): (SIGNATURE)
COELT LOG CODE
P.O. NO.:
LAB USE ONLY: 00-0747
COOLER RECEIPT TEMP = °C

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING FORMS ☐ COELT EDF ☐

SPECIAL INSTRUCTIONS:
Metals 2457
Samples are seawater. Metals, PNAs, TPH requires filtration (0.45) pest/pcb's require centrifugation.

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD POINT NAME (FOR COELT EDF) Elutriate	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or 50ug/L RL	BTEX / MTBE (8260B) or	OXYGENATES (8260B)	VOCs (8260B)	5035 ENCORE PREP	SVOCs (8270C)	PEST (8081A) (4779)	PCBs (8082) 6020	CAC, T22 METALS (6010B)/747	PNAs (8310) or (8270C) (4500)	VOCs (TO-14A) or (TO-15)	TPH(G) (TO-3M)
1	PE3	0145 - 63	6/12		Sea H2O	7		X						X	X	X	X		
2	PE20	- 64				6													
3	PE27	- 65				6													
4	PE40	- 66				6													
5	Seawater blank	- 67				4													

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		6/12/06	1430
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 6/12/06	Time: 1430

DISTRIBUTION: When with final report, Green to file, Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

02/20/06 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 06 - 06 - 0747

Cooler 0 of 0

SAMPLE RECEIPT FORM

CLIENT: Pacific Edge **DATE:** 6/12/06

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
_____ °C IR thermometer.
✓ Ambient temperature.

Initial: NC

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ✓

Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: NC

COMMENTS: