PORSF 11.3.234.1 v.15
(Pt.7). 8/19/2008

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

MUNICIPAL PRETREATMENT PROGRAM

INDUSTRIAL USER

COMPANY OFFICIAL SIGNATORY AUTHORIZATION

The undersigned person has been designated by Tosco / Chevron Remediation Site Portland, Oregon as the duly authorized representative with the assigned responsibility for environmental matters and compliance with the firm's City of Portland Waste Water Discharge Permit (#500.015)and the Code of the City of Portland.

This authorization is made pursuant to 40 CFR 403.12(l)(1-3).

DESIGNEE: _____
name

SITE MANAGER, RISK MANAGEMENT & REMEDIATION
position/title

RESPONSIBLE CORPORATE OFFICIAL: (SEE ATTACHED)
print name here

_____
signature here

40 CFR 403.12(l)(4)

If an authorization under paragraph (l)(3) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirement of paragraph (l)(3) of this section must be submitted to the Control Authority prior to or together with any reports to be signed by an authorized representative.

Document5

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DESIGNATION OF AUTHORITY

Undersigned is the duly elected Vice President of Phillips Petroleum Company. This instrument is to designate the authority of Martin Cramer to apply for and execute all applications, licenses, permits and documents necessary and incidental to discharging effluents from the Company's facility located at 5528 NW Doane Avenue, Portland, OR 97210 in to the municipal sanitary sewer system of the City of Portland, Oregon.

This designation appoints Martin Cramer as its agent and attorney in fact. Acts of the designee on behalf of the Company, limited by the foregoing, shall inure to the benefit of and shall be binding upon the Company.

October 11, 2002

Phillips Petroleum Company

David W. Holthe
Vice President

Attest: David Waldschmidt, Asst. Secretary attests that David W. Holthe is Vice President of Phillips Petroleum Company and that his signature affixed above is true and correct

David A. Waldschmidt

EXP 12-31-2004

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue
Suite 400
Portland, OR 97201-4987
(503) 229-5263 Voice
TTY (503) 229-5471

February 28, 2000

Tosco Corporation
Attn: Steve Gloeckner, Terminal Manager
PO Box 76
Portland OR 97207

Re: NPDES General Permit 1300-J
Site: Tosco Portland Terminal
File No. 90845
EPA OR No. OR000138-4
Multnomah County

The Department of Environmental Quality has received your application for National Pollutant Discharge Elimination System (NPDES) General Permit 1300-J along with appropriate fees and is enclosing the requested permit.

We urge you to carefully read the permit and to pay particular attention to the monitoring and reporting requirements outlined on page 8 through 10.

Please be advised that you will be billed an Annual Compliance Determination (ACD) each year as long as this permit is in effect.

Should you have any questions, please contact Elliot Zais at (503) 229-5292 or Annie Hill, Permits Coordinator at (503) 229-5438.

Sincerely,

Robert P. Baumgartner
Water Quality Manager
Northwest Region

amh
Enclosure
cc: File

DEQ-1

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204
Telephone: (503) 229-5279

Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

Issued 2/28/00 GEN13J MULTNOMAH/NWR
File No. 90845 ORO00138-4

Tosco Corporation
PO Box 76
Portland OR 97207
Site: Portland Terminal

SOURCES COVERED BY THIS PERMIT

Facilities storing, transferring, formulating and/or packaging bulk petroleum products or vegetable oils, and other facilities with oily storm water runoff and/or tank water bottoms. Facilities with discharges from oil/water separators that are also identified by 40 CFR §122.26 as needing an NPDES storm water permit may use this permit in place of the NPDES General Permit 1200 series of storm water permits if approved by the Department.

Michael T. Llewelyn, Administrator
Water Quality Division

1/11/00
Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a wastewater collection, treatment, control and/or disposal system, and discharge to public waters adequately treated wastewater only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

Page

Schedule A - Waste Discharge Limitations, Benchmarks, and Storm Water Pollution Control Plan 2-7
Schedule B - Minimum Monitoring and Reporting Requirements 8-10
Schedule C - Compliance Conditions and Schedules 11
Schedule D - Special Conditions 12-13
Schedule E - Not Applicable
Schedule F - General Conditions 14-20

Unless authorized by another NPDES or WPCF permit, all other direct and indirect discharges to waters of the state is prohibited, including discharge to an underground injection control system.

SCHEDULE A

1. **Deminimus Activities**
The following activities do not require a 1300-J permit. However, any violation of water quality standards, including causing an oily sheen at the point of discharge to public waters, is not allowed. Any activity found to be adversely affecting water quality will be required to register for a permit. Such an activity would then be subject to all terms and conditions of this permit. In addition, if the activity is located at a facility subject to federal NPDES storm water regulations, a storm water discharge permit may still be required.

Facilities where the only source(s) of discharge is(are) from:

a) Storm water runoff that contacts oil-filled electrical equipment in transformer substations which are equipped with oil spill prevention measures such as containment areas and/or oil/water separators.

b) Storm water runoff that contacts petroleum product receiving or dispensing areas or product dispensing equipment from which product is dispensed only to final users, whether or not the discharge is treated by an oil/water separator.*

c) Storm water that collects in a secondary containment area at a petroleum product dispensing site, where the secondary containment area is associated with storage tanks from which product is dispensed only to final users, and the discharge from the containment area is treated by an oil/water separator.*

d) Storm water that collects in a secondary containment area at a bulk petroleum product storage site, where the total storage capacity at the site does not exceed 150,000 gallons, and the discharge from the containment area is treated by an oil/water separator. A site with multiple containment areas is considered a single site for determining total storage capacity.

* *Conditions b and c apply only to retail or fleet fueling stations, including motor pools, where the* only fuel dispensing that occurs is to the final user of the fuel; it is not intended to cover bulk storage facilities or facilities where product is transferred to delivery vehicles.

2. **Discharges from the Oil /Water Separator Shall Not Exceed the Following Limitations:**

Parameter	Limitation	
	Monthly Average mg/l	Daily Maximum mg/l
Oil & Grease	10	15
Oil & Grease	No visible sheen at any time	

3. **Bulk Petroleum and Vegetable Oil Storage Requirements**

a) Where bulk petroleum or vegetable oil products are stored, a spill prevention and response contingency plan that describes methods to prevent spills along with clean-up procedures and notification procedures shall be in force at all times. The methods and procedures shall be made available to appropriate personnel. An adequate inventory of the required spill cleanup material and equipment must be on-site or readily available to areas where bulk petroleum or vegetable oil products are stored. A Spill Prevention Control and Countermeasure (SPCC) plan, if applicable, can be used to satisfy this requirement.

b) All areas where bulk petroleum or vegetable oil tanks are located shall be bermed or adequately controlled to prevent discharge of product to surface waters or groundwater in the event of a tank

rupture or overfill. If an area which will control a spill has a drain, the drain must also be controlled to prevent loss of the material. The drain control method must include at a minimum one of the following: a shut-off valve; an oil/water separator; a tank; a non-discharging basin; or an area that includes containment with no discharge. A SPCC plan that conforms to 40 CFR §112 can be used to satisfy this permit condition.

c) All collected oily waters in product containment areas must be drained through an oil/water separation device prior to discharge to public waters or storm sewers leading to public waters.

d) Floating matter and settled matter shall be cleaned frequently from the oil/water separation devices to assure their continuously efficient operation. The facility must have a procedure that describes maintenance criteria for determining when the solids are at a level that requires cleaning. All floating matter and grit or other settled matter removed from the oil/water separator or otherwise collected on site shall be disposed in a manner that complies with all applicable water quality, hazardous waste, and solid waste rules for disposal of such solids.

Conditions 4 through 6 are additional requirements for storm water discharges from facilities identified by 40 CFR §122.26 as needing a NPDES permit.

4. **Limitations, Benchmarks, and Controls for Storm Water Discharges**

a) Specific storm water discharge limitations apply to each source discharge of storm water that is not controlled by an oil/water separator. Point source discharges controlled by an oil/water separator must meet the limitations in Schedule A.2.

Parameter	Limitation
Oil & Grease	Shall not exceed 10 mg/l
PH	Shall be between 6.0 and 9.0
Oil & Grease	No visible sheen

b) Storm water discharge benchmarks are guideline concentrations not limitations. They are designed to assist the permittee in determining if the implementation of their Storm Water Pollution Control Plan (SWPCP) is reducing pollutant concentrations to below levels of concern.

Parameter	Benchmark
Total Copper	0.1 mg/l
Total Lead	0.4 mg/l
Total Zinc	0.6 mg/l
Total Suspended Solids	130 mg/l
Floating Solids (associated with industrial activities)	No visible discharge

c) If limitations or benchmarks are not achieved, the permittee shall review their SWPCP within 60 days of receiving sampling results. The purpose of this review is to determine if the SWPCP is being followed and to identify any additional technically and economically feasible site controls that need to be implemented to further improve the quality of storm water discharges. These site controls include best management practices, spill prevention and response procedures, preventative maintenance, and employee education procedures as described in Schedule A.6.b.

i. SWPCP Revision Any newly identified site controls shall be implemented in a timely manner and incorporated into the SWPCP as an update. A new SWPCP is not required.

If no additional site controls are identified, the permittee shall state as such in an update to the SWPCP.

ii. SWPCP Revision Submittal Results of this review shall be submitted to the Department in accordance with Schedule B.4.e and made available upon request to government agencies responsible for storm water management in the permittee's area.

iii. Background or Natural Conditions If the permittee demonstrates that background or natural conditions not associated with industrial activities at the site cause an exceedance of a benchmark, then no further modifications to the SWPCP are required for that parameter. The demonstration of natural or background conditions must be through monitoring of the same storm event used to evaluate benchmarks. If the permittee is eligible the monitoring reduction requirements are outlined in Schedule B.3.

5. **Preparation and Implementation of the Storm Water Pollution Control Plan**

a) The SWPCP shall be prepared and implemented according to the time frames set forth in Schedule C.

b) The SWPCP shall be signed in accordance with 40 CFR §122.22. Updates and revisions to the SWPCP shall also be signed in this manner. The SWPCP shall be signed as follows:
   i. For a Corporation - By a responsible corporate officer;
   ii. For a Partnership or Sole Proprietorship - By a general partner or the proprietor, respectively; or
   iii. For a Municipality, State, Federal, or other Public Facility - By either a principal executive officer or ranking elected official.

c) The SWPCP shall be kept current and updated as necessary to reflect any changes in facility operation.

d) The SWPCP and updates to the SWPCP shall be submitted to the Department in accordance with Schedule B.4.

e) A copy of the SWPCP shall be kept at the facility and made available upon request to government agencies responsible for storm water management in the permittee's area.

6. **Storm Water Pollution Control Plan Requirements**

a) **Site Description** The SWPCP shall contain the following information:

   i. A description of the industrial activities conducted at the site. Include a description of the significant materials (see Schedule D., Definitions) that are stored, used, treated and/or disposed of in a manner that allows exposure to storm water. Also describe the methods of storage, usage, treatment and/or disposal.

   ii. A general location map showing the location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features.

   iii. A site map including the following:
      (1) drainage patterns
      (2) drainage and discharge structures
      (3) outline of the drainage area for each storm water outfall

(4) paved areas and buildings within each drainage area
(5) areas used for outdoor manufacturing, treatment, storage, and/or disposal of significant materials
(6) existing structural control measures for reducing pollutants in storm water runoff
(7) material loading and access areas
(8) hazardous waste treatment, storage and disposal facilities
(9) location of wells including waste injection wells, seepage pits, drywells, etc.
(10) location of springs, wetlands and other surface water bodies.

iv. Estimates of the amount of impervious surface area (including paved areas and building roofs) relative to the total area drained by each storm water outfall.

v. For each area of the site where a reasonable potential exists for contributing pollutants to storm water runoff, identify the potential pollutants that could be present in storm water discharges.

vi. The name(s) of the receiving water(s) for storm water drainage. If drainage is to a municipal storm sewer system, the name(s) of the ultimate receiving waters and the name of the municipality.

vii. Identification of the discharge outfall(s) and the point(s) where storm water monitoring will occur as required by Schedule B. If multiple discharge outfalls exist but will not all be monitored (as allowed in Schedule B.2.b), a description supporting this approach shall also be included.

b) **Site Controls** The permittee shall maintain existing controls and/or develop new controls appropriate for the site. The purpose of these controls is to eliminate or minimize the exposure of pollutants to storm water. In developing a control strategy, the SWPCP shall have the following minimum components. A description of each component shall be included in the SWPCP.

i. *Storm Water Best Management Practices* If technically and economically feasible, the following best management practices shall be employed at the site. A schedule for implementation of these practices shall be included in the SWPCP if the practice has not already been accomplished. This schedule must be consistent with the requirements for developing and implementing the SWPCP in Schedule C of the permit.
(1) Containment - All hazardous materials (see Schedule D., Definitions) shall be stored within berms or other secondary containment devices to prevent leaks and spills from contaminating storm water. If the use of berms or secondary containment devices is not possible, then hazardous materials shall be stored in areas that do not drain to the storm sewer system.
(2) Oil and Grease - Oil/Water separators, booms, skimmers or other methods shall be employed to eliminate or minimize oil and grease contamination of storm water discharges.
(3) Waste Chemicals and Material Disposal - Wastes shall be recycled or properly disposed of in a manner to eliminate or minimize exposure of pollutants to storm water. All waste contained in bins or dumpsters where there is a potential for drainage of storm water through the waste shall be covered to prevent exposure of storm water to these pollutants. Acceptable covers include, but are not limited to, storage bins or dumpsters under roofed areas and use of lids or temporary covers such as tarps.
(4) Erosion and Sediment Control - Erosion control methods such as vegetating exposed

areas, graveling or paving shall be employed to minimize erosion of soil at the site. Sediment control methods such as detention facilities, sediment control fences, vegetated filter strips, bioswales, or grassy swales shall be employed to minimize sediment loads in storm water discharges. For activities that involve land disturbance, the permittee shall contact the local municipality to determine if there are other applicable requirements.

(5) Debris Control - Screens, booms, settling ponds, or other methods shall be employed to eliminate or minimize debris in storm water discharges.

(6) Storm Water Diversion - Storm water shall be diverted away from fueling, manufacturing, treatment, storage, and disposal areas to prevent exposure of uncontaminated storm water to potential pollutants.

(7) Covering Activities - Fueling, manufacturing, treatment, storage, and disposal areas shall be covered to prevent exposure of storm water to potential pollutants. Acceptable covers include, but are not limited to, permanent structures such as roofs or buildings and temporary covers such as tarps.

(8) Housekeeping - Areas that may contribute pollutants to storm water shall be kept clean. Sweeping, prompt clean up of spills and leaks, and proper maintenance of vehicles shall be employed to eliminate or minimize exposure of storm water to pollutants.

ii. *Spill Prevention and Response Procedures* Methods to prevent spills along with clean-up and notification procedures shall be included in the SWPCP. These methods and procedures shall be made available to appropriate personnel. The required clean up material shall be on-site or readily available. Spills prevention plans required by other regulations may be substituted for this provision providing that storm water management concerns are adequately addressed.

iii. *Preventative Maintenance* A preventative maintenance program shall be implemented to ensure the effective operation of all storm water best management practices. At a minimum the program shall include:

(1) Monthly inspections of areas where potential spills of significant materials or industrial activities could impact storm water runoff.

(2) Monthly inspections of storm water control measures, structures, catch basins, and treatment facilities.

(3) Cleaning, maintenance and/or repair of all materials handling and storage areas and all storm water control measures, structures, catch basins, and treatment facilities as needed upon discovery.

iv. *Employee Education* An employee orientation and education program shall be developed and maintained to inform personnel of the components and goals of the SWPCP. The education program shall also address spill response procedures and the necessity of good housekeeping practices. A schedule for employee education shall be included in the SWPCP.

c) **Record Keeping and Internal Reporting Procedures** The following information shall be recorded and maintained at the facility and provided to the Department and other government agencies upon request. This information does not need to be submitted as part of the SWPCP.

i. Inspection, maintenance, repair and education activities as required by the SWPCP.

ii. Spills or leaks of significant materials that impacted or had the potential to impact storm water or surface waters. Include the corrective actions to clean up the spill or leak as well as measures to prevent future problems of the same nature.

ADDITIONAL REQUIREMENTS APPLICABLE TO ALL SOURCES

7. Any facility which collects, treats and discharges wastewater or storm water to a municipally owned "storm sewer" may require a permit or other approval from the municipality. No discharge is allowed by this permit without appropriate documentation of prior approval.

8. *Oregon Administrative Rule 340-41-26(3)(a)(D), Surface Water Temperature Management Plan* Individual discharges are expected to meet the appropriate applicable temperature standard. Compliance with this permit meets the requirement of OAR 340-41-26(3)(a)(D) to develop and implement a surface water temperature management plan. If it is determined that discharges in a particular basin are impacting a Total Maximum Daily Load for temperature, then permittees in this basin will be required to implement additional management practices to reduce the temperature of the discharges. These practices include, but are not limited to, increased vegetation to provide for shading, underground conveyance systems or detention vaults, and filter treatment systems to reduce detention times.

9. *Specific River Basin Requirements* The permittee shall comply with any Oregon Administrative Rule requirements specific to the applicable river basin.

10. *Water Quality Standards* Discharges must comply with water quality standards in OAR 340-41. In instances where a discharge adversely impacts water quality, the Department will require the facility to implement additional management practices, apply for an individual permit, or take other appropriate action.

11. Notwithstanding the effluent limitations established by this permit, except as provided in OAR 340-45-080, no wastes shall be discharged and no activities shall be conducted which will violate water quality standards as adopted in OAR Chapter 340 Division 41 except in the following defined mixing zone:

    The allowable mixing zone shall not extend beyond 25 feet from the point of each discharge to public waters. For discharges to storm sewers, the allowable mixing zone shall not extend beyond 25 feet from the point where the storm sewer intersects public waters.

12. Waste Load Allocation - If storm water monitoring or any other wastewater monitoring at the site indicates that a pollutant, for which the stream is water quality limited, is discharging in significant quantities, the permit may be terminated and application for an individual permit or different general permit may be required that would include waste load allocations.

13. Additional Limitations or Monitoring Required - If storm water monitoring or any other wastewater monitoring indicates that certain pollutants are being discharged in quantities which may violate water quality standards or impair the beneficial uses of the receiving stream, the permit may be reopened and additional effluent limits and/or monitoring requirements added.

SCHEDULE B
MONITORING AND REPORTING REQUIREMENTS

1. **Minimum Monitoring Requirements**

Effluent Parameter	Minimum Frequency	Type of Sample
Oil and Grease	Twice/month* or weekly** when discharging	Grab
Oil/Water Separator	Daily	Visual observations***
Flow	Daily when discharging	Estimate
Oxygenated fuel additives****	Quarterly when discharging and on-site	Grab

* Facilities that only discharge storm water contaminated with oil and grease and/or fuel additives that are likely to be in the discharge where the discharge is treated with an oil/water separator. A monitoring reduction based on facility performance is allowed if the following conditions are met. If all twice/month monitoring results from October 1 to the end of February are in compliance then sampling once a month can commence. If any effluent violations occur the permittee shall revert back to twice/month monitoring until the conditions described above are again met. Sampling results reported under the previous permit or another general or individual permit for the most recent October 1999 through February 2000 period can be used to demonstrate compliance for the monitoring reduction.

** All other facilities covered by this permit that have discharges that may or may not be treated by an oil/water separator. A monitoring reduction based on facility performance is allowed if the following conditions are met. If all weekly monitoring results from October 1 to the end of February are in compliance then sampling once a month can commence. If any effluent violations occur the permittee shall revert back to weekly monitoring until the conditions described above are again met. Sampling results reported under the previous permit or another general or individual permit for the most recent October 1999 through February 2000 period can be used to demonstrate compliance for the monitoring reduction.

*** Daily observation should include observation of the runoff collection and treatment system, visual observation of discharge for any oil & grease sheen, as well as any discharge to public waters, where practicable.

****Oxygenated fuel additives means ethyl alcohol (ethanol) and/or Methyl-t-Butyl Ether (MTBE). Sampling for either or both of these compounds is required only during calendar quarters when either or both of these compounds is on-site in bulk quantities. Sampling need only be done for the specific oxygenated fuel additive(s) actually on-site in bulk quantities. Sampling for oxygenated fuel additives is not required if these compounds are on-site only in the form of a ready-to-use pre-blended fuel mixture.

Reporting Procedures

Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports shall be submitted to the Department by the 15th day of the following month.

The monitoring reports shall also include dates when the oil/water separator is cleaned, the amount of material removed (in gallons for liquids and cubic feet for solids), and the location where waste materials were disposed.

The following conditions are in addition to condition 1 above, and apply to facilities identified by 40 CFR §122.26.

2. **Additional Monitoring Parameters** - The permittee shall analyze grab samples and make visual observations of all point source discharges for the following parameters:

GRAB SAMPLES OF STORM WATER	
Parameter	Frequency
Total Copper	Twice per year
Total Lead	Twice per year
Total Zinc	Twice per year
pH	Twice per year
Total Suspended Solids	Twice per year

VISUAL MONITORING OF STORM WATER	
Parameter	Frequency
Floating Solids (associated with industrial activities)	Once a month when discharging
Oil & Grease Sheen	Daily when discharging

a) **Grab Samples** Grab samples that are representative of the discharge shall be taken at least 60 days apart. It is preferred, but not required, that one sample be collected in the fall and one in the spring. Compositing of samples from different drainage areas is not allowed.

b) **Multiple Point Source Discharges** The permittee may reduce the number of storm water monitoring points provided the outfalls have substantially identical effluents. Substantially identical effluents are discharges from drainage areas serving similar activities where the discharges are expected to be similar in composition. Outfalls serving areas with no exposure of storm water to industrial activities are not required to be monitored.

c) **Monitoring Location** All samples shall be taken at monitoring points specified in the SWPCP before the storm water joins or is diluted by any other wastestream, body of water or substance.

d) **No Exposure** If there is no exposure of storm water to material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery at the site, monitoring is not required. The permittee shall submit an annual statement certifying as such in lieu of monitoring (refer to Schedule B.4.b). If exposure cannot be prevented, the permittee shall comply with Schedule B.

3. **Monitoring Reduction**

a) **Visual Observations** No reduction is allowed.

b) **Grab Samples** The permittee is not required to conduct sampling if the benchmarks specified in Schedule A.4.b are met, or if the exceedance is due to natural or background conditions for at least

four consecutive storm water monitoring events over 24 continuous months.

i. Results from sampling events cannot be averaged to meet the benchmarks.
ii. Monitoring waivers may be allowed for individual parameters.
iii. Parameters in exceedance or not previously sampled shall be monitored as required in Schedule B.2 until the monitoring waiver condition above is met.
iv. Monitoring data from the previous permit period may be used to meet the waiver requirement. This data shall be evaluated against the benchmarks specified in this permit.
v. Monitoring data from the same storm event shall be used to demonstrate that background or natural conditions not associated with industrial activities at the site are contributing to the exceedance of a benchmark.
vi. The permittee shall submit written notification to the Department when exercising the monitoring waiver condition (refer to Schedule B.4.c).

c) **Reinstatement of Monitoring Requirements**

i. The permittee shall conduct monitoring as specified in Schedule B.2 if changes to site conditions are expected to impact storm water discharge characteristics.
ii. The Department may reinstate monitoring requirements as specified in Schedule B.2 if prior monitoring efforts were improper or results were incorrect.
iii. Monitoring may also be reinstated if future sampling efforts indicate benchmarks are being exceeded.

4. **Reporting Requirements** The permittee shall submit the following to the appropriate DEQ regional office:

a) **Monitoring Data** The permittee shall submit monitoring results by the 15th day of the following month when grab sampling and visual monitoring data are collected. If there was insufficient rainfall to collect samples, the permittee shall provide notification in the appropriate monthly report.

b) **No Exposure Certification** The permittee shall submit an annual certification by July 15 of each year if monitoring is not required due to no exposure of storm water to industrial activities. The certification shall state that site conditions have been evaluated and the facility meets the requirements of Schedule B.2.d.

c) **Monitoring Reduction Notification** The permittee shall submit written notification when exercising the monitoring reduction condition in Schedule B.3.b.

d) **SWPCP Update/Completion** The permittee shall prepare or update the SWPCP in accordance with Schedule C of the permit. The permittee shall submit an updated or completed SWPCP within 14 days after completion.

e) **SWPCP Revision** The permittee shall submit any revisions to the SWPCP required by Schedule A.4.c. within 14 days after the SWPCP is revised. If the Department does not comment on the revised SWPCP within 30 days, the permittee shall implement the revisions as proposed.

SCHEDULE C
COMPLIANCE CONDITIONS AND SCHEDULES

The following conditions apply to facilities identified by 40 CFR §122.26 that need a NPDES permit for storm water discharges.

1. **Existing Facilities**

   a) No later than 90 days after receiving this permit, the permittee shall complete/revise and begin implementation of their SWPCP to meet any new permit requirements.

   b) Except for site controls that require capital improvements (see Schedule D., Definitions), the SWPCP shall be implemented within 90 days after completion/revision of SWPCP. Site control activities that require capital improvements shall be completed in accordance with the schedule set forth in the SWPCP.

2. **New Facility**

   a) Prior to starting operations, a new facility shall prepare their SWPCP.

   b) Except for site controls that require capital improvements (see Schedule D.3, Definitions), the SWPCP shall be implemented within 90 days after beginning operation. Site control activities that require capital improvements shall be completed in accordance with the schedule set forth in the SWPCP.

3. **New Storm Water Discharges to Clackamas River, McKenzie River above Hayden Bridge (River Mile 15) or North Santiam River**

   Not later than 180 days after receiving this permit, new permittees discharging to Clackamas River, McKenzie River above Hayden Bridge (river mile 15) or North Santiam River shall submit to the Department a monitoring and water quality evaluation program. This program shall be effective in evaluating the in-stream impacts of the discharge as required by OAR 340-41-470. Within 30 days after Department approval, the permittee shall implement the monitoring and water quality evaluation program. New permittees are defined to include potential or existing dischargers that did not have a permit.

SCHEDULE D
SPECIAL CONDITIONS

1. **Releases in Excess of Reportable Quantities.** This permit does not relieve the permittee of the reporting requirements of 40 CFR §117 Determination of Reportable Quantities for Hazardous Substances and 40 CFR §302 Designation, Reportable Quantities, and Notification.

2. **Availability of SWPCP and Monitoring Data.** The Storm Water Pollution Control Plan and/or storm water monitoring data shall be made available to government agencies responsible for storm water management in the permittee's area.

3. **Definitions:**

   a) *Capital Improvements* means the following improvements that require capital expenditures:
      i. Treatment best management practices including but not limited to settling basins, oil/water separation equipment, catch basins, grassy swales, and detention/retention basins.
      ii. Manufacturing modifications that incur capital expenditures, including process changes for reduction of pollutants or wastes at the source.
      iii. Concrete pads, dikes and conveyance or pumping systems utilized for collection and transfer of storm water to treatment systems.
      iv. Roofs and appropriate covers for manufacturing areas.

   b) *Hazardous Materials* as defined in 40 CFR §302 Designation, Reportable Quantities, and Notification.

   c) *Material Handling Activities* include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.

   d) *Point Source* means a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, or conduit.

   e) *Significant Materials* includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with storm water discharges.

   f) *Product Dispensing Equipment* includes the pump, hose, nozzle, and meter assembly used to dispense product.

   g) *Product Dispensing Site* is a site where product is dispensed for final use; e.g., a vehicle fueling station.

   h) *Secondary Containment Area* means a containment area for a tank or tanks, intended to prevent a release to the environment in the event of an accidental release of product.

   i) *Storm Water* means storm water runoff, snow melt runoff, and surface runoff and drainage.

j) *Storm Water Discharge Associated with Industrial Activities [Edited version of 40 CFR §122.26(b)(14)]* means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR §122. For the categories of industries identified in 40 CFR §122.26(b)(14), the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters [as defined at 40 CFR §401]; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

For the categories of industries identified in 40 CFR §122.26, the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, state, or municipally owned or operated that meet the description of the facilities listed in 40 CFR §122.26) also include those facilities designated under the provisions of 40 CFR §122.26 (a)(1)(v).

SCHEDULE F
NPDES GENERAL CONDITIONS

SECTION A. STANDARD CONDITIONS

1. Duty to Comply
The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025 and is grounds for enforcement action; for permit termination, suspension, or modification; or for denial of a permit renewal application.

2. Penalties for Water Pollution and Permit Condition Violations
Oregon Law (ORS 468.140) allows the Director to impose civil penalties up to $10,000 per day for violation of a term, condition, or requirement of a permit.

Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to $25,000 or by imprisonment for not more than one year, or by both. Each day on which a violation occurs or continues is a separately punishable offense.

Under ORS 468.946, a person who knowingly discharges, places or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state, is subject to a Class B felony punishable by a fine not to exceed $200,000 and up to 10 years in prison.

3. Duty to Mitigate
The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of the Department, the permittee shall correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Duty to Reapply
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application shall be submitted at least 180 days before the expiration date of this permit.

The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions
This permit may be modified, suspended, revoked and reissued, or terminated for cause including, but not limited to, the following:
   a. Violation of any term, condition, or requirement of this permit, a rule, or a statute;
   b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts; or
   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the permittee for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants
The permittee shall comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit References
Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance
The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity
For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities
   a. Definitions
      (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not include nonuse of singular or multiple units or processes of a treatment works when the nonuse is insignificant to the quality and/or quantity of the effluent produced by the treatment works. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation.
      (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

   b. Prohibition of bypass.
      (1) Bypass is prohibited unless:
         (a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;
         (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
         (c) The permittee submitted notices and requests as required under General Condition B.3.c.
      (2) The Director may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Director determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

   c. Notice and request for bypass.
      (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, if possible at least ten days before the date of the bypass.
      (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset
   a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee.

An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
   (1) An upset occurred and that the permittee can identify the causes(s) of the upset;
   (2) The permitted facility was at the time being properly operated;
   (3) The permittee submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and
   (4) The permittee complied with any remedial measures required under General Condition A.3 hereof.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Event

For purposes of this permit, A Single Operational Event which leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation. A single operational event is an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational event does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational event is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

a. Definitions
   (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system including pump stations, through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
   (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system or pump station which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
   (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure, for example to overflowing manholes or overflowing into residences, commercial establishments, or industries that may be connected to a conveyance system.

b. Prohibition of overflows. Overflows are prohibited unless:
   (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
   (2) There were no feasible alternatives to the overflows, such as the use of auxiliary pumping or conveyance systems, or maximization of conveyance system storage; and
   (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.

c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.

d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the

permittee shall take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances
Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling
Sampling and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures
Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

4. Penalties of Tampering
The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than $20,000 per day of violation, or by imprisonment of not more than four years or both.

5. Reporting of Monitoring Results
Monitoring results shall be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports shall be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee
If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value shall be recorded unless otherwise specified in this permit.

7. Averaging of Measurements
Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean, except for bacteria which shall be averaged as specified in this permit.

8. Retention of Records
Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records of all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit,

and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

9. Records Contents
Records of monitoring information shall include:
a. The date, exact place, time and methods of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

10. Inspection and Entry
The permittee shall allow the Director, or an authorized representative upon the presentation of credentials to:
a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes
The permittee shall comply with Oregon Administrative Rules (OAR) 340, Division 52, "Review of Plans and Specifications". Except where exempted under OAR 340-52, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers shall be commenced until the plans and specifications are submitted to and approved by the Department. The permittee shall give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.

2. Anticipated Noncompliance
The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit shall be transferred to a third party without prior written approval from the Director. The permittee shall notify the Department when a transfer of property interest takes place.

4. Compliance Schedule
Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting
The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permittee becomes aware of the circumstances. During normal business hours, the Department's Regional office shall be called. Outside of normal business hours, the Department shall be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. If the permittee is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946,

and in which case if the original reporting notice was oral, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days. The written submission shall contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected;
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
e. Public notification steps taken, pursuant to General Condition B.7.

The following shall be included as information which must be reported within 24 hours under this paragraph:

a. Any unanticipated bypass which exceeds any effluent limitation in this permit.
b. Any upset which exceeds any effluent limitation in this permit.
c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Director in this permit.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports shall contain:

a. A description of the noncompliance and its cause;
b. The period of noncompliance, including exact dates and times;
c. The estimated time noncompliance is expected to continue if it has not been corrected; and
d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified in accordance with 40 CFR 122.22.

9. Falsification of Reports

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed $100,000 per violation and up to 5 years in prison.

10. Changes to Indirect Dischargers - **[Applicable to Publicly Owned Treatment Works (POTW) only]**

The permittee must provide adequate notice to the Department of the following:

a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants and;
b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
c. For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

11. Changes to Discharges of Toxic Pollutant - **[Applicable to existing manufacturing, commercial, mining, and silvicultural dischargers only]**

The permittee must notify the Department as soon as they know or have reason to believe of the following:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:
   (1) One hundred micrograms per liter (100 µg/l);
   (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
   (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
   (4) The level established by the Department in accordance with 40 CFR 122.44(f).

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
   (1) Five hundred micrograms per liter (500 µg/l);
   (2) One milligram per liter (1 mg/l) for antimony;
   (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
   (4) The level established by the Department in accordance with 40 CFR 122.44(f).

SECTION E. DEFINITIONS

1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. mg/l means milligrams per liter.
4. kg means kilograms.
5. m^3/d means cubic meters per day.
6. MGD means million gallons per day.
7. Composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
8. FC means fecal coliform bacteria.
9. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-41.
10. CBOD means five-day carbonaceous biochemical oxygen demand.
11. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
12. Quarter means January through March, April through June, July through September, or October through December.
13. Month means calendar month.
14. Week means a calendar week of Sunday through Saturday.
15. Total residual chlorine means combined chlorine forms plus free residual chlorine.
16. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
17. POTW means a publicly owned treatment works.

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
Water Pollution Control Laboratory
6543 N. Burlington Avenue, Bldg. 217, Portland, Oregon 97203 • Sam Adams, Commissioner • Dean Marriott, Director

RECEIVED
MAY 16 2007
BY:

May 14th, 2007

Mr. Brian Pletcher
Tosco-Chevron Remediation Site
c/o Delta Environmental Consultants
7150 SW Hampton, Suite 220
Tigard, OR 97223

RE: Permit #500.015

Dear Mr. Pletcher, September?

The current industrial wastewater discharge permit #500.015 for the Tosco-Chevron Remediation Site expires ~~April~~ 15th 2007. If the discharge of industrial process wastewater to the City of Portland's (City) sanitary sewer will continue, the permit must be renewed. Please complete the enclosed permit application and return it to our office by no later than **August 15th 2007.**

Since this facility already has a discharge history with the City, it will not be necessary to complete all sections of the document. I've noted the pertinent parts of the application with blue tabs. If you have any questions, please call me at 823-5538.

I have enclosed a copy of the City's industrial wastewater permit application and a copy of City Code 17.34. Please complete the application and return it, to my attention, at the following address:

Bureau of Environmental Services
Industrial Source Control Division
6543 N. Burlington Ave.
Portland, OR 97203-5452

Upon expiration, the conditions of existing permit #500.015 will be extended until the new permit is issued. Continue to submit the required self-monitoring reports pending receipt of the new permit. Again, if you have any questions, or if you need additional self-monitoring forms, please call me at (503) 823-5538. Thank you.

Respectfully,

Eric De Berry
Permit Manager
enc.: Permit Application
City Code 17.34

COPPOR00006559

City of Portland
Environmental Services
Water Pollution Control
Laboratory

6543 N. Burlington Avenue, Portland, Oregon 97203-5452
(503) 823-5600 FAX: (503) 823-5559

Permit Application

INDUSTRIAL SOURCE CONTROL DIVISION

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

INDUSTRIAL WASTEWATER DISCHARGE PERMIT APPLICATION

In Accordance with the Federal Clean Water Act and ORS 468B, the City of Portland operates a mandated program for the regulation of discharges of industrial wastewater to the City's sewer collection system. This program is implemented through a National Pollutant Discharge Elimination System (NPDES) permit and the City Code Chapter 17.34.

The Bureau of Environmental Services, through its Industrial Source Control Division, is responsible for the protection of the sewer collection system and public health and safety. The Division administers wastewater discharge permits as outlined on the City Code Chapter 17.34. These permits describe the manner of discharge, applicable pollutant limitations, and other terms and conditions of wastewater discharges. By completing the *Industrial Wastewater Discharge Permit Application*, you are helping the City of Portland meet its requirements.

Confidential Information

As outlined in 40 CFR 403.14 (a)-(c) and ORS 192.430, any information submitted to the City under the Pretreatment Program requirements may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the City may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR part 2 (Public Information) and ORS 192.440(2).

Information and data provided to the City under these requirements which is effluent data shall be available to the public without restriction.

All other information which is submitted to the State or POTW shall be available to the public at least to the extent provided by 40 CFR 2.302 and ORS 192.440(2).

If, at any time, there is insufficient space to complete an answer, continue your response on a separate piece of paper. Indicate the section and question number next to your response.

INSTRUCTIONS: INDUSTRIAL WASTEWATER PERMIT APPLICATION
SECTION I: GENERAL FACILITY INFORMATION

1. Enter the name of the company, *i.e.*, the name of the company legally responsible for this facility.

2. Enter the name of the facility, such as the name used on letterhead and/or correspondence or advertising.

3. Enter the street address where the facility is located.

4. Enter the *mailing* address of the facility, if different from the facility street address above.

5. Enter the name, title, telephone number, and fax number of the person who is most familiar with the facts reported on this form and who can be contacted by City staff. Generally, this person is the facility's maintenance supervisor or engineer.

6. Enter the approximate month and year that operations began, or are proposed to begin, otherwise use best estimate.

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

INDUSTRIAL WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION I: GENERAL INFORMATION

Confidential Information - Indicate those sections of this application that you wish to remain confidential *as well as* your reasons for requiring confidentiality. Wastewater discharge characteristics can not be considered confidential.

1. _____
(Company Name)

2. _____
(Facility Name)

3. _____
(Facility Address, Street)

_____ _____ _____
(City) (State) (Zip Code)

4. _____
(Mailing Address, Street/PO. Box)

_____ _____ _____
(City) (State) (Zip Code)

5. Provide the name of the person to contact on information contained in this questionnaire:

_____ _____
(Name) (Phone)

_____ _____
(Title) (Fax)

6. Initial startup date of operations at this facility: _____

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7. Enter the name, title, telephone number, and fax number of the person who is responsible for responding or organizing a response to emergencies at this facility, and who can be contacted by City staff. These emergencies may include spills and chemical releases, fires, floods, or earthquakes.

8. Check the appropriate box and make the necessary changes or corrections to the enclosed document, if needed.

SECTION I: GENERAL FACILITY INFORMATION, Continued

7. Person to be contacted in case of an emergency at this facility:

Name	Phone
Title	Fax

8. Is all of the information previously submitted in your facility's *Environmental Survey Part II*, still current, up-to-date, and correct?

Yes [ ] No [ ]

{A copy of your facility's Environmental Survey Part II is included for your reference.}

If you checked No, make the needed changes to the enclosed Environmental Survey Part II, initial and date all changes and send in the corrected copy of the Survey with the completed Permit Application.

INSTRUCTIONS: INDUSTRIAL WASTEWATER PERMIT APPLICATION
SECTION II: FACILITY PROCESS FLOW INFORMATION

1. Provide the daily average flows discharged in gallons per day (gpd) for the last 12 months. For estimating sanitary flow, use 25 gallons per employee per day. Be as specific as possible. If the exact amount of water is not known for each item, then estimate the amount as best as possible and note how the estimation was determined.

2. Check the appropriate box and provide the necessary information.

SECTION II: FACILITY PROCESS FLOW INFORMATION

1. For your facility, provide the following flows for each of your processes or proposed processes (i.e., manufacturing process line or other processes that may generate process wastewater).

   Total Plant Flow in Gallons Per Day (gpd) discharged to the sanitary sewer collection system:

   Daily Average _____ Daily Maximum _____

   Individual Process Flows in Gallons Per Day (gpd)

Process Description	Average Flow, gpd	Maximum Flow, gpd	Type of discharge

2. Is an inspection or sampling manhole structure available on-site? Yes [ ] No [ ]

- If No, is one planned? Yes [ ] No [ ]
- If Yes, provide location below and include as part of the process flow schematic (see also Attachment B).
- Location description: _____

_____

_____

_____

_____

_____

_____

_____

3. Check the appropriate boxes and provide the required information.

4. Briefly describe any previous spills of raw materials, products, or process wastes that were or may have been discharged to the sewer collection system. Also list all corrective actions that were taken to clean-up the spills and procedures that were put in place to prevent a re-occurrence.

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment in use or included in future plans?

∘	Current:	Flow Metering	Yes [ ]	No [ ]	N/A [ ]
		Sampling Equipment	Yes [ ]	No [ ]	N/A [ ]
∘	Planned:	Flow Metering	Yes [ ]	No [ ]	N/A [ ]
		Sampling Equipment	Yes [ ]	No [ ]	N/A [ ]

If Yes, describe the equipment below and indicate the present or future location of this equipment on the process flow schematic in Attachment B:

4. Please describe below, or on a separate sheet of paper, any previous spills or slug discharges from the facility. Also list the clean-up actions taken as well as the remedial measures put in place to prevent a reoccurrence.

INTRODUCTION: INDUSTRIAL WASTEWATER PERMIT APPLICATION
SECTION III: FACILITY WASTEWATER INFORMATION

This section, in two parts, details the collection of the necessary quantitative wastewater information required to establish applicable pretreatment limits and monitoring requirements for each industrial user. Contact the Industrial Source Control Division if there are any questions on what limits apply, what parameters to sample, sampling requirements, and from where to take the samples. Samples should be taken of the final effluent prior to discharge to the City's sewer collection system. If there is more than one discharge of process wastewater to the City's sewer lines, photocopy this page and supply the analytical results for all process wastewater discharges.

Existing Facility: (report results in concentrations (mg/L) or mass (lbs))

Each Facility must complete Attachment A, Priority Pollutants list. This information will be used to help determine what may or may not be present in the facility's effluent.

Each facility will sample, have analyzed, and report on all pollutants as specified by the City. If mass limits apply, the facility must report results on a mass basis (concentration x regulated process flow). Attach all calculations.

Samples collected must be representative and taken during peak production. Samples must be collected each day for three consecutive days, and analyzed separately.

An existing facility can use existing historical data, on file with the City, to fulfill this requirement.

New Facility: (report results in concentrations (mg/L) or mass (lbs))

This includes a new business moving into an existing facility or a new business proposing to construct a new building. A new facility should be in compliance with applicable pretreatment standards upon commencement of discharge and is required to sample and submit the final compliance report within 30 days of commencement of discharge. Because no discharge of process wastewater has occurred, provide your best estimate of the discharge. This estimate shall be confirmed through monitoring of the facility's effluent.

Each Facility must complete Attachment A, Priority Pollutants list. This information will be used to help determine what may or may not be present in the facility's effluent.

SECTION III: FACILITY WASTEWATER INFORMATION

TABLE 1 APPLICABLE LIMITS: [1]

Parameter	Suggested Analysis Method 40 CFR 136	Local Limit	Sample Type, Grab or Composite	Required Sampling
Metals				
Arsenic	200.7	0.2 mg/L	Composite	
Cadmium	200.7	0.7 mg/L	Composite	
Chromium	200.7	5.0 mg/L	Composite	
Copper	200.7	3.7 mg/L	Composite	
Lead	200.7	0.7 mg/L	Composite	
Mercury	245.1	0.010 mg/L	Composite	
Molybdenum	200.7	1.4 mg/L	Composite	
Nickel	200.7	2.8 mg/L	Composite	
Selenium	200.7	0.6 mg/L	Composite	
Silver	200.7	0.4 mg/L	Composite	
Zinc	200.7	3.7 mg/L	Composite	
Non-Metals				
BOD_5	405.1		Composite	
Closed Cup Flash Point	ASTM D-93-80	>140 °F	Grab	
Cyanide	335.2	1.2 mg/L	Grab	
Non-polar Fats, Oil, & Grease	1664	110. mg/L	Grab	
pH	150.1	5.0-11.5 S.U.	Grab	
Total Toxic Organics	624 & 625	2.13 mg/L		
Total Suspended Solids	160.2		Composite	
Dissolved Sulfide	376.2	4 mg/L	Grab	
Individual Organic Compounds				
Acrylonitrile	603	1.0 mg/L	Grab	
Chlordane	625	0.03 mg/L	Composite	
Chlorobenzene	624	0.2 mg/L	Grab	
Chloroform	624	0.2 mg/L	Grab	
1,2 Dichloroethane	624	0.5 mg/L	Grab	
2,4-Dinitrotoluene	625	0.13 mg/L	Composite	
Nitrobenzene	625	2.0 mg/L	Composite	
Pentachlorophenol	625	0.04 mg/L	Composite	
Trichloroethylene	624	0.2 mg/L	Grab	

[1] This table lists the applicable Local Limits for all Permitted Industrial Users. Categorical Industrial Users may have additional limits that apply.

PART A. NON-CATEGORICAL INDUSTRIAL FACILITIES

1. Each Permitted Industrial User is required to perform self monitoring sampling and analyses to help document compliance with the pretreatment regulations. Provide the requested information even if all of the self monitoring analyses are performed by facility staff.

2. Provide the requested information. Most Commercial Laboratories participate in at least one performance evaluation or certification program to help insure and document that the data generated is valid and credible.

3. After comparing the process wastewater data to the discharge limits that are listed in Table 1, check the appropriate box and complete as requested. Describe any additional O & M or installation of pretreatment equipment required to meet the listed discharge limits and attach a proposed compliance schedule. Specify the major events. After approval by the city, a Compliance Order will be put in place. Failure to comply with the approved schedule will subject the facility to enforcement actions.

PART A. NON-CATEGORICAL INDUSTRIAL FACILITIES

1. Provide name and address of the commercial testing lab(s) who is (are) performing analyses:

_____
(Laboratory Name)

_____
(Street Address)

_____ _____ _____
(City) (State) (Zip Code)

_____ _____
(Phone) (Fax)

2. List the Certification Program(s) in which the laboratory participates:

_____

_____

3. Compliance Certification: Compare the sample results against the listed Local Limits (Table 1).

   a.) Is the facility meeting applicable pretreatment standards on a consistent basis?

   Yes [ ] No [ ] Don't Know [ ]

   If Don't Know, then compliance must be evaluated after the baseline monitoring is completed.

   If No, do you require:

   b.) Additional operation and maintenance (O&M) to achieve compliance? Yes [ ] No [ ]

   c.) New or additional pretreatment facilities to achieve compliance? Yes [ ] No [ ]

   If additional O&M or new or additional pretreatment equipment will be required for the facility to meet pretreatment standards on a consistent basis, attach a description of what is required and a proposed schedule for completion of the work.

   d.) I have provided a compliance schedule. Yes [ ] No [ ]

   Describe the compliance schedule of events on a separate sheet. Detail what the proposed work entails and the proposed due dates for each of the tasks involved. The proposed compliance schedule is subject to prior approval by the City.

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PART B. CATEGORICAL INDUSTRIAL FACILITIES

1. List each regulated process, its production rate (i.e. 1,000 lbs. of product per day), the process wastewater flow rate in gpd, the applicable SIC code, and the pretreatment category. If the exact flow rate is not known for each process, then estimate the amount as best as possible and note how the estimation was determined.

   Baseline Monitoring Report: As per 40 CFR 403.12, each Categorical Industrial User must submit a Baseline Monitoring Report (BMR). This one time submital should identify the nature and concentrations of all regulated pollutants that might be in th e facility's discharge. In the case of new facilities this report must be submitted 90 days prior to the start of discharge. Estimates may be used but these estimates shall be confirmed through final compliance monitoring of the facility's effluent. If the effluent samples were taken at one combined point, indicate alongside the regulated process line what process flows are co-mingled at the sampling point. Contact the City's Industrial Source Control Division for guidance on where to take samples and how many samples to take.

2. Each Permitted Industrial User is required to perform self-monitoring sampling and analyses to help document compliance with the pretreatment regulations. Provide the requested information even if all of the self monitoring analyses are performed by facility staff.

3. Provide the requested information. Most Commercial Laboratories participate in at least one performance evaluation or certification program to help insure and document that the data generated are valid and credible.

PART B. CATEGORICAL INDUSTRIAL FACILITIES

1. Summarize each regulated process: (report concentrations in mg/L or mass in lbs.).

Regulated Process Description	Production Rate	Process Flow	SIC Code	Pretreatment Category

Total plant flow: (In gallons per day, gpd) _____

2. Provide name and address of the commercial testing lab(s) who is (are) performing analyses:

_____
(Laboratory Name)

_____
(Street Address)

_____ _____ _____
(City) (State) (Zip Code)

_____ _____
(Phone) (Fax)

3. List the Certification Program(s) in which the laboratory participates:

_____

_____

_____

4. As discussed in question #1 of this subsection, a BMR includes sampling and analysis data of the facility's effluent. Daily maximum and average pollutant concentrations from each categorically regulated process must be reported. A report form is included as Attachment D. A minimum of four grab samples for pH, cyanide, phenols, oils & greases, sulfide, and volatile organics must be taken, if applicable to the facility's categorically regulated processes. For all other regulated pollutants, a 24 hour composite sample is required. All such samples must be representative of the facility's daily operations. After comparing the analysis data to the discharge limits listed in the appropriate subpart of 40 CFR and the Local Limits listed in Table 1, check the appropriate box and complete as requested. Describe any additional O & M or installation of pretreatment equipment required to meet the listed discharge limits and attach a proposed compliance schedule. Specify the major events, bench marks, needed to achieve compliance, as well as dates for completion of the events. After approval by the City, the compliance schedule will be in place. Failure to comply with the approved schedule will subject the facility to escalating enforcement actions.

5. Total Toxic Organics (TTOs): Facilities who use toxic organics, as listed by EPA in its published categorical pretreatment standards, are required to meet the TTO pretreatment standards. Each facility must initially sample its discharge for TTOs to determine if the facility's discharge is in compliance with applicable limits. After a facility is found to be in compliance with the applicable TTO discharge limits, the Industrial User may adopt either a certification statement or a solvent management plan in lieu of periodically sampling for TTOs, if these options are allowed under the facility's category. If you do not use toxic organics in your manufacturing process, you may not be required to sample for TTOs. Contact the City's Industrial Source Control Division for guidance.

   Check the appropriate boxes.

4. Compliance Certification: Compare the sample results against the listed Categorical Standards and those listed in the Local Limits (Table 1).

   a.) Is the facility meeting applicable pretreatment standards on a consistent basis?

   Yes [ ] No [ ] Don't Know [ ]

   If Don't Know, then compliance must be evaluated after the baseline monitoring is completed.

   If No, do you require:

   b.) Additional operation and maintenance (O&M) to achieve compliance?

   Yes [ ] No [ ]

   c.) New or additional pretreatment facilities to achieve compliance?

   Yes [ ] No [ ]

   If additional O&M or new or additional pretreatment will be required for the facility to meet pretreatment standards on a consistent basis, attach a description of what is required and a proposed schedule for completion of the work.

   d.) I have provided a compliance schedule.

   Yes [ ] No [ ]

   Describe the compliance schedule of events on a separate sheet. Detail what the proposed work entails and the proposed due dates for each of the tasks involved. The proposed compliance schedule is subject to prior approval by the City.

5. Total Toxic Organics (TTOs): Facilities covered by a TTO pretreatment standard must initially sample for the listed TTOs to help determine compliance. Contact the City's Industrial Source Control Division for a listing of the TTOs applicable to your industrial category. See also the table in Attachment A.

   a.) We presently use or plan to use toxic organics listed in the categorical pretreatment standards.

   Yes [ ] No [ ] If "Yes" then:

   b.) A solvent management plan has been developed and is attached.

   Yes [ ] No [ ]

   If "No," attach a proposed schedule to develop and implement a Solvent Management Plan with due dates for each of the tasks involved. The proposed schedule is subject to prior approval by the City.

   c.) I have provided a proposed schedule to develop and implement a Solvent Management Plan.

   Yes [ ] No [ ]

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INSTRUCTIONS: INDUSTRIAL WASTEWATER PERMIT APPLICATION
SECTION IV: SIGNATURES & CERTIFICATIONS

The Qualified Professional Certification pertains to the actual preparer of this form if different than the Responsible Corporate Official. Said person could be a consultant or professional engineer hired to gather and prepare the required information for this application.

This form shall be signed by a Responsible Corporate Official , as defined in 40 CFR 403.12(l). Said person may be either a general partner, a corporate officer, or by a duly authorized representative who has responsibility for the overall operation of the facility that discharges process wastewater to the City's sewer.

Photocopy the completed survey form for your records and return the original survey to:

Industrial Source Control Division
City of Portland Environmental Services
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

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SECTION IV: SIGNATURES & CERTIFICATIONS

Qualified Professional Certification:

I hereby certify under penalty of law that this information was obtained in accordance with the applicable procedures and requirements as specified in the General Pretreatment Regulations and amendments thereto and the City's sewer use ordinance. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print)	Title
Signature	Date

Authorized Representative Statement: {40 CFR 403.6(a)(2)(ii)}

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief is true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print)	Title
Signature	Date

SECTION IV: SIGNATURES & CERTIFICATIONS

Qualified Professional Certification:

I hereby certify under penalty of law that this information was obtained in accordance with the applicable procedures and requirements as specified in the General Pretreatment Regulations and amendments thereto and the City's sewer use ordinance. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Brian J. Pletcher	Senior Project Manager
Name (print)	Title
[signature]	8/8/07
Signature	Date

Authorized Representative Statement: {40 CFR 403.6(a)(2)(ii)}

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief is true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (print)	Title
Signature	Date

ATTACHMENT A PRIORITY POLLUTANTS

Priority Pollutant Information

1. Indicate by placing an "X" in the appropriate space by each listed chemical whether it is Suspected to be Absent, Known to be Absent, Suspected to be Present, or Known to be Present in your manufacturing or service activity, or generated as a byproduct.

No.	Pollutant of Concern	Known Absent	Suspected Absent	Suspected Present	Known Present	Annual Usage (lb./yr.)	Loss to Sewer (lb./yr.)
1.	asbestos (fibrous)						
2.	cyanide (total)						
3.	antimony (total)						
4.	arsenic (total)						
5.	beryllium (total)						
6.	cadmium (total)						
7.	chromium (total)						
8.	copper (total)						
9.	lead (total)						
10.	mercury (total)						
11.	nickel (total)						
12.	selenium (total)						
13.	silver (total)						
14.	thallium (total)						
15.	zinc (total)						
16.	acenaphthene						
17.	acenaphthylene						
18.	acrolein						
19	acrylonitrile						
20.	aldrin						
21.	anthracene						
22.	benzene						
23.	benzidine						
24	benzo(a)anthracene						
25.	benzo(a)pyrene						
26.	benzo(b)fluoranthene						
27.	benzo(g,h,i)perylene						
28	benzo(k)fluoranthene						
29.	a-BHC(alpha)						
30.	b-BHC(beta)						
31.	d-BHC(delta)						
32.	G-BHC*(gamma)						
33.	bis(2-chloroethyl)ether						
34.	bis(2-chloroethoxy)methane						
35.	bis(2-chloroisopropyl)ether						
36.	bis(chloromethyl)ether						
37.	bromodichloromethane						

38.	bis(2-ethythexyl)phthalate						
39.	bromoform						
40.	bromomethane						
41.	4-bromophenyl phenylether						
42.	butylbenzyl phthalate						
43.	carbon tetrachloride						
44.	chlordane						
45.	4-chloro-3-ethylphenol						
46.	chlorobenzene						
47.	chloroethane						
48.	2-chloroethylvinyl ether						
49.	chloroform						
50.	chloromethane						
51.	2-chloronaphthalene						
52.	2-chlorophenol						
53.	4-chlorophenylphenyl ether						
54.	chrysene						
55.	4,4'-DDE						
56.	4,4'- DDD						
57.	4,4'-DDT						
58.	dibenzo(a,h)anthracene						
59.	dibromochloromethane						
60.	1,2-dichlorobenzene						
61.	1,3-dichlorobenzene						
62.	1,4-dichlorobenzene						
63.	3,3-dichlorobenzidine						
64.	dichlorodifluoromethane						
65.	1,1-dichloroethane						
66.	1,2-dichloroethane						
67.	1,1-dichloroethene						
68.	trans-1,2-dichloroethene						
69.	1,4-dichlorophenol						
70.	1,2-dichloropropane						
71.	(cis&trans)1,3-dichloropropene						
72.	dieldrin						
73.	diethyl phthalate						
74.	2,4-dimethylphenol						
75.	dimethyl phthalate						
76.	di-n-butyl phthalate						
77.	di-n-ocytl phthalate						
78.	4,6-dinitro-2-methylphenol						
79.	1,4-dinitrophenol						
80.	1,4-dinitrotoluene						
81.	2,6-dinitrotoluene						
82.	1,2-diphenythydrazine						
83.	endosulfan t						
84.	endosulfan tt						
85.	endosulfan sulfate						
86.	endrin						

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87.	endrin aldehyde						
88.	ethylbenzene						
89.	fluoranthene						
90.	fluorene						
91.	heptachlor						
92.	heptachlor epoxide						
93.	hexachlorobenzene						
94.	hexachlorobutadiene						
95.	hexachlorocyclobentadiene						
96.	hexachloroethane						
97.	indeno (1,2,3-cd)pyrene						
98.	isophorone						
99.	methylene chloride						
100.	naphthalene						
101.	nitrobenzene						
102.	2-nitrophenol						
103.	4-nitrophenol						
104.	n-nitroso-dimethylamine						
105.	n-nitroso-dipropylamine						
106.	n-nitroso-diphenylamine						
107.	PCB-1016						
108.	PCB-1221						
109.	PCB-1232						
110.	PCB-1242						
111.	PCB-1248						
112.	PCB-1254						
113.	PCB-1260						
114.	pentachlorophenol						
115.	phenyl anthracene						
116.	phenol						
117.	pyrene						
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin						
119.	1,1,2,2-tetrachloroethane						
120.	tetrachloroethene						
121.	toluene						
122.	toxaphene						
123.	1,2,4-trichlorobenzene						
124.	1,1,1-trichloroethane						
125.	1,1,2-trichloroethane						
126.	trichloroethene						
127.	trichlorofluoromethane						
128.	2,4,6-trichlorophenol						
129.	vinyl chloride						

ATTACHMENT B PROCESS FLOW DIAGRAM

For each major activity in which wastewater is generated, draw a diagram of the flow of materials and water from start to completed activity, showing all unit processes generating wastewater. Number each unit process having wastewater discharges to the community sewer. Use these numbers when showing this unit process in the building layout in schematic. Use the space below or additional sheets of 8x11 paper. An example is provided on the other side of this sheet. Using this example as a guide, diagram the flow of materials and water from the start of each process to the completed product or activity. Show all unit processes generating wastewater. Indicate the process flow rates in gallons per day (gpd) with numbered steps keyed to building locations.

Instructions

PROCESS FLOW DIAGRAM

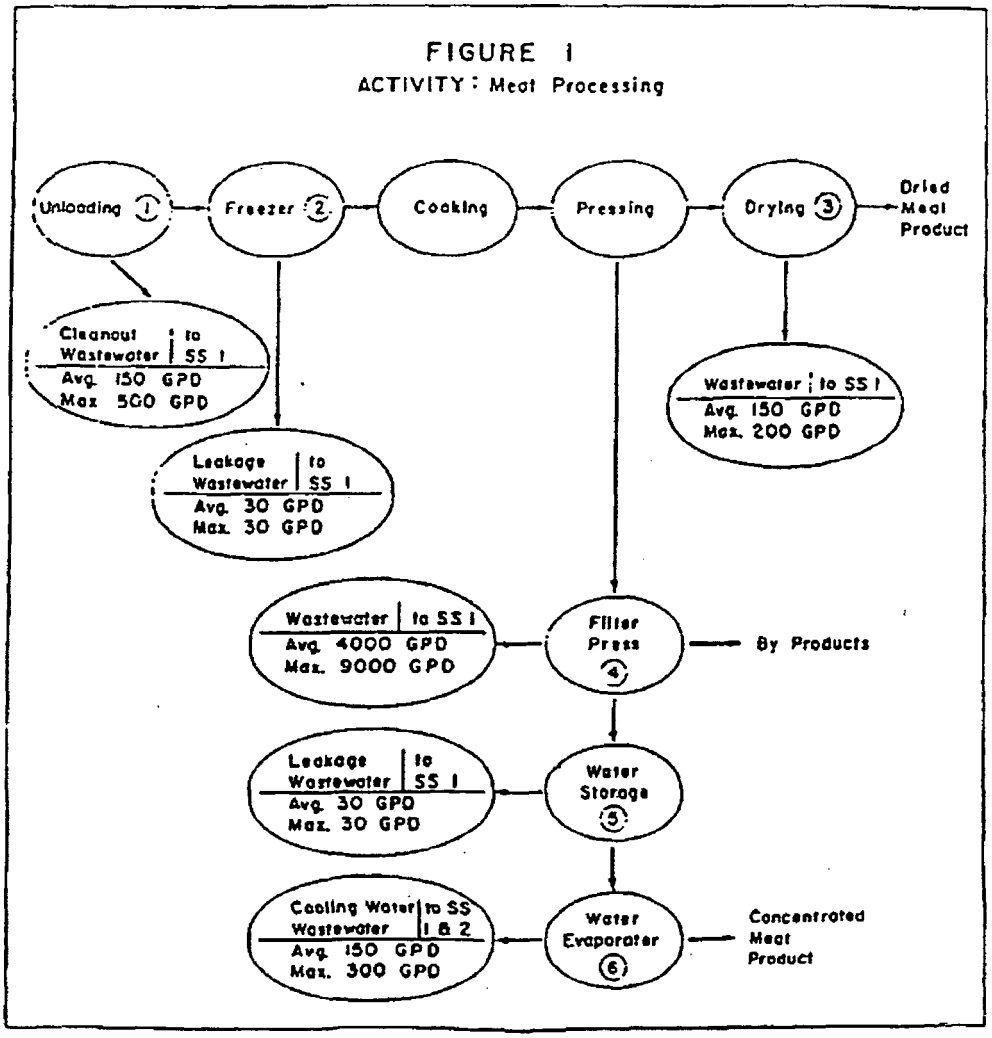
A Separate drawing should be completed for each major business activity.

A line drawing (schematic flow diagram) of each major business activity is to be completed either in the space below or drawn on separate sheet of paper (all sheets should be letter size). Number each process that generates wastewater using the same numbering system as in the building layout or plant site plan shown in the building layout schematic. An example of drawing required is shown below in Figure 1.

To determine your average daily volume and maximum daily volume of wastewater flow, you may have to read water meters, sewer meters, or make estimates of volumes that are not directly measurable.

FIGURE 1

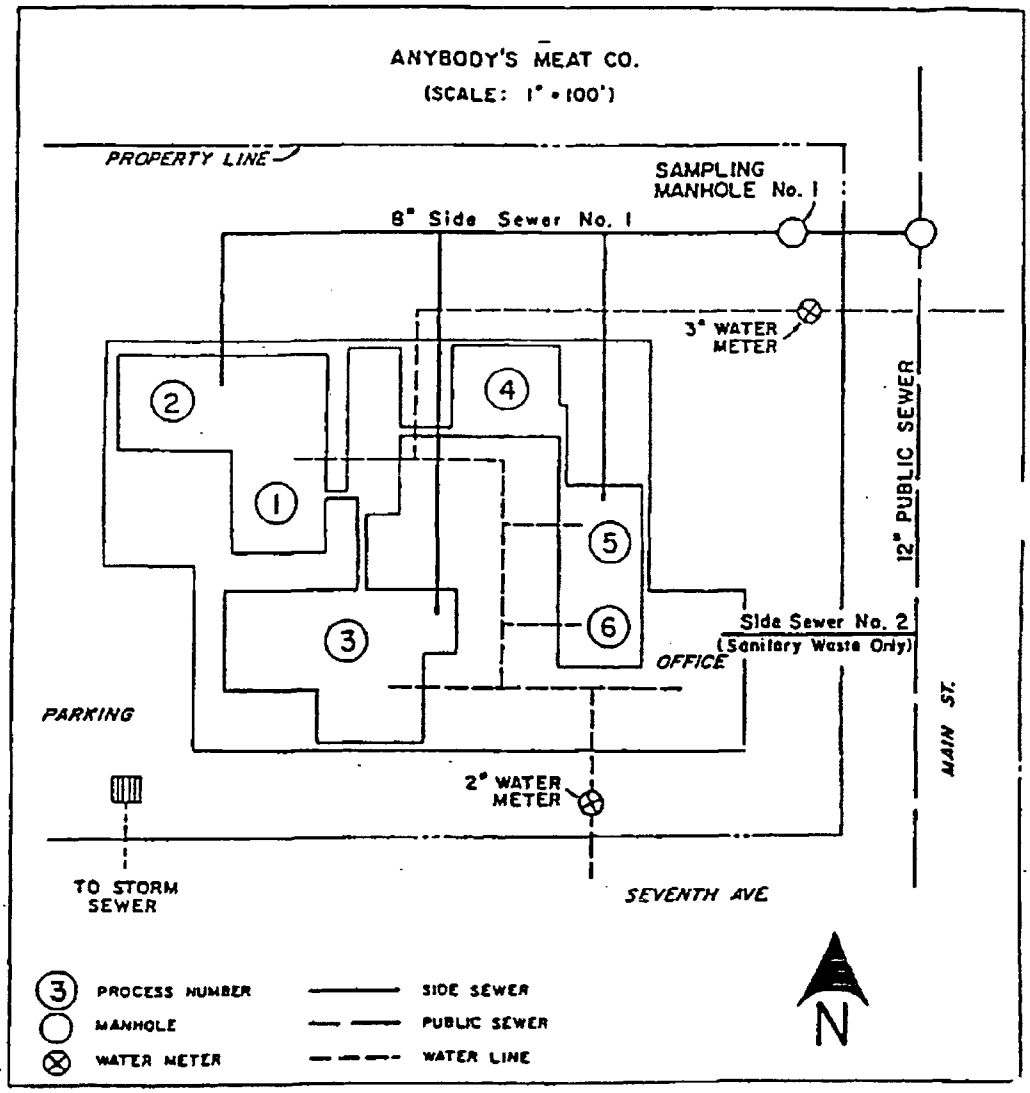
ACTIVITY : Meat Processing



ATTACHMENT C BUILDING LAYOUT

Draw the location of each building on the premises. Show location of all current or planned water meters, storm drains, numbered unit processes (from process schematic(s)), community sewers and each side sewer connected to the community sewers, automatic sampling equipment (current or planned), location of pretreatment processes, treated flows and untreated flows, name and location of pertinent streets. Use flow schematic to indicate process and process discharge in gpd. Number each side sewer and show possible sampling locations (sampling manhole).

An attached blueprint or drawing of the facilities showing the above items may be substituted for a drawing on this sheet. Use the example on the back side of this sheet as a guide.



ATTACHMENT D BASELINE MONITORING REPORT FORM

City of Portland
Industrial Wastewater Discharge
Baseline Monitoring Report

COMPANY NAME: _____ **PHONE NO.:** (503) _____
FACILITY ADDRESS: _____
PROCESS DESCRIPTION: _____
SAMPLING LOCATION: _____
SIC CODE(S): _____ **ESTIMATED FLOW (GPD):** _____

Analyze for all parameters indicated under *required sampling*. The sampling and analysis must be representative of normal work cycles and expected pollutant discharges.

Required Sampling	Pollutant	40 CFR 136 Method	Sample Type	Sample Date	Results (or estimates) mg/L or lbs.
	pH		Grab		
	Arsenic		Composite		
	Cadmium		Composite		
	Chromium		Composite		
	Copper		Composite		
	Lead		Composite		
	Mercury		Composite		
	Molybdenum		Composite		
	Nickel		Composite		
	Selenium		Composite		
	Silver		Composite		
	Zinc		Composite		
	Oil & Grease (total)	EPA 1664	Grab		
	Cyanide A		Grab		
	Cyanide T		Grab		
	Volatiles		Grab		
	Semi-volatiles		Grab		
	BEJX		Grab		
	Ammonia				
	BOD5				
	TSS				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: _____ **DATE:** _____

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
Water Pollution Control Laboratory
6543 N. Burlington Avenue, Bldg 217, Portland, Oregon 97203 • Sam Adams, Commissioner • Dean Marriott, Director

MUNICIPAL PRETREATMENT PROGRAM

INDUSTRIAL USER

COMPANY OFFICIAL SIGNATORY AUTHORIZATION

The undersigned person has been designated by Tosco-Chevron Remediation Portland, Oregon as the duly authorized representative with the assigned responsibility for environmental matters and compliance with the firm's City of Portland Waste Water Discharge Permit (#500.015) and the Code of the City of Portland.

This authorization is made pursuant to 40 CFR 403.12(l)(1-3).

DESIGNEE: ConocoPhillips
name

Area Mgr. R M & R
position/title

RESPONSIBLE CORPORATE OFFICIAL: Myron W. Smith
print name here

Myron W. Smith
signature here

40 CFR 403.12(l)(4)

If an authorization under paragraph (l)(3) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirement of paragraph (l)(3) of this section must be submitted to the Control Authority prior to or together with any reports to be signed by an authorized representative

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CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Avenue, Bldg. 217, Portland, Oregon 97203 • Sam Adams, Commissioner • Dean Marriott, Director

September 26, 2007

RECEIVED
OCT 0 1 2007
BY:

ConocoPhillips-Chevron Remediation Site
C/o Delta Consultants
7150 SW Hampton, Suite 220
Tigard, Oregon 97223

Attn: Brian Pletcher,

Dear Mr. Pletcher,

Enclosed, you will find the Industrial Wastewater Discharge Permit for the ConocoPhillips-Chevron Products Co. Groundwater site. Please fill out the enclosed Signatory Authorization form and return it to my attention at:

City of Portland Water Pollution Control Laboratory
6543 North Burlington Ave.
Portland, Oregon 97210

Please call me at (503) 823-5538, if you have any questions.

Sincerely,

Eric De Berry
Permit Manager
Industrial Source Control Division

UPLOADED INTO WEBEX
DATE: 8/14/07
BY: DEVON

FILE

August 14, 2007

Mr. Eric De Berry
City of Portland Bureau of Environmental Services
Industrial Source Control Division
6543 N. Burlington Avenue
Portland, Oregon 97203-5452

Subject: **Wastewater Discharge Permit #500.015**
Application for Renewal
ConcoPhillips Company / Chevron Products Company
Groundwater Remediation Site
5528 NW Doane Avenue
Portland, Oregon 97210
Delta Project No: ORZ0922PER

DELTA

Dear Mr. De Berry:

This letter is being submitted as an application to renew Wastewater Discharge Permit #500.015 for the above mentioned site (**Figure 1**) which expires on September 15, 2007. On behalf of ConocoPhillips Company (ConocoPhillips) and Chevron Products Company(Chevron), Delta Environmental Consultants, Inc. (Delta) has been authorized to perform operations and maintenance activities for the groundwater treatment system. The permit application forms are included as **Appendix A**.

Groundwater is currently extracted from three remediation wells (RW-1, RW-2, and RW-5) located behind the 60-inch storm sewer cutoff designed to intercept separate phase hydrocarbons (SPH) and groundwater migrating along the backfill of the 60-inch diameter storm sewer trench. This cutoff wall was installed in November and December 2001 with 20-foot-long steel sheet-pile with sealed joints between the sheet-piles. In addition, in Third Quarter 2006 an additional cutoff wall was installed in the area of the former 27-inch storm sewer and spanning both the ConocoPhillips and Chevron properties. Groundwater extraction was initiated from four extractions wells (EW-1 through EW-4) located behind these walls in January 2007. A site plan is included as **Figure 2**.

Extracted groundwater is routed to the remediation compound where it is passed through an oil water separator, into a batch tank, and treated through two 2,000-pound granular activated carbon (GAC) vessels before being discharged to the sanitary sewer. The SPH recovered from the oil-water separator is stored in a collection tank and currently transported from the site to Oil-Re-Refining in Portland, Oregon for recycling. A process flow diagram is included as **Figure 3**.

a member of: Inogen Environmental Alliance

7150 SW Hampton Suite 220 Tigard, Oregon 97223 USA
Phone 503.639.8098 / 800.477.7411 Fax 503.639.7619 www.deltaenv.com

In addition to the current remediation system configuration, Delta is currently evaluating technologies for pre-treating the wastewater for dissolved iron which is currently diminishing the life of the GAC vessels by hindering wastewater flow. One possible technology is to use ozone injection to precipitate dissolved iron which will then be removed by a media filter. Delta is requesting that this possible treatment configuration be allowed by the wastewater discharge permit.

Should you have any questions or concerns regarding the information provided in this request, please do not hesitate to contact me at (503) 639-8098.

Sincerely,

DELTA CONSULTANTS

Brian J. Pletcher, R.G.
Senior Project Manager

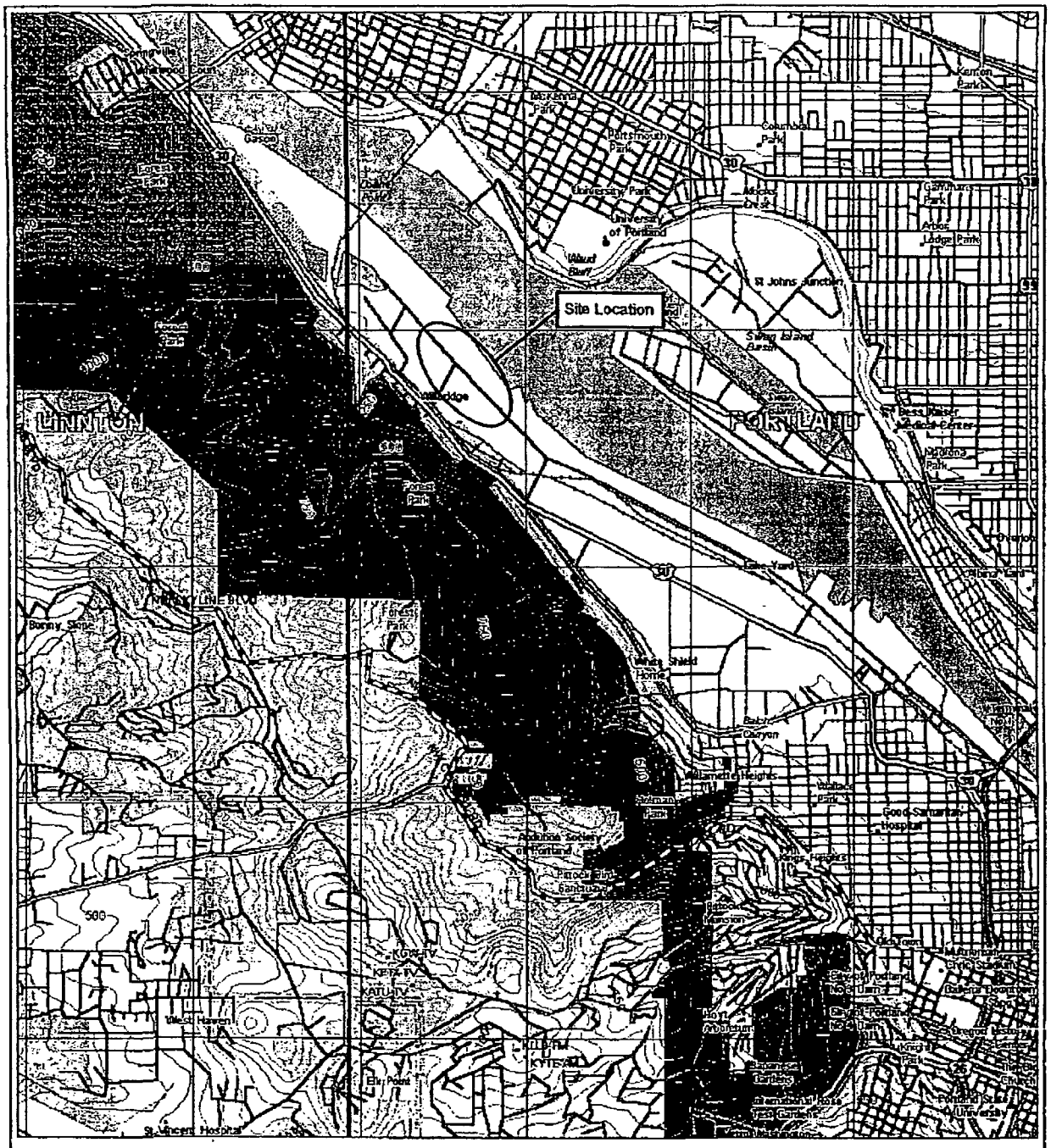
cc: Mike Noll, ConocoPhillips

Attachments:

Figure 1 – Site Location Map
Figure 2 – Site Plan with Remediation System Layout
Figure 3 – Site Plan with Wastewater Discharge Line
Figure 4 – Process Flow Diagram

Appendix A – Permit Application Forms

FIGURES



REFERENCES

USGS 7.5 Minute Topographic Maps
Portland, Oregon-Washington
Linnton, Oregon
DeLorme TopoQuads, 1999
SCALE: 1 inch = 3750 feet

North

FIGURE 1

SITE LOCATION MAP

Willbridge Petroleum Terminals
Portland, Oregon

PROJECT NO. ORZ0922GWI-6	DRAWN BY KNT 6-12-03
FILE NO.	PREPARED BY CRF 5/1/07
REVISION NO.	REVIEWED BY

DELTA

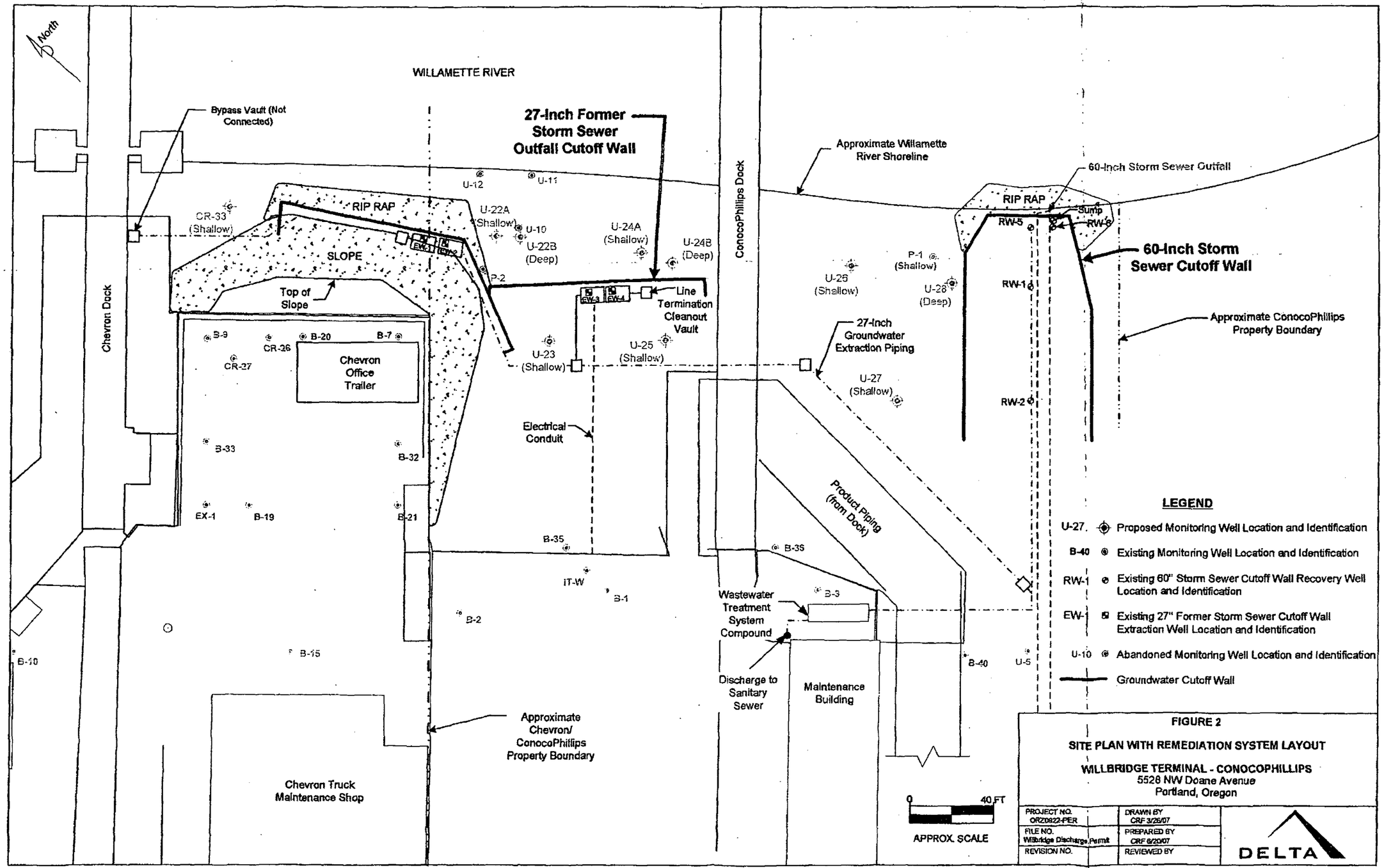


FIGURE 2

SITE PLAN WITH REMEDIATION SYSTEM LAYOUT

WILLBRIDGE TERMINAL - CONOCOPHILLIPS
5528 NW Doane Avenue
Portland, Oregon

PROJECT NO. ORZ0822-PER	DRAWN BY CRF 3/26/07
FILE NO. Willbridge Discharge.Permit	PREPARED BY CRF 6/20/07
REVISION NO.	REVIEWED BY

DELTA

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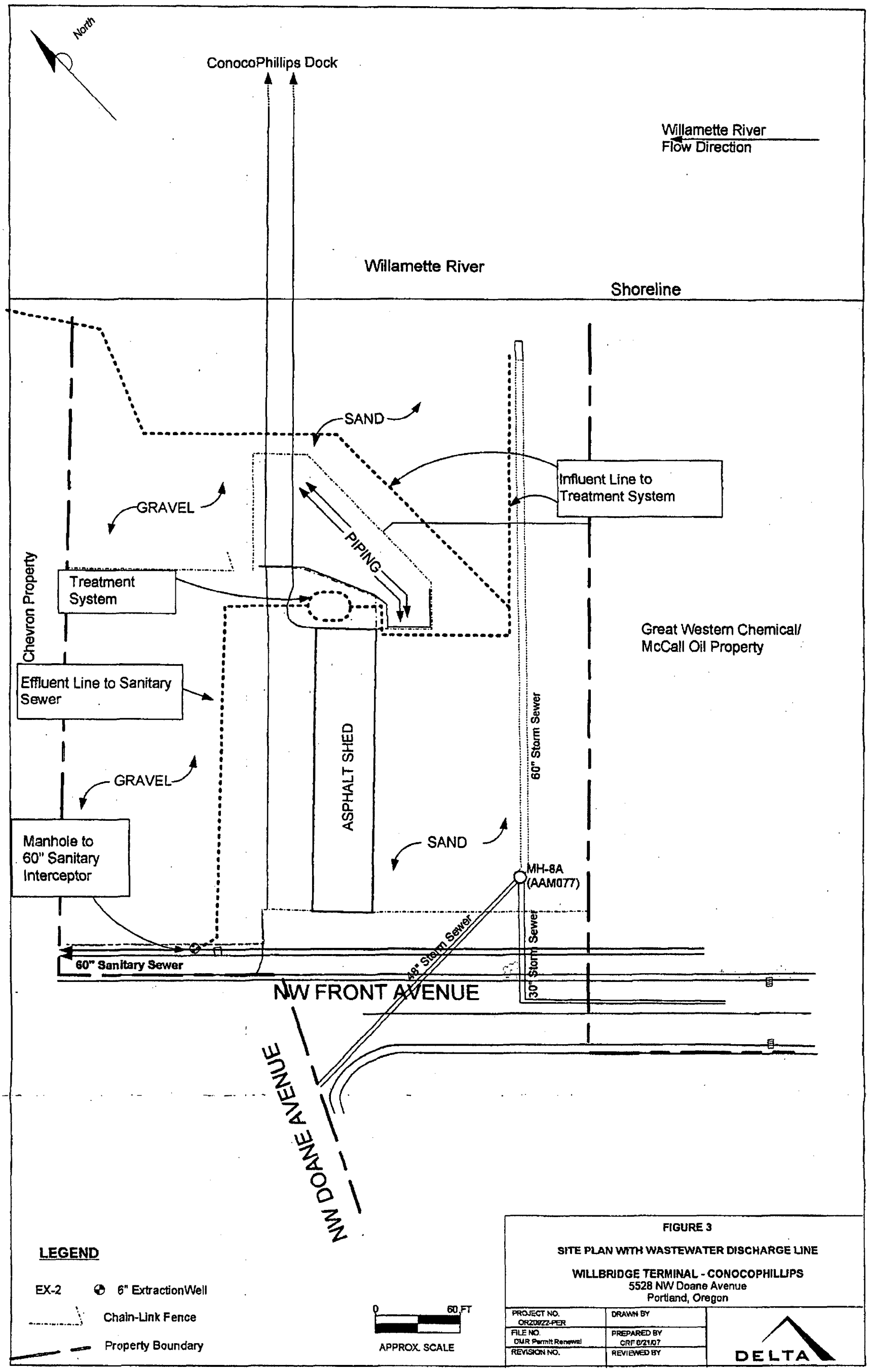


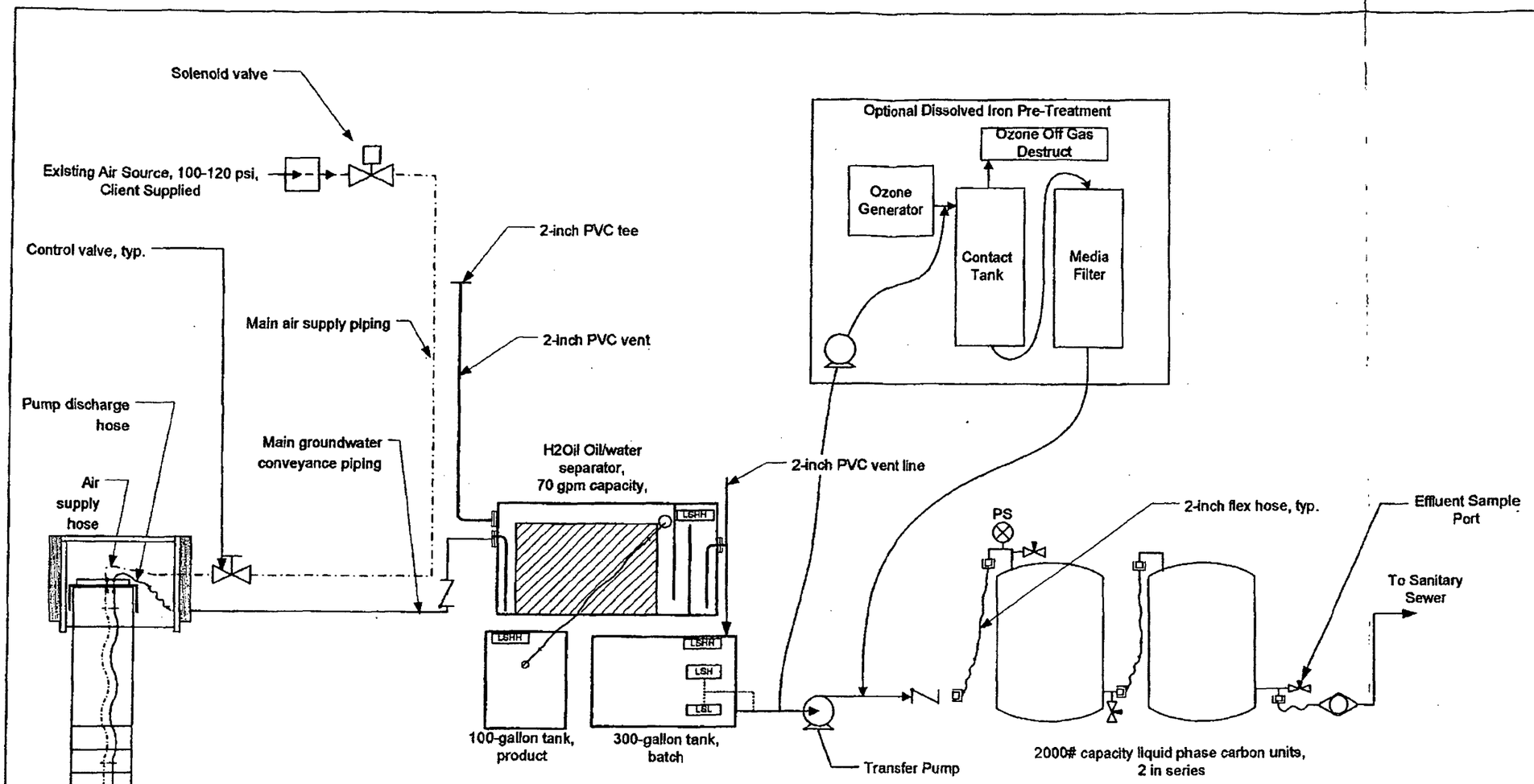
FIGURE 3

SITE PLAN WITH WASTEWATER DISCHARGE LINE

WILLBRIDGE TERMINAL - CONOCOPHILLIPS
5528 NW Doane Avenue
Portland, Oregon

PROJECT NO. ORZ09ZZ-PER	DRAWN BY
FILE NO. DMR Permit Renewal	PREPARED BY CRF 8/21/07
REVISION NO.	REVIEWED BY

DELTA



LEGEND

- Monitoring port
- Flowmeter/totalizer
- PS — Pressure switch
- LSHH — Level switch, high shut off
- LSH — Level switch, high
- LSL — Level switch, low
- Quick disconnect
- Check valve

FIGURE 4

PROCESS FLOW DIAGRAM

WILLBRIDGE TERMINAL - CONOCOPHILLIPS
5528 NW Doane Avenue
Portland, Oregon

PROJECT NO. ORZ0922-PER	DRAWN BY
FILE NO. DMR Permit Renewal	PREPARED BY CRF 6/21/07
REVISION NO.	REVIEWED BY

DELTA

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APPENDIX A
PERMIT APPLICATION FORMS

CITY OF PORTLAND ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

INDUSTRIAL WASTEWATER DISCHARGE PERMIT APPLICATION

SECTION I: GENERAL INFORMATION

Confidential Information - Indicate those sections of this application that you wish to remain confidential *as well as* your reasons for requiring confidentiality. Wastewater discharge characteristics can not be considered confidential.

1. ConocoPhillips Co. / Chevron Products Co.
(Company Name)

2. Groundwater Remediation Site
(Facility Name)

3. 5528 NW Doane Ave.
(Facility Address, Street)

Portland (City) OR (State) 97210 (Zip Code)

4. c/o Delta Environmental Consultants, Inc.
(Mailing Address, Street/PO. Box)

Tigard (City) OR (State) 97223 (Zip Code)

5. Provide the name of the person to contact on information contained in this questionnaire:

Brian Pletcher (Name) (503)639-8098 (Phone)

Project Manager (Title) (505)639-7619 (Fax)

6. Initial startup date of operations at this facility: December 2001

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7. Person to be contacted in case of an emergency at this facility:

#1 Brian Pletcher — Name

(503)784-0303 cell
(503)639-8098 — Phone

Project Manager - Delta Consultants — Title

(503)639-7619 — Fax

8. Is all of the information previously submitted in your facility's *Environmental Survey Part II*, still current, up-to-date, and correct?

Not Applicable (per Eric De Berry) for Remediation System

Yes [ ] No [ ]

{A copy of your facility's Environmental Survey Part II is included for your reference.}

If you checked No, make the needed changes to the enclosed Environmental Survey Part II, initial and date all changes and send in the corrected copy of the Survey with the completed Permit Application.

#2 contact Person

Steve Kober
North West Area Supervisor
ConocoPhillips

p 503-248-1538
cell 206-~~[illegible]~~730-5439
fax 503 248 - 1522

Rev. 9/14/98

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SECTION II: FACILITY PROCESS FLOW INFORMATION

1. For your facility, provide the following flows for each of your processes or proposed processes (i.e., manufacturing process line or other processes that may generate process wastewater).

Total Plant Flow in Gallons Per Day (gpd) discharged to the sanitary sewer collection system:

Daily Average 25,000 gpd Daily Maximum 86,000 gpd

Individual Process Flows in Gallons Per Day (gpd)

Process Description	Average Flow, gpd	Maximum Flow, gpd	Type of discharge
Groundwater Remediation	25,000	86,000	wastewater

2. Is an inspection or sampling manhole structure available on-site? Yes ⋈ No [ ]

- If No, is one planned? Yes [ ] No [ ]
- If Yes, provide location below and include as part of the process flow schematic (see also Attachment B).
- Location description: A sample port is available on the effluent line from the treatment system. In addition, a manhole exists on the discharge line prior to connecting to city sanitary sewer. SEE FIGURE 3 for location of discharge line.

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SECTION II: FACILITY PROCESS FLOW INFORMATION, Continued

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment in use or included in future plans?

•	Current:	Flow Metering	Yes ⋈	No [ ]	N/A [ ]
		Sampling Equipment	Yes [ ]	No ⋈	N/A [ ]
•	Planned:	Flow Metering	Yes [ ]	No [ ]	N/A ⋈
		Sampling Equipment	Yes [ ]	No ⋈	N/A [ ]

If Yes, describe the equipment below and indicate the present or future location of this equipment on the process flow schematic in Attachment B:

A flow totalizer exists on the effluent of the treatment system.

4. Please describe below, or on a separate sheet of paper, any previous spills or slug discharges from the facility. Also list the clean-up actions taken as well as the remedial measures put in place to prevent a reoccurrence.

None.

SECTION III: FACILITY WASTEWATER INFORMATION

TABLE 1 APPLICABLE LIMITS: [1]

Parameter	Suggested Analysis Method 40 CFR 136	Local Limit	Sample Type, Grab or Composite	Required Sampling
Metals				
Arsenic	200.7	0.2 mg/L	Composite	
Cadmium	200.7	0.7 mg/L	Composite	
Chromium	200.7	5.0 mg/L	Composite	
Copper	200.7	3.7 mg/L	Composite	
Lead	200.7	0.7 mg/L	Composite	
Mercury	245.1	0.010 mg/L	Composite	
Molybdenum	200.7	1.4 mg/L	Composite	
Nickel	200.7	2.8 mg/L	Composite	
Selenium	200.7	0.6 mg/L	Composite	
Silver	200.7	0.4 mg/L	Composite	
Zinc	200.7	3.7 mg/L	Composite	
Non-Metals				
BOD_5	405.1		Composite	
Closed Cup Flash Point	ASTM D-93-80	>140 °F	Grab	
Cyanide	335.2	1.2 mg/L	Grab	
Non-polar Fats, Oil, & Grease	1664	110. mg/L	Grab	
pH	150.1	5.0-11.5 S.U.	Grab	
Total Toxic Organics	624 & 625	2.13 mg/L		
Total Suspended Solids	160.2		Composite	
Dissolved Sulfide	376.2	4 mg/L	Grab	
Individual Organic Compounds				
Acrylonitrile	603	1.0 mg/L	Grab	
Chlordane	625	0.03 mg/L	Composite	
Chlorobenzene	624	0.2 mg/L	Grab	
Chloroform	624	0.2 mg/L	Grab	
1,2 Dichloroethane	624	0.5 mg/L	Grab	
2,4-Dinitrotoluene	625	0.13 mg/L	Composite	
Nitrobenzene	625	2.0 mg/L	Composite	
Pentachlorophenol	625	0.04 mg/L	Composite	
Trichloroethylene	624	0.2 mg/L	Grab	

[1] This table lists the applicable Local Limits for all Permitted Industrial Users. Categorical Industrial Users may have additional limits that apply.

SECTION III: FACILITY WASTEWATER INFORMATION

PART A. NON-CATEGORICAL INDUSTRIAL FACILITIES

1. Provide name and address of the commercial testing lab(s) who is (are) performing analyses:

Test America Analytical Testing Corporation
(Laboratory Name)

9405 S.W. Nimbus Avenue
(Street Address)

Beaverton (City) OR (State) 97008 (Zip Code)

(503) 906-9200 (Phone) (503) 906-9210 (Fax)

2. List the Certification Program(s) in which the laboratory participates:

ORELAP No. OR100021

3. Compliance Certification: Compare the sample results against the listed Local Limits (Table 1).

a.) Is the facility meeting applicable pretreatment standards on a consistent basis?

Yes [X] No [ ] Don't Know [ ]

If Don't Know, then compliance must be evaluated after the baseline monitoring is completed.

If No, do you require:

b.) Additional operation and maintenance (O&M) to achieve compliance? Yes [ ] No [ ]

c.) New or additional pretreatment facilities to achieve compliance? Yes [ ] No [ ]

If additional O&M or new or additional pretreatment equipment will be required for the facility to meet pretreatment standards on a consistent basis, attach a description of what is required and a proposed schedule for completion of the work.

d.) I have provided a compliance schedule. Yes [ ] No [ ]

Describe the compliance schedule of events on a separate sheet. Detail what the proposed work entails and the proposed due dates for each of the tasks involved. The proposed compliance schedule is subject to prior approval by the City.

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SECTION III: FACILITY WASTEWATER INFORMATION, Continued

PART B. CATEGORICAL INDUSTRIAL FACILITIES NA

1. Summarize each regulated process: (report concentrations in mg/L or mass in lbs.).

Regulated Process Description	Production Rate	Process Flow	SIC Code	Pretreatment Category

Total plant flow: (In gallons per day, gpd) _____

2. Provide name and address of the commercial testing lab(s) who is (are) performing analyses:

_____
(Laboratory Name)

_____
(Street Address)

_____ _____ _____
(City) (State) (Zip Code)

_____ _____
(Phone) (Fax)

3. List the Certification Program(s) in which the laboratory participates:

_____

_____

_____

4. Compliance Certification: Compare the sample results against the listed Categorical Standards and those listed in the Local Limits (Table 1).

   a.) Is the facility meeting applicable pretreatment standards on a consistent basis?

   Yes [ ] No [ ] Don't Know [ ]

   If Don't Know, then compliance must be evaluated after the baseline monitoring is completed.

   If No, do you require:

   b.) Additional operation and maintenance (O&M) to achieve compliance?

   Yes [ ] No [ ]

   c.) New or additional pretreatment facilities to achieve compliance?

   Yes [ ] No [ ]

   If additional O&M or new or additional pretreatment will be required for the facility to meet pretreatment standards on a consistent basis, attach a description of what is required and a proposed schedule for completion of the work.

   d.) I have provided a compliance schedule.

   Yes [ ] No [ ]

   Describe the compliance schedule of events on a separate sheet. Detail what the proposed work entails and the proposed due dates for each of the tasks involved. The proposed compliance schedule is subject to prior approval by the City.

5. Total Toxic Organics (TTOs): Facilities covered by a TTO pretreatment standard must initially sample for the listed TTOs to help determine compliance. Contact the City's Industrial Source Control Division for a listing of the TTOs applicable to your industrial category. See also the table in Attachment A.

   a.) We presently use or plan to use toxic organics listed in the categorical pretreatment standards.

   Yes [ ] No [ ] If "Yes" then:

   b.) A solvent management plan has been developed and is attached.

   Yes [ ] No [ ]

   If "No," attach a proposed schedule to develop and implement a Solvent Management Plan with due dates for each of the tasks involved. The proposed schedule is subject to prior approval by the City.

   c.) I have provided a proposed schedule to develop and implement a Solvent Management Plan.

   Yes [ ] No [ ]

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SECTION IV: SIGNATURES & CERTIFICATIONS

Qualified Professional Certification:

I hereby certify under penalty of law that this information was obtained in accordance with the applicable procedures and requirements as specified in the General Pretreatment Regulations and amendments thereto and the City's sewer use ordinance. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Brian Pletcher — Name (print)

Project Manager — Title

Signature

8/14/07 — Date

Authorized Representative Statement: {40 CFR 403.6(a)(2)(ii)}

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief is true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Wyron W. Smith — Name (print)

Area Mgr. RM&R — Title

Signature

8/13/07 — Date

Rev 9/14/98

08/14/2007 09:35 7122566501 SHS DMASH PAGE 03/03

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ATTACHMENT A PRIORITY POLLUTANTS

Priority Pollutant Information

1. Indicate by placing an "X" in the appropriate space by each listed chemical whether it is Suspected to be Absent, Known to be Absent, Suspected to be Present, or Known to be Present in your manufacturing or service activity, or generated as a byproduct.

No.	Pollutant of Concern	Known Absent	Suspected Absent	Suspected Present	Known Present	Annual Usage (lb./yr.)	Loss to Sewer (lb./yr.)
1.	asbestos (fibrous)		X				
2.	cyanide (total)		X				
3.	antimony (total)		X				
4.	arsenic (total)				X		
5.	beryllium (total)		X				
6.	cadmium (total)				X		
7.	chromium (total)				X		
8.	copper (total)				X		
9.	lead (total)				X		
10.	mercury (total)				X		
11.	nickel (total)		X				
12.	selenium (total)				X		
13.	silver (total)				X		
14.	thallium (total)		X				
15.	zinc (total)				X		
16.	acenaphthene				X		
17.	acenaphthylene				X		
18.	acrolein		X				
19	acrylonitrile		X				
20.	aldrin		X				
21.	anthracene				X		
22.	benzene				X		
23.	benzidine		X				
24	benzo(a)anthracene				X		
25.	benzo(a)pyrene				X		
26.	benzo(b)fluoranthene				X		
27.	benzo(g,h,i)perylene				X		
28	benzo(k)fluoranthene				X		
29.	a-BHC(alpha)		X				
30.	b-BHC(beta)		X				
31.	d-BHC(delta)		X				
32.	G-BHC*(gamma)		X				
33.	bis(2-chloroethyl)ether		X				
34.	bis(2-chloroethoxy)methane		X				
35.	bis(2-chloroisopropyl)ether		X				
36.	bis(chloromethyl)ether		X				
37.	bromodichloromethane		X				

38.	bis(2-ethythexyl)phthalate		X				
39.	bromoform		X				
40.	bromomethane		X				
41.	4-bromophenyl phenylether		X				
42.	butylbenzyl phthalate		X				
43.	carbon tetrachloride		X				
44.	chlordane		X				
45.	4-chloro-3-ethylphenol		X				
46.	chlorobenzene		X				
47.	chloroethane		X				
48.	2-chloroethylvinyl ether		X				
49.	chloroform		X				
50.	chloromethane		X				
51.	2-chloronaphthalene		X				
52.	2-chlorophenol		X				
53.	4-chlorophenylphenyl ether		X				
54.	chrysene				X		
55.	4,4'-DDE		X				
56.	4,4'- DDD		X				
57.	4,4'-DDT		X				
58.	dibenzo(a,h)anthracene				X		
59.	dibromochloromethane		X				
60.	1,2-dichlorobenzene		X				
61.	1,3-dichlorobenzene		X				
62.	1,4-dichlorobenzene		X				
63.	3,3-dichlorobenzidine		X				
64.	dichlorodifluoromethane		X				
65.	1,1-dichloroethane		X				
66.	1,2-dichloroethane		X				
67.	1,1-dichloroethene		X				
68.	trans-1,2-dichloroethene		X				
69.	1,4-dichlorophenol		X				
70.	1,2-dichloropropane		X				
71.	(cis&trans)1,3-dichloropropene		X				
72.	dieldrin		X				
73.	diethyl phthalate		X				
74.	2,4-dimethylphenol		X				
75.	dimethyl phthalate		X				
76.	di-n-butyl phthalate		X				
77.	di-n-ocytl phthalate		X				
78.	4,6-dinitro-2-methylphenol		X				
79.	1,4-dinitrophenol		X				
80.	1,4-dinitrotoluene		X				
81.	2,6-dinitrotoluene		X				
82.	1,2-diphenythydrazine		X				
83.	endosulfan t		X				
84.	endosulfan tt		X				
85.	endosulfan sulfate		X				
86.	endrin		X				

87.	endrin aldehyde		X				
88.	ethylbenzene				X		
89.	fluoranthene				X		
90.	fluorene				X		
91.	heptachlor		X				
92.	heptachlor epoxide		X				
93.	hexachlorobenzene		X				
94.	hexachlorobutadiene		X				
95.	hexachlorocyclobentadiene		X				
96.	hexachloroethane		X				
97.	indeno (1,2,3-cd)pyrene				X		
98.	isophorone		X				
99.	methylene chloride		X				
100.	naphthalene				X		
101.	nitrobenzene		X				
102.	2-nitrophenol		X				
103.	4-nitrophenol		X				
104.	n-nitroso-dimethylamine		X				
105.	n-nitroso-dipropylamine		X				
106.	n-nitroso-diphenylamine		X				
107.	PCB-1016		X				
108.	PCB-1221		X				
109.	PCB-1232		X				
110.	PCB-1242		X				
111.	PCB-1248		X				
112.	PCB-1254		X				
113.	PCB-1260		X				
114.	pentachlorophenol		X				
115.	phenyl anthracene				X		
116.	phenol		X				
117.	pyrene				X		
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin		X				
119.	1,1,2,2-tetrachloroethane		X				
120.	tetrachloroethene		X				
121.	toluene				X		
122.	toxaphene		X				
123.	1,2,4-trichlorobenzene		X				
124.	1,1,1-trichloroethane		X				
125.	1,1,2-trichloroethane		X				
126.	trichloroethene		X				
127.	trichlorofluoromethane		X				
128.	2,4,6-trichlorophenol		X				
129.	vinyl chloride		X				

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SEE FIGURE 4

ATTACHMENT B PROCESS FLOW DIAGRAM

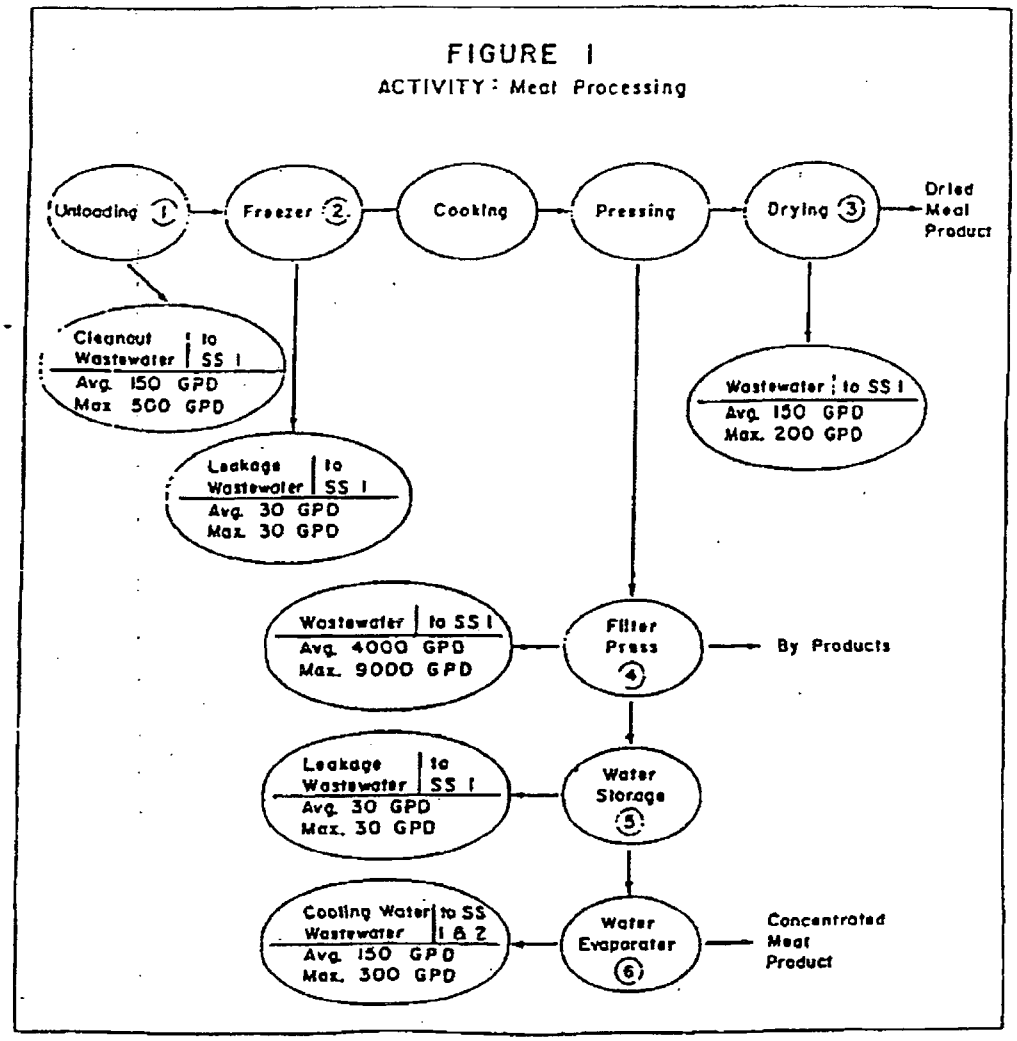
For each major activity in which wastewater is generated, draw a diagram of the flow of materials and water from start to completed activity, showing all unit processes generating wastewater. Number each unit process having wastewater discharges to the community sewer. Use these numbers when showing this unit process in the building layout in schematic. Use the space below or additional sheets of 8x11 paper. An example is provided on the other side of this sheet. Using this example as a guide, diagram the flow of materials and water from the start of each process to the completed product or activity. Show all unit processes generating wastewater. Indicate the process flow rates in gallons per day (gpd) with numbered steps keyed to building locations.

Instructions PROCESS FLOW DIAGRAM

A Separate drawing should be completed for each major business activity.

A line drawing (schematic flow diagram) of each major business activity is to be completed either in the space below or drawn on separate sheet of paper (all sheets should be letter size). Number each process that generates wastewater using the same numbering system as in the building layout or plant site plan shown in the building layout schematic. An example of drawing required is shown below in Figure 1.

To determine your average daily volume and maximum daily volume of wastewater flow, you may have to read water meters, sewer meters, or make estimates of volumes that are not directly measurable.

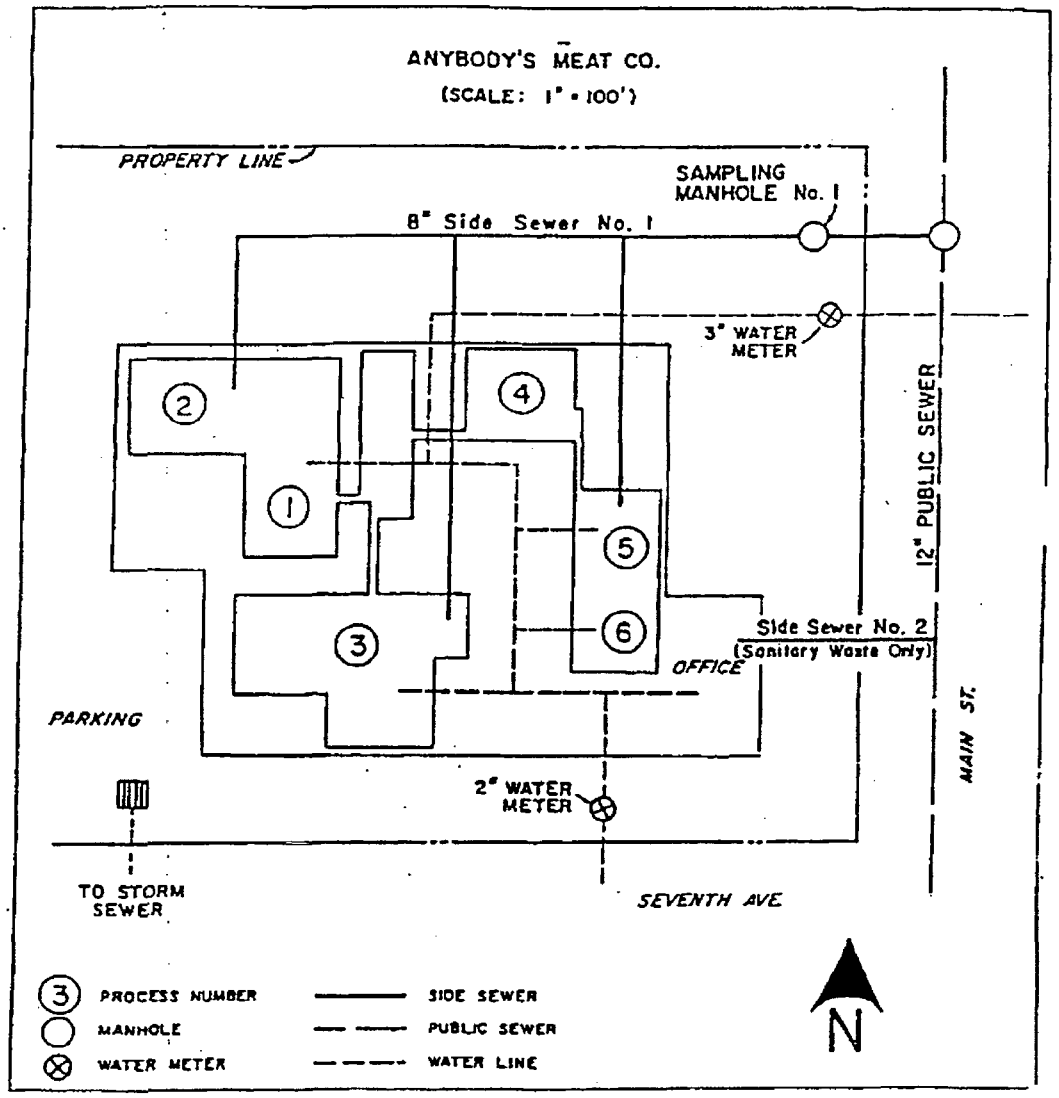


SEE FIGURE 2

ATTACHMENT C BUILDING LAYOUT

Draw the location of each building on the premises. Show location of all current or planned water meters, storm drains, numbered unit processes (from process schematic(s)), community sewers and each side sewer connected to the community sewers, automatic sampling equipment (current or planned), location of pretreatment processes, treated flows and untreated flows, name and location of pertinent streets. Use flow schematic to indicate process and process discharge in gpd. Number each side sewer and show possible sampling locations (sampling manhole).

An attached blueprint or drawing of the facilities showing the above items may be substituted for a drawing on this sheet. Use the example on the back side of this sheet as a guide.



ATTACHMENT D BASELINE MONITORING REPORT FORM

NA
EXISTING
SYSTEM

City of Portland
Industrial Wastewater Discharge
Baseline Monitoring Report

COMPANY NAME: _____ PHONE NO.: (503) _____
FACILITY ADDRESS: _____
PROCESS DESCRIPTION: _____
SAMPLING LOCATION: _____
SIC CODE(S): _____ ESTIMATED FLOW (GPD): _____

Analyze for all parameters indicated under *required sampling*. The sampling and analysis must be representative of normal work cycles and expected pollutant discharges.

Required Sampling	Pollutant	40 CFR 136 Method	Sample Type	Sample Date	Results (or estimates) mg/L or lbs.
	pH		Grab		
	Arsenic		Composite		
	Cadmium		Composite		
	Chromium		Composite		
	Copper		Composite		
	Lead		Composite		
	Mercury		Composite		
	Molybdenum		Composite		
	Nickel		Composite		
	Selenium		Composite		
	Silver		Composite		
	Zinc		Composite		
	Oil & Grease (total)	EPA 1664	Grab		
	Cyanide A		Grab		
	Cyanide T		Grab		
	Volatiles		Grab		
	Semivolatiles		Grab		
	BETX		Grab		
	Ammonia				
	BOD5				
	TSS				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: _____ DATE: _____

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
Water Pollution Control Laboratory
6543 N. Burlington Avenue, Bldg. 217, Portland, Oregon 97203 • Sam Adams, Commissioner • Dean Marriott, Director

September 26, 2007

RECEIVED
OCT 0 1 2007
BY:

ConocoPhillips-Chevron Remediation Site
C/o Delta Consultants
7150 SW Hampton, Suite 220
Tigard, Oregon 97223

Attn: Brian Pletcher,

Dear Mr. Pletcher,

Enclosed, you will find the Industrial Wastewater Discharge Permit for the ConocoPhillips-Chevron Products Co. Groundwater site. Please fill out the enclosed Signatory Authorization form and return it to my attention at:

City of Portland Water Pollution Control Laboratory
6543 North Burlington Ave.
Portland, Oregon 97210

Please call me at (503) 823-5538, if you have any questions.

Sincerely,

Eric De Berry
Permit Manager
Industrial Source Control Division

CITY OF PORTLAND
ENVIRONMENTAL SERVICES
Water Pollution Control Laboratory
6543 N. Burlington Avenue, Bldg. 217, Portland, Oregon 97203 • Sam Adams, Commissioner • Dean Marriott, Director

WASTEWATER DISCHARGE PERMIT

ISSUED TO:	ConocoPhillips-Chevron Remediation, Willbridge Terminal
SIC CODE:	2992, 5171
PLANT TYPE:	Groundwater Remediation Site
EPA CATEGORY:	Non-Categorical
LOCATION:	5528 NW Doane Ave. Portland, Oregon 97210
MAILING ADDRESS:	Delta Environmental 7150 SW Hampton Suite 220 Tigard, Oregon 97223
RESPONSIBLE OFFICIAL:	Myron W. Smith
PHONE NUMBER:	(602) 728-6986
FAX NUMBER:	(602) 728-5032

EXPIRATION DATE: 8/15/2012

INDUSTRIAL SOURCE CONTROL MANAGER — Gerald W. Baumgartner — 10-2-07 Effective Date

PREPARED BY: EDB
CHECKED BY : MAS

Ph: 503-823-5600 Fax: 503-823-5656 • www.cleanriverspdx.org • Using recycled paper. • An Equal Opportunity Employer.
For disability accommodation requests call 503-823-7740, Oregon Relay Service at 1-800-735-2900, or TDD 503-823-6868.

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INTRODUCTION

PERMITTED ACTIVITIES

The permittee is authorized to discharge industrial wastewater to the City of Portland's sewer system in compliance with Chapter 17.34 of the City Code, the Bureau of Environmental Services Administrative Rules and any applicable provisions of federal or state laws or regulations and in accordance with discharge point(s), effluent limitations, monitoring requirements, and all other conditions set forth herein.

It is the permittee's duty to comply with all conditions of this permit. Any noncompliance with permit requirements constitutes a violation of Chapter 17.34 of Portland's City Code and, as such, subjects the permittee to enforcement action(s).

Schedule A
WASTEWATER DISCHARGE LIMITATIONS

Listed below are the waste discharge limitations not to be exceeded after **the permit effective date.** Applicable regulations include Chapters 17.34 (Schedule F of this permit lists the General Discharge Prohibitions) and 17.36 of the Code of the City of Portland and 40 CFR 403. The point of compliance with the discharge limitations shall be 1A.

POC (*)	Pollutant Name	Local Limit Daily Max (mg/L)	Categorical Limit (mg/Lmg/l, lb / off lb) Daily	Monthly
	METALS			
	Arsenic	0.2		
	Cadmium	0.7	See Schedule D	
	Chromium	5.0	See Schedule D	
	Copper	3.7	See Schedule D	
	Lead	0.7	See Schedule D	
	Mercury	0.010	See Schedule D	
	Molybdenum	1.4		
	Nickel	2.8	See Schedule D	
	Selenium	0.6		
	Silver	0.4	See Schedule D	
	Zinc	3.7	See Schedule D	
	NON-METALS (INORGANICS)			
	Cyanide	1.2		
*	**pH**	5.0-11.5 su		
	Sulfide	4.0		
	NON-METALS (ORGANICS)			
	1,2-Dichloroethane	0.50		
	2,4-Dinitrotoluene	0.13		
	Acrylonitrile	1.00		
	Chlordane	0.03		
	Chlorobenzene	0.20		
	Chloroform	0.20		
	Nitrobenzene	2.00		
	Pentachlorophenol	0.04		
	Trichloroethylene	0.20		
*	**Non-polar Oil & Grease**	110		
*	**BTEX (Total)**	see note 4		

Notes:

1. This schedule may be revised upon written notification by the City to accommodate process changes by the permittee or as determined by the Director of Environmental Services.

2. In addition to the limits stated in Schedule A, the permittee shall comply with all other applicable City, State and Federal regulations.

3. The pollutant parameters marked with an asterisk (*) are the pollutants of concern. At a minimum, the permittee is required to monitor for pollutants of concern. All limits are applicable at the point of compliance.

4. This is a benchmark concentration developed and implemented in accordance with City Code 17.34.040(c), and the Director of the Bureau of Environmental Services. (See Schedule D)

5. The City has Pollutant Prohibitions for certain individual organic compounds that are not amenable to biological treatment or that have a screening value or local limit that is less than the practical method detection level (MDL). Discharges containing concentrations of a prohibited pollutant above the MDL, as listed in Appendix 5, is a violation of City Code and this permit.

Schedule B
MONITORING AND
REPORTING REQUIREMENTS

I. Periodic Compliance Self-Monitoring:

Parameter	Sample Type	First Quarter			Second Quarter			Third Quarter			Fourth Quarter		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Non Metals													
pH		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oil and Grease (total)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BTEX (Total)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Due Dates		Feb 15	Mar 15	Apr 15	May 15	Jun 15	Jul 15	Aug 15	Sept 15	Oct 15	Nov 15	Dec 15	Jan 15

I. Periodic Compliance Self-Monitoring Report, Notes:

1. Periodic Compliance Reports are to be submitted to the Industrial Source Control Division by the 15th of the month following the conclusion of the reporting period. Sampling, analysis, and reporting will follow the schedule above.

2. All official sampling shall be taken at the approved sampling location. (See Appendix 2: sampling location map.)

3. The permittee shall analyze samples for all listed parameters plus any other which might be expected to be present in significant quantities.

4. The permittee shall submit all self-monitoring results to the Industrial Source Control Division as part of their monitoring and reporting requirements.

5. All monitoring results are to be mailed to:

   Industrial Source Control Division
   Bureau of Environmental Services
   City of Portland
   6543 N. Burlington Ave.
   Portland, OR 97203

6. Periodic Compliance Reports are to be submitted by the 15th of each month following the report period for each sampling location. The reports shall consist of:

   a. Statement of compliance/noncompliance, signed by the officially designated contact person (statement is found on bottom of the self-monitoring report form).

Schedule B
MONITORING AND
REPORTING REQUIREMENTS

II. Periodic Compliance Self-Monitoring Report (Notes continued):

b. Sample analysis results recorded on the appropriate self-monitoring report form and chain of custody for sample collected.

c. Originals of all laboratory analysis sheets showing who analyzed sample, date and time sample was analyzed, analytical methods used, method detection limit, test result, and quality assurance/quality control.

d. Copies of pH charts (if any) showing violations (if any).

e. Any other reports that may be required.

f. Calculations of monthly average, if appropriate.

7. The permittee should instruct its laboratory that, if the oil and grease (total) concentration exceeds 110 mg/L, the laboratory should determine the concentrations of the polar and non-polar oil and grease fractions.

8. The City may reduce or increase the frequency of sampling, based on the analytical results submitted.

9. As per 40 CFR 403.12(g)(5), if an industrial user subject to the reporting requirements of Schedule B monitors any parameter from the official sampling location more frequently than required, using procedures specified in Schedule E14(c), the results of their monitoring must be submitted in the required report.

Schedule C
COMPLIANCE SCHEDULE

Schedule D
SPECIAL CONDITIONS

As per 17.34.040 (c), the Director of Environmental Services may limit the characteristics or volume of the ground water discharged to the City sewer system if the discharge from ConocoPhillips-Chevron., damages the sewer system, causes interference with the operations of the City sewer system, endangers human health, or causes degradation to receiving waters.

In addition to the standard industrial wastewater discharge limitations listed in Schedule A, ConocoPhillips-Chevron., is required to meet the Pollutant Levels of Concern (PLOC). The PLOC are listed below. In the event treated groundwater from Tosco-Chevron., contains a parameter with a concentration above the PLOC, discharge will stop immediately. In the event self monitoring analysis indicated a violation of the PLOC has occurred, ConocoPhillips-Chevron, shall notify the City within 24 hours of becoming aware of the analysis results.

Pollutant	PLOC Concentration mg/L
Cadmium (total)	0.06
Chromium (total)	0.34
Copper (total)	0.23
Lead (total)	0.10
Mercury (total)	0.0013
Nickel (total)	0.25
Silver (total)	0.036
Zinc (total)	0.47
Benzene (total)	0.05
BTEX (total)	0.75
Non-Polar Oil & Grease	10.0

A report detailing the cause of the excursion, the work done to rectify the problem, and results of the re-sampled effluent must be reviewed and found acceptable by the City before the discharge is allowed to continue.

Schedule E
GENERAL CONDITIONS

1. Accidental Spill Prevention Plan

To comply with Section 17.34.090 of the City Code, the permittee shall submit a new or revised Accidental Spill Prevention Plan (ASPP) to the Industrial Wastewater Management Section 90 days after the effective date of this permit. The plans shall include the following elements.

a. A description of the hazardous substances handled and their potential points of entry into the City sewer system or storm runoff

b. A description of the measures to be taken to prevent entry at the described points before a spill occurs

c. Measures to be taken to contain a spill if one occurs

d. A description of employee training in the prevention and control of spills

e. A posted notice informing employees of the requirement to notify the Bureau of Environmental Services in case of spills or uncontrolled discharges.

2. Appeal

Upon receipt of a final industrial wastewater discharge permit, a permittee may appeal any of its terms or conditions to the Code Hearings Officer in accordance with procedures set out at Chapter 22.10 of the Portland City Code; provided that such an appeal shall include a copy of the permit that is the subject of the appeal, shall state the basis for the appeal, and shall be filed with the Code Hearings Officer and the Bureau of Environmental Services.

3. Authorized Discharge

All discharge and activities authorized herein shall be consistent with the terms and conditions of this permit, Chapter 17.34 of the City Code and the Administrative rules. The discharge of any pollutant in excess of these limits shall constitute a violation of the terms and conditions of this permit.

4. Bypass or Diversion

The diversion or bypass (the intentional diversion of wastestreams from any portion of a permittee's treatment facility) of any discharge, from facilities used by the permittee, to maintain compliance with the terms and conditions of this permit is prohibited except:

a. When unavoidable to prevent loss of life or severe property damage.

b. When excessive storm drainage or runoff would damage facilities necessary for compliance with the terms and conditions of this permit.

4. Bypass or Diversion (continued)

The permittee shall immediately notify the City in writing of each such diversion or bypass, in accordance with the procedure specified in condition No. 23.

5. Certification

Legible copies of all applications, reports, and information submitted to the City shall be signed and certified as follows in accordance with 40 CFR 403.12.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

6. Chemical Storage

Chemicals shall be stored in a manner that will prevent the entry of these substances into the sanitary, combined sewer, or storm sewer system, or waters of the state.

7. Continuous Compliance

Compliance with Schedule E, No. 23 shall not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit.

8. Dilution Prohibition

It is unlawful for a discharger to use dilution as a partial or complete substitute for adequate treatment to achieve compliance with the standards and limitations set forth in this permit. The Director may impose mass limitations on dischargers who are using dilution to meet the applicable pretreatment standards or the requirement set forth in this permit.

9. Enforcement Provision

A violation of any conditions, standards or requirements of this permit constitutes a violation of Chapter 17.34 of the City Code and any rules promulgated thereunder. Therefore, the City may seek any or all of the remedies or penalties provided for in Section 17.34.110 of the City Code, including recovery of costs incurred by the City, in response to the following:

a. Any violation by the permittee of the provisions in this Industrial Wastewater Discharge Permit.

b. Any violation by the permittee of the provisions of the City Code.

9. Enforcement Provision (continued)

c. Any violation by the permittee of an Enforcement Action requirement with respect to provisions set forth in this Industrial Wastewater Discharge Permit and the City Code and Administrative Rules.

The range or severity of enforcement actions taken by the City against the permittee will be determined by, but not limited to, the nature, magnitude, duration, and frequency of the violation as provided by City Code and Administrative Rules.

10. Extra-Strength Sewer Charge (ESSC)

Discharges exceeding 300 mg/L for the 5-day biochemical oxygen demand (BOD) or 350 mg/L total suspended solids (TSS) concentrations (as defined in Section 17.36.060(1) of the City Code) shall be subject to the extra-strength sewer charge (ESSC) established in Section 17.36.060(1).

11. Hazardous Waste Notification

The industrial user shall notify the Industrial Source Control Division Section, the POTW, the EPA Regional Waste Management Division Director, and State hazardous waste authorities in writing of any discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the industrial user discharges more than 100 kilograms of such waste per calendar month to the POTW, the notification shall also contain the following information to the extent such information is known and readily available to the industrial user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following 12 months.

12. Inspection and Entry

The permittee shall, at all reasonable times, allow authorized representatives of the City:

a. To enter the permittee's premises where an effluent source or disposal system is located or where any records associated with this permit are kept.

b. To have access to any required records and permission to copy these records. At no time can wastewater effluent data be claimed or held as confidential information.

c. To inspect and evaluate any monitoring equipment or monitoring methods required by this permit.

d. To sample any discharge to the sewer system.

13. Liability

The City of Portland, its officers, agents or employees shall not sustain any liability due to the issuance of this permit or the construction or maintenance of facilities resulting from this permit.

14. Monitoring

a. The permittee shall record the following information:

* The exact date, time, and place of sampling
* Name of person who collected the sample(s)
* Type of sample(s) collected
* The dates analyses were performed
* Who performed the analyses
* The analytical techniques or methods used
* The results of all required analyses
* Whether quality assurance and quality control laboratory procedures are followed

b. Samples and measurements, taken to meet the requirements of the above condition, shall be representative of the effluent. Grab samples must be collected for pH, cyanide, phenol, sulfide, volatile organic compounds and oil and grease monitoring.

c. All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless otherwise approved in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants as specified in 40 CFR, Part 136. Laboratory quality assurance and quality control programs should be documented. EPA QA/QC programs should be followed.

d. The permittee is required to document proper installation, and maintenance of flow monitoring and sampling equipment.

e. If the results of the permittee's wastewater analysis indicate that a noncompliance has occurred, the permittee must notify the City's Industrial Source Control Division Section within 24 hours of becoming aware of the noncompliance. The permittee must also repeat the sampling within 24 hours of the effluent noncompliance or next process day and submit the analysis to the City within 30 days after becoming aware of the noncompliance.

f. The permittee shall take all reasonable steps to minimize or correct any adverse impact to the POTW or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

14. Monitoring (continued)

g. If requested, the permittee shall provide or split discharge samples with the City of Portland Water Pollution Control Laboratory.

15. Permit Modification

This permit may be modified with 30 days prior written notification, in whole or in part, for causes including but not limited to the following:

a. A change in the City's NPDES permit or any other condition that requires either a temporary or permanent elimination of any authorized discharge.

b. To incorporate new or revised federal, state, or local pretreatment standards or requirements.

c. Information indicating that the permitted discharge poses a threat to the City's collection and treatment system, POTW personnel, or the receiving waters and sludge.

d. To correct typographical or other errors in the permit.

e. Any significant change in the volume of a permitted discharge.

16. Permit Renewal

This permit is issued to a specific entity and cannot be transferred by the industrial user and must be renewed pursuant to Section 17.34.070 of the Code of the City of Portland and Permit Applications must be received 90 days prior to:

a. Expiration date of current permit.

b. In the event the permittee plans to cease operations at the present location, and plans to relocate within the City of Portland's jurisdiction and continue the same permitted activities.

c. The permitted industrial process being significantly altered or changed so that pollutants not specifically mentioned in the current permit are present in the permittee's discharge.

17. Permit Suspension or Termination

a. Violation of any terms or conditions of this permit or any applicable rule, standard, or order of the director of the Bureau of Environmental Services.

b. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts.

c. Falsifying self-monitoring reports.

d. Tampering with monitoring equipment.

17. Permit Suspension or Termination (continued)

e. Refusing to allow prompt access to the facility premises and records.

f. Failure to meet effluent limitations.

g. Failure to pay fines.

h. Failure to meet compliance schedules.

18. Plant Closure

In the event the permittee plans to cease operations at the present business location, and not to relocate within the City of Portland's jurisdiction, the permittee shall inform this office, in writing, 60 days prior to plant closure.

19. Property Rights or Privileges

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges; it does not authorize any injury to private property or any invasion of personal rights; and it does not authorize any infringements or federal, state, or local laws or regulations.

20. Records Retention

All records of monitoring activities and results, including all original strip chart recordings for continuous monitoring instrumentation (and calibration and maintenance records), shall be retained by the permittee for a minimum of three years. This retention period shall be extended during the course of any unresolved litigation pertaining to the discharge of pollutants by the permittee, or whenever it is requested by the City, the Approval Authority (DEQ), the Regional Administrator (EPA).

21. Reporting Requirements

a. Accidental or Slug Loading

If accidental or slug loading to the sanitary sewer occurs, the permittee shall notify the City Permit Manager immediately, if no response then call the City Duty Officer at 503-823-7180 (M-F 8:00am - 4:30pm) or 503-323-3398 (after 4:30pm and weekends). A formal written report, discussing circumstances and remedies, shall be submitted to the City within 5 days of the occurrence

b. Changes in Wastewater Characteristics

The permittee shall give notice to the Industrial Source Control Division Section 90 days before any facility expansion, production increase, or process modifications that result in new or substantially increased discharges or a change in the nature of the discharge.

c. Change in representative

21. Reporting Requirements (continued)

If the responsible corporate official changes, notify the City within 10 days, as per 40 CFR 403.12 (1) (4).

22. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to the other circumstances and the remainder of this permit shall not be affected.

23. Slug Load Notification

If the permittee is unable to comply with all the conditions of this permit due to a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, or should any condition cause the release of any slug load, the permittee shall:

a. Immediately take action to stop, contain, clean up the unauthorized discharges, and correct the problem.

b. Immediately call the City Permit Manager, if no response then call the City Duty Officer at 503-823-7180 (M-F 8:00am - 4:30pm) or 503-323-3398 (after 4:30pm and weekends).

c. Within five (5) days submit a detailed written initial report to the City Permit Manager describing the breakdown, the actual quantity of resultant waste discharges, the corrective action taken, the steps taken to prevent recurrence, and any other pertinent information.

d. Samples shall be taken immediately upon discovery of the Slug load.. Within 15 days, a follow-up report shall be submitted. The report shall contain analysis of samples taken during such discharge and samples taken after normal conditions have been restored. The samples, at a minimum, shall be analyzed for the parameters required in Schedule B. Sampling shall be continued until all parameters are within discharge limits.

24. Upset

a. Definition:

For the purposes of this section, upset means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards, because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an Upset:

An upset will constitute an affirmative defense to an action brought for noncompliance with applicable pretreatment standards, if the requirements of paragraph c are met.

24. Upset (continued)

c. Conditions Necessary for a Demonstration of an Upset:

A permittee who wishes to establish the affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and the permittee can identify the specific cause(s) of the upset.

(2) The facility was, at the time, being operated prudently, efficiently, and in compliance with applicable operation and maintenance procedures.

(3) The permittee has submitted the following information to the Industrial Source Control Division within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within 5 days).

* A description of the indirect discharge and cause of noncompliance

* The period of noncompliance, including exact dates and times or, if not corrected, the anticipated duration of noncompliance

* Steps planned or now being taken to reduce, eliminate, and prevent recurrence of the noncompliance

d. Burden of Proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset shall have the burden of proof.

e. Permittee Responsibility in Case of an Upset.

If reduction, loss, or failure of its treatment facility occurs, the permittee shall control production of all discharges in order to maintain compliance with applicable pretreatment standards until the facility is restored or an alternative method of treatment is provided. This requirement especially applies if the primary source of the treatment facility power is reduced, lost, or failed.

Schedule F
GENERAL DISCHARGE PROHIBITIONS

The permittee shall not discharge, cause to discharge or allow to discharge directly or indirectly into the City sewer system any of the following:

1. Wastewater containing substances in such concentrations that they inhibit or interfere with the operation or performance of the sewer system, or that are not amenable to treatment or reduction by the sewage treatment process employed, or are only partially amenable to treatment such that the sewage treatment plant effluent cannot meet the requirements of any agency having jurisdiction over its discharge to the receiving waters, or that prevent or impair the use or disposal of sewage treatment plant sludge and sludge products in accordance with applicable State and federal regulations;

2. Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction to cause fire or explosion or be injurious in any other way to the operation of the sewer system, or wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Celsius (using test methods prescribed at 40 CFR 261.21), or discharges which cause the atmosphere in any portion of the sewer system to reach a concentration of 10% or more of the Lower Explosive Limit (LEL).

3. Any solid or viscous substances capable of obstructing wastewater which will or may cause obstruction to the flow of wastewater or other interference with the operation of the sewer system;

4. Any noxious, malodorous or toxic liquids gases, vapors or fumes, solids, or other substances which, either singly or by interaction with other wastes, may cause acute or chronic worker health and safety problems, a public nuisance, a hazard or interference with any part of the sewer system;

5. Any industrial wastewater containing a hazardous or toxic substance which, either singly or by interaction with other substances, injures or interferes with the sewer system or constitutes a hazard to humans or animals, or creates a hazard in, or adversely affects the receiving waters, or results in such substances being discharged in combined sewer overflows or sewage treatment plant effluent in any concentrations in excess of limitations imposed by any permit, law or regulation;

6. Any wastes, wastewaters or substances having a pH less than 5.0 or more than 11.5, or capable of causing damage or hazard to structures, equipment, processes or personnel of the sewer system, unless these limits are modified by permit.

7. Any liquid or vapor having a temperature higher than 65 degrees Celsius (149 degrees Fahrenheit) or containing heat in amounts which will inhibit biological activity, or result in interference at the treatment plant. In no case shall a discharge to the sewer system contain heat in such quantities that the temperature of the treatment plant influent exceeds 27 degrees Celsius (80 degrees Fahrenheit);

8. Any material trucked or hauled from a cesspool, holding or septic tank or any other nondomestic source, except such material received at designated locations under City contract or permit in accordance with any other applicable requirements of the City Code 17.34 or rules adopted hereunder;

9. Any substance which may solidify or become discernibly viscous at temperatures above 0 degrees Celsius or 32 degrees Fahrenheit;

10. Any material that has not been properly comminuted to 0.65 centimeters (1/4 inch) or less in any dimension;

11. Any slugload, as defined in City Code 17.34 or rules adopted hereunder;

12. Any substances with excessive color, as determined by the Director of Environmental Services, which are not removed in the treatment process;

13. Any batch discharges without written permission from the Director of Environmental Services. Batch discharges shall comply with all other requirements of City Code 17.34 and rules adopted hereunder;

14. Any concentrations of inert suspended or settleable solids which may interfere with the operation of the sewer system;

15. Any concentrations of dissolved solids which may interfere with the operation of the sewer system;

16. Any radioactive material, except in compliance with a current permit issued by the Oregon State Health Division or other state or federal agency having jurisdiction;

17. Any substance which may cause sewer system effluent or treatment residues, sludges, or scums, to be unsuitable for reclamation and reuse or which interferes with the reclamation process. (In no case, shall a substance discharged to the sewer system cause the City to be in noncompliance with sludge use or disposal criteria, guidelines or regulations developed under the Clean Water Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act (42 USC 6901), the Clean Air Act (42 USC 1857), the Toxic Substances Control Act (15 USC 2601), or any other federal or State statutes, regulations or standards applicable to the sludge management method being used, or any amendments thereto.)

18. Petroleum oil, nonbiodegradeable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.

19. Noncontact cooling water (except that noncontact cooling water may be discharged to the separate storm sewer system upon approval by the Director of Environmental Services);

20. Any substance that causes the City to violate the terms of its NPDES permit.

Appendix 1
DEFINITIONS

Abbreviations

BOD_5	Five-day biochemical oxygen demand
mg/L	Milligrams per liter
k	Kilograms
m^3/d	Cubic meters per day
ppm	Parts per million (assumed equal to milligrams per liter)
POTW	Publicly owned treatment works
WPCL	Water Pollution Control Laboratory

Averages for BOD, TSS, and chemical parameters are based on arithmetic mean of samples taken.

Definitions

Bypass

The intentional diversion of wastestreams from any portion of a permittee's treatment facility.

Compatible Pollutant

Biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, and additional pollutants that the City treatment works is designed to treat.

Conventional Pollutants

Classification of industrial pollutants, which includes BOD (biochemical oxygen demand), suspended solids, fecal coliform, pH (acidity/alkalinity), and other pollutants so designated by EPA, as defined by Section 304(a)(4) of the Clean Water Act.

Director of Environmental Services

The Director of Environmental Services of the City of Portland, Oregon, or that person's duly authorized representative or agent.

City, or City of Portland

The municipality of Portland, Oregon, a municipal corporation of the State of Oregon, acting through the City Council or any board, committee, body, official, or person to whom the Council shall have lawfully delegated the power to act on behalf of the City. Unless a particular board, committee, official, or person is specifically designated in these rules and regulations, wherever action by the City is explicitly required or implied herein, it shall be understood to mean action by the Director of Environmental Services of Portland, Oregon, or that person's duly authorized representative or agent.

Effective Date of this Permit

The date this permit is signed by the Director of the Bureau of Environmental Services.

Expiration Date

From 1 to 5 years beyond the effective date of this permit.

Hazardous or toxic substances

Hazardous or toxic substances are those substances referred to in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S. Code 9601 et seq.), section 502(13) of the Clean Water Act, and any other substances so designated by the Director of Environmental Services and contained in rules adopted pursuant to this Chapter.

Industrial Waste

Any liquid, solid, or gaseous substance (or combination thereof) resulting from any process of industry, manufacturing, commercial food processing, business, agriculture, trade, or research, including but not limited to the development, recovery, or processing of natural resources and leachate from landfills or other disposal sites.

Industrial Wastewater Discharge Permit

A permit to discharge industrial wastewater into the City sewer system issued under the authority of the City Code, which prescribes certain discharge requirements and limitation.

Interference

Interference means a discharge which, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the normal operation of the City sewer system, or which causes a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or any increase in the cost of treatment of sewage or in the cost of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations); Section 405 of the Clean Water Act, the Solid Waste Disposal Act (including Title II, more commonly referred to as the Resource Conservation and Recovery Act), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of RCRA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum Daily Discharge Limitation

The highest allowable daily discharge.

Nonconventional Pollutants

All pollutants that are not specifically designated as either conventional or toxic.

Oil and Grease

Fats, Oils and Grease. Fats, oils and grease are those substances which are measured by USEPA Method 1664: N-Hexane Extractable Method (HEM) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM).

(a) Non-polar fats, oils and grease are that portion of fats, oils and grease which is measured as non-polar (from petroleum sources) by USEPA Method 1664.

(b) Polar fats, oils and grease are that portion of fats, oils and grease which is determined to be polar (of animal or vegetable origin) by USEPA Method 1664.

Pass Through

Pass through means a discharge which exits the POTW into waters of the United States in Quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

POTW

POTW means Publicly Owned Treatment Works, which includes any devices and systems, owned by a State or municipality, used in the collection, transportation, storage, treatment, recycling and reclamation of wastewater.

Pretreatment

The reduction of the amount of pollutants, the elimination of pollutants, or the alternation of the nature of pollutant properties in wastewater to a non-harmful state, prior to or in lieu of discharge of such pollutants into the City sewer system.

Sampling

a. The "monthly average" other than pH is the arithmetic mean of samples collected during a calendar month.

b. The "daily maximum" is defined as the greatest allowable value for any calendar day.

c. The "four day average" is defined as the average of four discrete sampling events for a particular pollutant, which is determined by the sampling frequency and not necessarily four consecutive calendar days.

d. A " composite sample" is a series of individual discrete samples taken at selected intervals based on either an increment of flow or time. The samples are mixed together to approximate the average composition of discharge to the City sewer system. A composite sample for one day shall consist of a pool of samples, collected over the operational period of the production day.

e. A "Grab" sample is an individual sample collected in less than 15 minutes, without regard for flow or time.

f. A "Grab-Composite" is a minimum of four grab samples collected and preserved over a 24-hour period and combined to provide a representative sample of effluent being discharged.

Schedule of Compliance

A schedule of remedial measures, including an enforceable sequence of actions or operations leading to compliance with an effluent limitation or other limitation, prohibition, or standard.

Severe Property Damage

Substantial physical damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Slugload

A slugload is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge.

Solid Waste

Any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits.

Solid Waste Disposal

The final placement of refuse that cannot be salvaged or recycled.

Solvent Management Plan

A plan that specifies the toxic organic compounds used, the method of disposal used (instead of dumping into wastestreams), and procedures for ensuring that toxic organics do not spill or leak into wastewater discharged to the City sewer system.

Total Dissolved Solids

The total dissolved (filterable) solids as determined by use of the method specified in the list of approved test procedures.

Total Organic Active Ingredients

The sum of all organic active ingredients covered by the organic pesticide chemicals manufacturing subcategory, which are manufactured at a facility subject to the effluent guidelines for pesticides chemicals manufacturing.

Total Solids

The sum of dissolved and undissolved constituents in water or wastewater, usually expressed as milligrams per liter.

Total Suspended Solids

Total suspended matter that either floats on the surface or is in suspension in water or wastewater and that are removable by laboratory filtering (as described in *Standard Methods for the Examination of Water and Wastewaters,* current edition) or Guidelines Establishing Test Procedures for the analysis of Pollutants, contained in 40 CFR 136, as published in the *Federal Register.*(Bureau of Environmental Services Administrative Rules I[22])

Upset

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards, because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste

Unwanted materials left over from manufacturing processes, or refuse from places of human or animal habitation.

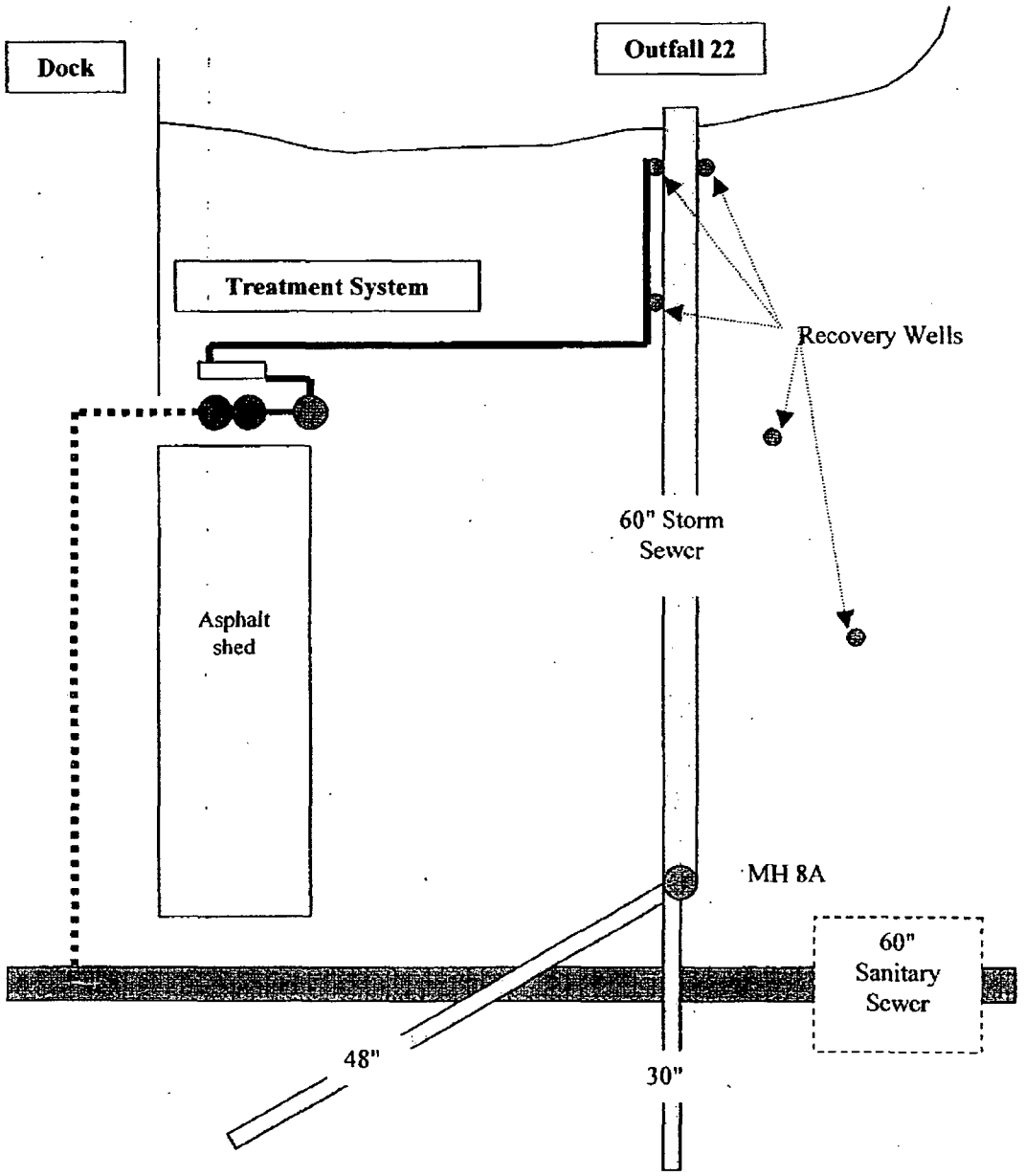
Wastewater

Industrial waste, sewage, or any other waste, including that which may be combined with any groundwater, surface water, or stormwater that may be discharged to the city sewer system.

Water Pollution

The addition of enough harmful or objectionable material to damage water quality.

Appendix 2
SAMPLING LOCATION MAP



Appendix 3
RESERVED: ACCIDENTAL SPILL PREVENTION PLAN

Already on file with the City.

Appendix 4
Individual Organic Compounds - Pollutant Prohibitions

POLLUTANT PROHIBITIONS	*METHOD DETECTION LIMIT(mg/L)*
Volatiles	
Bromodichloromethane	0.005
Bromoform	0.005
Bromomethane	0.010
1,1,1,2-Tetrachloroethane	0.010
1,1,2-Trichloroethane	0.005
1,1-Dichloroethene	0.005
Chloroethane	0.050
Chloromethane	0.005
Dibromochloromethane	0.005
Vinyl Chloride	0.050
Base/Neutral extractables	
1,2,4-Trichlorobenzene	0.005
1,2-Dichlorobenzene	0.005
1,2-Diphenylhydrazine	0.005
1,3-Dichlorobenzene	0.005
1,4-Dichlorobenzene	0.005
2,6-Dinitrotoluene	0.005
4-Bromophenyl-Phenyl Ether	0.005
Bis (2-Chloroethoxy)methane	0.010
Bis (2-Chloroisopropyl)ether	0.010
Hexachlorobenzene	0.005
Hexachlorobutadiene	0.005
Hexachlorocyclopentadiene	0.005
N-Nitroso-Di-N-Propylamine	0.005
Pesticides	
4,4-DDD (p,p-TDE)	0.001
4,4-DDE (p,p-DEX)	0.001
4,4-DDT	0.001
a-BHC (alpha)	0.001
b-BHC (beta)	0.001
d-BHC (delta)	0.001
Dieldrin	0.001
Endosulfan II (beta)	0.001

Endosulfan Sulfate	0.001
Endosulfan-I (alpha)	0.001
Endrin	0.001
Endrin Aldehyde	0.001
g-BHC (gamma) (Lindane)	0.001
Heptachlor	0.001
Heptachlor Epoxide	0.001
Toxaphene	0.001
Polychlorinated biphenyls (PCBs)	
PCB 1016	0.001
PCB 1221	0.001
PCB 1232	0.001
PCB 1242	0.001
PCB 1248	0.001
PCB 1254	0.001
PCB 1260	0.001

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

MUNICIPAL PRETREATMENT PROGRAM

INDUSTRIAL USER

COMPANY OFFICIAL SIGNATORY AUTHORIZATION

The undersigned person has been designated by Tosco / Chevron Remediation Site Portland, Oregon as the duly authorized representative with the assigned responsibility for environmental matters and compliance with the firm's City of Portland Waste Water Discharge Permit (#500.015)and the Code of the City of Portland.

This authorization is made pursuant to 40 CFR 403.12(l)(1-3).

DESIGNEE: _____
name

SITE MANAGER, RISK MANAGEMENT & REMEDIATION
position/title

RESPONSIBLE CORPORATE OFFICIAL: (SEE ATTACHED)
print name here

_____
signature here

40 CFR 403.12(l)(4)

If an authorization under paragraph (l)(3) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirement of paragraph (l)(3) of this section must be submitted to the Control Authority prior to or together with any reports to be signed by an authorized representative.

Document5

DESIGNATION OF AUTHORITY

Undersigned is the duly elected Vice President of Phillips Petroleum Company. This instrument is to designate the authority of Martin Cramer to apply for and execute all applications, licenses, permits and documents necessary and incidental to discharging effluents from the Company's facility located at 5528 NW Doane Avenue, Portland, OR 97210 in to the municipal sanitary sewer system of the City of Portland, Oregon.

This designation appoints Martin Cramer as its agent and attorney in fact. Acts of the designee on behalf of the Company, limited by the foregoing, shall inure to the benefit of and shall be binding upon the Company.

October 11, 2002

Phillips Petroleum Company

David W. Holthe
Vice President

Attest: David Waldschmidt, Asst. Secretary attests that David W. Holthe is Vice President of Phillips Petroleum Company and that his signature affixed above is true and correct

David A. Waldschmidt

KHM ENVIRONMENTAL MANAGEMENT
7150 SW Hampton, Suite 220
Tigard, Oregon 97223
Phone (503) 639-8098
Fax (503) 639-7619

LETTER OF TRANSMITTAL

To:	Mr. Eric Deberry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	November 5, 2002
Re:	Discharge Monitoring Report October 2002 Tosco-Chevron Remediation Site	**Project #:**	B17-05H Permit No. 500.015

Mr. Deberry,

Water samples were collected by KHM Environmental Management on October 15, 2002 (Grab and Composite). Samples were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (APHA/EPA Method), volatile organic compounds (EPA 624), semivolatile organic compounds (EPA 625), and total metals (EPA 200). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the first compliance self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
KHM Environmental Management, Inc.

Cc: Martin Cramer, Philips Petroleum Company

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
FIRST FINAL COMPLIANCE SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: November 15, 2002

SAMPLING PERIOD: October 2002

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
10/15/02	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	APHA/EPA	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00	500 mg/L	N/A	Not analyzed
pH		7.8	SU		5.0 - 11.5	N/A	
Volatile Organic Compounds(EPA 624)	EPA 624	ND	mg/L	0.00200-0.0100			
Semivolatile Organic Compounds (EPA 625)	EPA 625	ND	mg/L	0.00500-0.0250		N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
10/15/02	1A	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
Arsenic (Total)	EPA 200	0.00195	mg/L	0.00100	0.2 mg/L	N/A	
Cadmium (Total)	EPA 200	ND	mg/L	0.00100	0.7 mg/L	N/A	
Chromium (Total)	EPA 200	ND	mg/L	0.00100	5.0 mg/L	N/A	
Copper (Total)	EPA 200	ND	mg/L	0.00200	3.7 mg/L	N/A	
Lead (Total)	EPA 200	0.00206	mg/L	0.00100	0.7 mg/L	N/A	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 11/6/02

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

RECEIVED
NOV 04 2002

KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P2J0481-01	Water	10/15/02 12:00	10/16/02 10:20
Mid	P2J0481-02	Water	10/15/02 12:00	10/16/02 10:20

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

KHM Environmental 7150 SW Hampton - Suite 220 Tigard, OR 97223	Project: Chevron #100-1868, Portland, OR Project Number: B17-05H Project Manager: Scott Miller	**Reported:** 10/30/02 10:06

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P2J0481-01) Water					Sampled: 10/15/02 Received: 10/16/02				
Benzene	ND	0.500	ug/l	1	NW-G, 8021B	10/17/02	10/17/02	2100573	
Toluene	0.599	0.500	"	"	"	"	"	"	
Ethylbenzene	0.579	0.500	"	"	"	"	"	"	
Xylenes (total)	5.81	1.00	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	793	80.0	"	"	"	"	"	"	
Surr: 4-BFB (FID)	*106 %*	*50-150*							
Surr: 4-BFB (PID)	*102 %*	*75-120*							

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P2J0481-01) Water					Sampled: 10/15/02 Received: 10/16/02				
Diesel Range Organics	3.06	0.250	mg/l	1	NWTPH-Dx	10/17/02	10/17/02	2100574	A-01
Heavy Oil Range Hydrocarbons	ND	0.500	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	*90.2 %*	*50-150*							

North Creek Analytical - Portland

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CHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
lid (P2J0481-02) Water					Sampled: 10/15/02 Received: 10/16/02				
il & Grease	ND	5.00	mg/l	1	EPA 1664	10/18/02	10/21/02	2100636	

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Total Metals per EPA 200 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2J0481-02) Water					Sampled: 10/15/02 Received: 10/16/02				
Arsenic	0.00195	0.00100	mg/l	1	EPA 200.8	10/17/02	10/18/02	2100605	
Cadmium	ND	0.00100	"	"	"	"	"	"	
Chromium	ND	0.00100	"	"	"	"	"	"	
Copper	ND	0.00200	"	"	"	"	"	"	
Lead	0.00206	0.00100	"	"	"	"	"	"	

North Creek Analytical - Portland

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Purgeables per EPA Method 624 Modified

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2J0481-02) Water					Sampled: 10/15/02 Received: 10/16/02				
Benzene	ND	2.00	ug/l	1	EPA 624	10/17/02	10/17/02	2100567	
Bromodichloromethane	ND	2.00	"	"	"	"	"	"	
Bromoform	ND	2.00	"	"	"	"	"	"	
Bromomethane	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.00	"	"	"	"	"	"	
Chlorobenzene	ND	2.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	2.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.00	"	"	"	"	"	"	
Ethylbenzene	ND	2.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.00	"	"	"	"	"	"	
Tetrachloroethene	ND	2.00	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.00	"	"	"	"	"	"	
Trichloroethene	ND	2.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
Vinyl chloride	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	*101 %*	*84.5-124*							
Surr: 1,2-DCA-d4	*124 %*	*77.9-123*							*S-08*
Surr: Dibromofluoromethane	*126 %*	*83.5-119*							*S-08*
Surr: Toluene-d8	*128 %*	*84.1-116*							*S-08*

North Creek Analytical - Portland

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Acid and Base/Neutral Extractables per EPA Method 625

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2J0481-02) Water					Sampled: 10/15/02 Received: 10/16/02				
Acenaphthene	ND	5.00	ug/l	1	EPA 625	10/17/02	10/25/02	2100591	
Acenaphthylene	ND	5.00	"	"	"	"	"	"	
Anthracene	ND	5.00	"	"	"	"	"	"	
Benzidine	ND	50.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.00	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.00	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	5.00	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.00	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.00	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.00	"	"	"	"	"	"	
2-Chlorophenol	ND	5.00	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.00	"	"	"	"	"	"	
Chrysene	ND	5.00	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.00	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	5.00	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	5.00	"	"	"	"	"	"	
1,2 Diphenylhydrazine (as Azobenzene)	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	5.00	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.00	"	"	"	"	"	"	
Diethyl phthalate	ND	5.00	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.00	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	25.0	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	5.00	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	5.00	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10.0	"	"	"	"	"	"	
Fluoranthene	ND	5.00	"	"	"	"	"	"	
Fluorene	ND	5.00	"	"	"	"	"	"	

North Creek Analytical - Portland

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Environmental Laboratory Network

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Acid and Base/Neutral Extractables per EPA Method 625

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2J0481-02) Water					Sampled: 10/15/02 Received: 10/16/02				
Hexachlorobenzene	ND	5.00	ug/l	1	EPA 625	10/17/02	10/25/02	2100591	
Hexachlorobutadiene	ND	10.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10.0	"	"	"	"	"	"	
Hexachloroethane	ND	10.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.00	"	"	"	"	"	"	
Isophorone	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
Nitrobenzene	ND	5.00	"	"	"	"	"	"	
2-Nitrophenol	ND	5.00	"	"	"	"	"	"	
4-Nitrophenol	ND	25.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.00	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.00	"	"	"	"	"	"	
Pentachlorophenol	ND	10.0	"	"	"	"	"	"	
Phenanthrene	ND	5.00	"	"	"	"	"	"	
Phenol	ND	5.00	"	"	"	"	"	"	
Pyrene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	5.00	"	"	"	"	"	"	
Surr: 2-Fluorobiphenyl	*75.1 %*	*26-135*							
Surr: 2-Fluorophenol	*41.1 %*	*6-124*							
Surr: Nitrobenzene-d5	*80.0 %*	*23-147*							
Surr: Phenol-d6	*29.7 %*	*11-130*							
Surr: p-Terphenyl-d14	*89.4 %*	*38-149*							
Surr: 2,4,6-Tribromophenol	*86.0 %*	*19-126*							

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100573 - EPA 5030B										
Blank (2100573-BLK1)				Prepared & Analyzed: 10/17/02						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Gasoline Range Hydrocarbons	ND	80.0	"							
Surr: 4-BFB (FID)	*50.7*		"	*50.0*		*101*	*50-150*			
Surr: 4-BFB (PID)	*48.0*		"	*50.0*		*96.0*	*75-120*			
LCS (2100573-BS1)				Prepared & Analyzed: 10/17/02						
Gasoline Range Hydrocarbons	1310	80.0	ug/l	1250		105	70-130			
Surr: 4-BFB (FID)	*54.7*		"	*50.0*		*109*	*50-150*			
LCS (2100573-BS2)				Prepared & Analyzed: 10/17/02						
Benzene	20.6	0.500	ug/l	20.0		103	70-130			
Toluene	19.9	0.500	"	20.0		99.5	70-130			
Ethylbenzene	20.5	0.500	"	20.0		102	70-130			
Xylenes (total)	60.2	1.00	"	60.0		100	70-130			
Surr: 4-BFB (PID)	*49.9*		"	*50.0*		*99.8*	*75-120*			
LCS Dup (2100573-BSD1)				Prepared & Analyzed: 10/17/02						
Gasoline Range Hydrocarbons	1420	80.0	ug/l	1250		114	70-130	8.06	20	
Surr: 4-BFB (FID)	*52.5*		"	*50.0*		*105*	*50-150*			
Duplicate (2100573-DUP1)	Source: P2J0448-01			Prepared & Analyzed: 10/17/02						
Gasoline Range Hydrocarbons	ND	80.0	ug/l		ND				50	
Surr: 4-BFB (FID)	*52.3*		"	*50.0*		*105*	*50-150*			
Matrix Spike (2100573-MS1)	Source: P2J0514-02			Prepared & Analyzed: 10/17/02						
Benzene	1240	25.0	ug/l	1000	220	102	70-130			
Toluene	957	25.0	"	1000	ND	95.7	70-130			
Ethylbenzene	1160	25.0	"	1000	146	101	70-130			
Xylenes (total)	3660	50.0	"	3000	705	98.5	70-130			
Surr: 4-BFB (PID)	*45.5*		"	*50.0*		*91.0*	*75-120*			

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CHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100573 - EPA 5030B										
Matrix Spike Dup (2100573-MSD1)	Source: P2J0514-02			Prepared & Analyzed: 10/17/02						
Benzene	1280	25.0	ug/l	1000	220	106	70-130	3.17	15	
Toluene	981	25.0	"	1000	ND	98.1	70-130	2.48	15	
Ethylbenzene	1230	25.0	"	1000	146	108	70-130	5.86	15	
Xylenes (total)	3970	50.0	"	3000	705	109	70-130	8.13	15	
Surr: 4-BFB (PID)	*49.0*		"	*50.0*		*98.0*	*75-120*			

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100574 - EPA 3510 Fuels										
Blank (2100574-BLK1)				Prepared & Analyzed: 10/17/02						
Diesel Range Organics	ND	0.250	mg/l							
Heavy Oil Range Hydrocarbons	ND	0.500	"							
Surr: 1-Chlorooctadecane	*0.0973*		"	*0.0960*		*101*	*50-150*			
LCS (2100574-BS1)				Prepared & Analyzed: 10/17/02						
Diesel Range Organics	1.94	0.250	mg/l	2.50		77.6	50-150			
Heavy Oil Range Hydrocarbons	1.29	0.500	"	1.50		86.0	50-150			
Surr: 1-Chlorooctadecane	*0.0914*		"	*0.0960*		*95.2*	*50-150*			
LCS Dup (2100574-BSD1)				Prepared & Analyzed: 10/17/02						
Diesel Range Organics	2.03	0.250	mg/l	2.50		81.2	50-150	4.53	50	
Heavy Oil Range Hydrocarbons	1.56	0.500	"	1.50		104	50-150	18.9	50	
Surr: 1-Chlorooctadecane	*0.0994*		"	*0.0960*		*104*	*50-150*			
Matrix Spike (2100574-MS1)	Source: P2J0469-03			Prepared & Analyzed: 10/17/02						
Diesel Range Organics	1.79	0.250	mg/l	2.36	ND	75.8	50-150			
Heavy Oil Range Hydrocarbons	1.35	0.500	"	1.42	ND	95.1	50-150			
Surr: 1-Chlorooctadecane	*0.0931*		"	*0.0906*		*103*	*50-150*			
Matrix Spike Dup (2100574-MSD1)	Source: P2J0469-03			Prepared & Analyzed: 10/17/02						
Diesel Range Organics	2.03	0.250	mg/l	2.36	ND	86.0	50-150	12.6	50	
Heavy Oil Range Hydrocarbons	1.63	0.500	"	1.42	ND	115	50-150	18.8	50	
Surr: 1-Chlorooctadecane	*0.0890*		"	*0.0906*		*98.2*	*50-150*			

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100636 - EPA 1664										
Blank (2100636-BLK1)				Prepared: 10/18/02 Analyzed: 10/21/02						
Oil & Grease	ND	5.00	mg/l							
LCS (2100636-BS1)				Prepared: 10/18/02 Analyzed: 10/21/02						
Oil & Grease	71.2	5.00	mg/l	80.0		89.0	73-109			
LCS Dup (2100636-BSD1)				Prepared: 10/18/02 Analyzed: 10/21/02						
Oil & Grease	70.3	5.00	mg/l	80.0		87.9	73-109	1.27	18	

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Total Metals per EPA 200 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100605 - EPA 200/3005										
Blank (2100605-BLK1)				Prepared: 10/17/02 Analyzed: 10/18/02						
Arsenic	ND	0.00100	mg/l							
Cadmium	ND	0.00100	"							
Chromium	ND	0.00100	"							
Copper	ND	0.00200	"							
Lead	ND	0.00100	"							
LCS (2100605-BS1)				Prepared: 10/17/02 Analyzed: 10/18/02						
Arsenic	0.0903	0.00100	mg/l	0.100		90.3	85-115			
Cadmium	0.0912	0.00100	"	0.100		91.2	85-115			
Chromium	0.0932	0.00100	"	0.100		93.2	85-115			
Copper	0.0905	0.00200	"	0.100		90.5	85-115			
Lead	0.0992	0.00100	"	0.100		99.2	85-115			
Duplicate (2100605-DUP1)	Source: P2J0350-01			Prepared: 10/17/02 Analyzed: 10/18/02						
Arsenic	0.0108	0.00100	mg/l		0.0103			4.74	20	
Cadmium	ND	0.00100	"		ND			3.64	20	
Chromium	0.0192	0.00100	"		0.0186			3.17	20	
Copper	0.0573	0.00200	"		0.0560			2.29	20	
Lead	0.00581	0.00100	"		0.00591			1.71	20	
Matrix Spike (2100605-MS1)	Source: P2J0350-01			Prepared: 10/17/02 Analyzed: 10/18/02						
Arsenic	0.110	0.00100	mg/l	0.100	0.0103	99.7	70-130			
Cadmium	0.0890	0.00100	"	0.100	ND	88.7	70-130			
Chromium	0.121	0.00100	"	0.100	0.0186	102	70-130			
Copper	0.149	0.00200	"	0.100	0.0560	93.0	70-130			
Lead	0.0894	0.00100	"	0.100	0.00591	83.5	70-130			
Matrix Spike (2100605-MS2)	Source: P2J0383-01			Prepared: 10/17/02 Analyzed: 10/18/02						
Arsenic	0.113	0.00841	mg/l	0.100	ND	109	70-130			R-02
Cadmium	0.0870	0.00100	"	0.100	0.00156	85.4	70-130			
Chromium	0.116	0.00100	"	0.100	0.00391	112	70-130			
Copper	0.131	0.00200	"	0.100	0.0295	102	70-130			
Lead	0.0837	0.00100	"	0.100	0.00126	82.4	70-130			

North Creek Analytical - Portland

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Purgeables per EPA Method 624 Modified - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100567 - EPA 5030B										
Blank (2100567-BLK1)				Prepared & Analyzed: 10/17/02						
Benzene	ND	2.00	ug/l							
Bromodichloromethane	ND	2.00	"							
Bromoform	ND	2.00	"							
Bromomethane	ND	10.0	"							
Carbon tetrachloride	ND	2.00	"							
Chlorobenzene	ND	2.00	"							
Chloroethane	ND	5.00	"							
Chloroform	ND	2.00	"							
Chloromethane	ND	5.00	"							
Dibromochloromethane	ND	2.00	"							
1,2-Dichlorobenzene	ND	2.00	"							
1,3-Dichlorobenzene	ND	2.00	"							
1,4-Dichlorobenzene	ND	2.00	"							
1,1-Dichloroethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
1,1-Dichloroethene	ND	2.00	"							
trans-1,2-Dichloroethene	ND	2.00	"							
1,2-Dichloropropane	ND	2.00	"							
cis-1,3-Dichloropropene	ND	2.00	"							
trans-1,3-Dichloropropene	ND	2.00	"							
Ethylbenzene	ND	2.00	"							
Methylene chloride	ND	5.00	"							
1,1,2,2-Tetrachloroethane	ND	2.00	"							
Tetrachloroethene	ND	2.00	"							
Toluene	ND	2.00	"							
1,1,1-Trichloroethane	ND	2.00	"							
1,1,2-Trichloroethane	ND	2.00	"							
Trichloroethene	ND	2.00	"							
Trichlorofluoromethane	ND	5.00	"							
Vinyl chloride	ND	2.00	"							
Surr: 4-BFB	*19.9*		"	*20.0*		*99.5*	*84.5-124*			
Surr: 1,2-DCA-d4	*20.9*		"	*20.0*		*104*	*77.9-123*			
Surr: Dibromofluoromethane	*20.9*		"	*20.0*		*104*	*83.5-119*			
Surr: Toluene-d8	*20.9*		"	*20.0*		*104*	*84.1-116*			

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Purgeables per EPA Method 624 Modified - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100567 - EPA 5030B										
LCS (2100567-BS1)				Prepared & Analyzed: 10/17/02						
Benzene	20.9	2.00	ug/l	20.0		104	80-120			
Chlorobenzene	20.8	2.00	"	20.0		104	75-130			
1,1-Dichloroethene	19.0	2.00	"	20.0		95.0	61-145			
Toluene	20.7	2.00	"	20.0		104	76-125			
Trichloroethene	19.4	2.00	"	20.0		97.0	71-120			
Surr: 4-BFB	*19.5*		"	*20.0*		*97.5*	*84.5-124*			
Surr: 1,2-DCA-d4	*19.4*		"	*20.0*		*97.0*	*77.9-123*			
Surr: Dibromofluoromethane	*19.4*		"	*20.0*		*97.0*	*83.5-119*			
Surr: Toluene-d8	*20.8*		"	*20.0*		*104*	*84.1-116*			
Matrix Spike (2100567-MS1)	Source: P2J0481-02			Prepared & Analyzed: 10/17/02						
Benzene	21.6	2.00	ug/l	20.0	ND	108	76-127			
Chlorobenzene	21.3	2.00	"	20.0	ND	106	75-130			
1,1-Dichloroethene	20.0	2.00	"	20.0	ND	100	61-145			
Toluene	21.2	2.00	"	20.0	ND	106	76-125			
Trichloroethene	18.4	2.00	"	20.0	ND	92.0	71-120			
Surr: 4-BFB	*21.1*		"	*20.0*		*106*	*84.5-124*			
Surr: 1,2-DCA-d4	*21.2*		"	*20.0*		*106*	*77.9-123*			
Surr: Dibromofluoromethane	*21.2*		"	*20.0*		*106*	*83.5-119*			
Surr: Toluene-d8	*22.8*		"	*20.0*		*114*	*84.1-116*			
Matrix Spike Dup (2100567-MSD1)	Source: P2J0481-02			Prepared & Analyzed: 10/17/02						
Benzene	21.8	2.00	ug/l	20.0	ND	109	76-127	0.922	25	
Chlorobenzene	21.5	2.00	"	20.0	ND	108	75-130	0.935	25	
1,1-Dichloroethene	20.0	2.00	"	20.0	ND	100	61-145	0.00	25	
Toluene	21.8	2.00	"	20.0	ND	109	76-125	2.79	25	
Trichloroethene	18.4	2.00	"	20.0	ND	92.0	71-120	0.00	25	
Surr: 4-BFB	*20.6*		"	*20.0*		*103*	*84.5-124*			
Surr: 1,2-DCA-d4	*20.9*		"	*20.0*		*104*	*77.9-123*			
Surr: Dibromofluoromethane	*21.3*		"	*20.0*		*106*	*83.5-119*			
Surr: Toluene-d8	*22.7*		"	*20.0*		*114*	*84.1-116*			

North Creek Analytical - Portland

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100591 - EPA 3510/600 Series										
Blank (2100591-BLK1)				Prepared: 10/17/02 Analyzed: 10/24/02						
Acenaphthene	ND	5.00	ug/l							
Acenaphthylene	ND	5.00	"							
Anthracene	ND	5.00	"							
Benzidine	ND	50.0	"							
Benzo (a) anthracene	ND	5.00	"							
Benzo (a) pyrene	ND	5.00	"							
Benzo (b) fluoranthene	ND	5.00	"							
Benzo (ghi) perylene	ND	5.00	"							
Benzo (k) fluoranthene	ND	5.00	"							
4-Bromophenyl phenyl ether	ND	5.00	"							
Butyl benzyl phthalate	ND	5.00	"							
4-Chloro-3-methylphenol	ND	5.00	"							
Bis(2-chloroethoxy)methane	ND	10.0	"							
Bis(2-chloroethyl)ether	ND	5.00	"							
Bis(2-chloroisopropyl)ether	ND	10.0	"							
2-Chloronaphthalene	ND	5.00	"							
2-Chlorophenol	ND	5.00	"							
4-Chlorophenyl phenyl ether	ND	5.00	"							
Chrysene	ND	5.00	"							
Di-n-butyl phthalate	ND	5.00	"							
Di-n-octyl phthalate	ND	5.00	"							
Dibenzo (a,h) anthracene	ND	5.00	"							
1,2 Diphenylhydrazine (as Azobenzene)	ND	5.00	"							
1,2-Dichlorobenzene	ND	5.00	"							
1,3-Dichlorobenzene	ND	5.00	"							
1,4-Dichlorobenzene	ND	5.00	"							
3,3'-Dichlorobenzidine	ND	5.00	"							
2,4-Dichlorophenol	ND	5.00	"							
Diethyl phthalate	ND	5.00	"							
2,4-Dimethylphenol	ND	10.0	"							
Dimethyl phthalate	ND	5.00	"							
4,6-Dinitro-2-methylphenol	ND	10.0	"							
2,4-Dinitrophenol	ND	25.0	"							
2,4-Dinitrotoluene	ND	5.00	"							
2,6-Dinitrotoluene	ND	5.00	"							
Bis(2-ethylhexyl)phthalate	ND	10.0	"							

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100591 - EPA 3510/600 Series										
Blank (2100591-BLK1)				Prepared: 10/17/02 Analyzed: 10/24/02						
Fluoranthene	ND	5.00	ug/l							
Fluorene	ND	5.00	"							
Hexachlorobenzene	ND	5.00	"							
Hexachlorobutadiene	ND	10.0	"							
Hexachlorocyclopentadiene	ND	10.0	"							
Hexachloroethane	ND	10.0	"							
Indeno (1,2,3-cd) pyrene	ND	5.00	"							
Isophorone	ND	5.00	"							
Naphthalene	ND	5.00	"							
Nitrobenzene	ND	5.00	"							
2-Nitrophenol	ND	5.00	"							
4-Nitrophenol	ND	25.0	"							
N-Nitrosodimethylamine	ND	5.00	"							
N-Nitrosodi-n-propylamine	ND	10.0	"							
N-Nitrosodiphenylamine	ND	5.00	"							
Pentachlorophenol	ND	10.0	"							
Phenanthrene	ND	5.00	"							
Phenol	ND	5.00	"							
Pyrene	ND	5.00	"							
1,2,4-Trichlorobenzene	ND	5.00	"							
2,4,6-Trichlorophenol	ND	5.00	"							
Surr: 2-Fluorobiphenyl	*56.8*		"	*75.0*		*75.7*	*26-135*			
Surr: 2-Fluorophenol	*73.2*		"	*150*		*48.8*	*6-124*			
Surr: Nitrobenzene-d5	*64.5*		"	*75.0*		*86.0*	*23-147*			
Surr: Phenol-d6	*55.7*		"	*150*		*37.1*	*11-130*			
Surr: p-Terphenyl-d14	*67.6*		"	*75.0*		*90.1*	*38-149*			
Surr: 2,4,6-Tribromophenol	*116*		"	*150*		*77.3*	*19-126*			

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100591 - EPA 3510/600 Series										
LCS (2100591-BS1)				Prepared: 10/17/02 Analyzed: 10/24/02						
Acenaphthene	63.0	5.00	ug/l	75.0		84.0	40-110			
4-Chloro-3-methylphenol	109	5.00	"	150		72.7	40-110			
2-Chlorophenol	105	5.00	"	150		70.0	40-110			
1,4-Dichlorobenzene	50.8	5.00	"	75.0		67.7	20-90			
2,4-Dinitrotoluene	66.7	5.00	"	75.0		88.9	50-110			
4-Nitrophenol	55.2	25.0	"	150		36.8	15-100			
N-Nitrosodi-n-propylamine	*62.9*	*10.0*	"	*75.0*		*83.9*	*40-110*			
Pentachlorophenol	110	10.0	"	150		73.3	30-120			
Phenol	58.8	5.00	"	150		39.2	15-110			
Pyrene	69.9	5.00	"	75.0		93.2	40-110			
1,2,4-Trichlorobenzene	52.1	5.00	"	75.0		69.5	25-100			
Surr: 2-Fluorobiphenyl	*59.5*		"	*75.0*		*79.3*	*26-135*			
Surr: 2-Fluorophenol	*75.1*		"	*150*		*50.1*	*6-124*			
Surr: Nitrobenzene-d5	*67.8*		"	*75.0*		*90.4*	*23-147*			
Surr: Phenol-d6	*57.5*		"	*150*		*38.3*	*11-130*			
Surr: p-Terphenyl-d14	*71.0*		"	*75.0*		*94.7*	*38-149*			
Surr: 2,4,6-Tribromophenol	*122*		"	*150*		*81.3*	*19-126*			
LCS Dup (2100591-BSD1)				Prepared: 10/17/02 Analyzed: 10/24/02						
Acenaphthene	59.5	5.00	ug/l	75.0		79.3	40-110	5.71	36	
4-Chloro-3-methylphenol	101	5.00	"	150		67.3	40-110	7.62	43	
2-Chlorophenol	102	5.00	"	150		68.0	40-110	2.90	38	
1,4-Dichlorobenzene	54.6	5.00	"	75.0		72.8	20-90	7.21	43	
2,4-Dinitrotoluene	60.1	5.00	"	75.0		80.1	50-110	10.4	31	
4-Nitrophenol	47.0	25.0	"	150		31.3	15-100	16.0	36	
N-Nitrosodi-n-propylamine	57.8	10.0	"	75.0		77.1	40-110	8.45	37	
Pentachlorophenol	98.3	10.0	"	150		65.5	30-120	11.2	40	
Phenol	54.9	5.00	"	150		36.6	15-110	6.86	36	
Pyrene	64.9	5.00	"	75.0		86.5	40-110	7.42	31	
1,2,4-Trichlorobenzene	55.1	5.00	"	75.0		73.5	25-100	5.60	42	
Surr: 2-Fluorobiphenyl	*55.5*		"	*75.0*		*74.0*	*26-135*			
Surr: 2-Fluorophenol	*72.9*		"	*150*		*48.6*	*6-124*			
Surr: Nitrobenzene-d5	*64.3*		"	*75.0*		*85.7*	*23-147*			
Surr: Phenol-d6	*53.2*		"	*150*		*35.5*	*11-130*			
Surr: p-Terphenyl-d14	*65.4*		"	*75.0*		*87.2*	*38-149*			
Surr: 2,4,6-Tribromophenol	*112*		"	*150*		*74.7*	*19-126*			

North Creek Analytical - Portland

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 2100591 - EPA 3510/600 Series

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/30/02 10:06

Notes and Definitions

A-01	The detected hydrocarbons appear to be due to weathered gas, weathered diesel, and biogenic interference.
R-02	The reporting limit for this analyte was raised due to the high analyte concentration present in the sample.
S-08	Surrogate recovery is above control limits. Since no analytes were detected in the sample, the quality of the data has not been affected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

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Environmental Laboratory Network
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CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT

CHEVRON INFORMATION

Facility Number: 100-1868
Site Address: Willbridge Light Products
City, State, ZIP: Portland, OR
Service Code: ☐ Site Assesment
Service Order: ☑ Remediation
Cost Element: 75100100 ☐ O & M
Chevron Project Manager: Gerald O'Regan ☐ GWM

CONSULTANT INFORMATION

Name: KHM Environmental Project# B17-05H
Address: 7150 SW Hampton, #220
Tigard, OR 97223
Phone: 503-639-8098 Fax: 503-639-7619
Project Manager: Scott Miller Airbill#:
Sample Collection by: NWH

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☐ 10 Business Days STD
☐ 3 Day Air Samples (Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W.S.O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	OC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Total Metals EPA 200 Series As Cd, Cr, Cu, Pb	HEM 0.1 Grease 1664	VOCs EPA 624	SVOCs EPA 625		NCA SAMPLE NUMBER
1. Pre	10-15-02	W	4				X		X														
2. Mid	10-15-02	W	6															X	X	X	X		
3. Post	10-15-02	W	6															X					← Hold Please
4.																							
5.																							
6.																							
7.																							
8.																							
9.																							
10.																							

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	KHM	10/16/02 @10:00	[signature]	NCA	10/16/02 @10:00
2.	[signature]			Enca Dalton	NCA	10/16/02 1020
3.						0.9°C

Additional Comments: Send Preliminary Results To smiller@KHM1.com Nhemphill@KHM1.com Thnx

Page 1 of 1 Chev CoC. Rev. 3.3. 2/99

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FILE

KHM ENVIRONMENTAL MANAGEMENT

7150 SW Hampton, Suite 220
Tigard, Oregon 97223
Phone (503) 639-8098
Fax (503) 639-7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	December 12, 2002
Re:	Discharge Monitoring Report November 2002 Tosco-Chevron Remediation Site	**Project #:**	B17-05H Permit No. 500.015

Mr. DeBerry,

Water samples were collected by KHM Environmental Management on November 19, 2002 (Grab and Composite). Samples were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (APHA/EPA Method), volatile organic compounds (EPA 624), semi-volatile organic compounds (EPA 625), and total metals (EPA 200). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the second compliance self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
KHM Environmental Management, Inc.

R Scott Miller

cc: Mr. Martin Cramer, Phillips Petroleum Company

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SECOND FINAL COMPLIANCE SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: December 15, 2002

SAMPLING PERIOD: November 2002

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
11/19/2002	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	APHA/EPA	Non-Detect mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA	NA mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA	NA mg/L	5.00	500 mg/L	N/A	Not analyzed
pH		6.7 SU		5.0 - 11.5	N/A	
Volatile Organic Compounds(EPA 624)	EPA 624	ND mg/L	0.00200-0.0100			
Semivolatile Organic Compounds (EPA 625)	EPA 625	ND mg/L	0.00500-0.0250		N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
11/19/2002	1A	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
Arsenic (Total)	EPA 200	0.0146 mg/L	0.00100	0.2 mg/L	N/A	
Cadmium (Total)	EPA 200	ND mg/L	0.00100	0.7 mg/L	N/A	
Chromium (Total)	EPA 200	ND mg/L	0.00100	5.0 mg/L	N/A	
Copper (Total)	EPA 200	0.00324 mg/L	0.00200	3.7 mg/L	N/A	
Lead (Total)	EPA 200	0.00227 mg/L	0.00100	0.7 mg/L	N/A	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 12/11/02

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- Chain of Custody form
- Analytical Results with Method Detection Limits (MDL)
- QA/QC Results, if applicable
- Signed Signatory Certification Statement (Printed on bottom of SMR)
- Completed Self Monitoring Report form

Whenever appropriate:

- Hand Composite Sample form
- Copies of pH charts showing the violation
- Calculations of monthly average
- Any other required reports

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Eric DeBerry

www.ncalabs.com

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P2K0645-01	Water	11/19/02 12:00	11/20/02 18:13
Mid	P2K0645-02	Water	11/19/02 12:00	11/20/02 18:13
Post	P2K0645-03	Water	11/19/02 12:00	11/20/02 18:13

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P2K0645-01RE1) Water					Sampled: 11/19/02 Received: 11/20/02				
Benzene	**1.31**	0.500	ug/l	1	NW-G, 8021B	11/26/02	11/27/02	2110907	
Toluene	**3.33**	0.500	"	"	"	"	"	"	
Ethylbenzene	**3.74**	0.500	"	"	"	"	"	"	
Xylenes (total)	**18.2**	1.00	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	**712**	80.0	"	"	"	"	"	"	
Surr: 4-BFB (FID)	*114 %*	*50-150*							
Surr: 4-BFB (PID)	*89.4 %*	*75-120*							

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P2K0645-01) Water					Sampled: 11/19/02 Received: 11/20/02				
Diesel Range Organics	**4.27**	0.250	mg/l	1	NWTPH-Dx	11/25/02	11/25/02	2110861	A-01
Heavy Oil Range Hydrocarbons	ND	0.500	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	*79.0 %*	*50-150*							

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2K0645-02) Water					Sampled: 11/19/02 Received: 11/20/02				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	12/03/02	12/04/02	2120062	

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Total Metals per EPA 200 Series Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2K0645-02) Water					Sampled: 11/19/02 Received: 11/20/02				
Arsenic	**0.0146**	0.00100	mg/l	1	EPA 200.8	12/02/02	12/04/02	2120043	
Cadmium	ND	0.00100	"	"	"	"	"	"	
Chromium	ND	0.00100	"	"	"	"	"	"	
Copper	**0.00324**	0.00200	"	"	"	"	"	"	
Lead	**0.00227**	0.00100	"	"	"	"	"	"	

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North Creek Analytical, Inc.
Environmental Laboratory Network

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Purgeables per EPA Method 624 Modified

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2K0645-02) Water					Sampled: 11/19/02 Received: 11/20/02				
Benzene	ND	2.00	ug/l	1	EPA 624	11/22/02	11/22/02	2110789	
Bromodichloromethane	ND	2.00	"	"	"	"	"	"	
Bromoform	ND	2.00	"	"	"	"	"	"	
Bromomethane	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.00	"	"	"	"	"	"	
Chlorobenzene	ND	2.00	"	"	"	"	"	"	
Chloroethane	ND	5.00	"	"	"	"	"	"	
Chloroform	ND	2.00	"	"	"	"	"	"	
Chloromethane	ND	5.00	"	"	"	"	"	"	
Dibromochloromethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.00	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.00	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.00	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.00	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.00	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.00	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.00	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.00	"	"	"	"	"	"	
Ethylbenzene	ND	2.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.00	"	"	"	"	"	"	
Tetrachloroethene	ND	2.00	"	"	"	"	"	"	
Toluene	ND	2.00	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.00	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.00	"	"	"	"	"	"	
Trichloroethene	ND	2.00	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.00	"	"	"	"	"	"	
Vinyl chloride	ND	2.00	"	"	"	"	"	"	
Surr: 4-BFB	*105 %*	*84.5-124*							
Surr: 1,2-DCA-d4	*106 %*	*77.9-123*							
Surr: Dibromofluoromethane	*104 %*	*83.5-119*							
Surr: Toluene-d8	*100 %*	*84.1-116*							

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2K0645-02) Water					Sampled: 11/19/02 Received: 11/20/02				
Acenaphthene	ND	5.00	ug/l	1	EPA 625	11/26/02	12/04/02	2110912	
Acenaphthylene	ND	5.00	"	"	"	"	"	"	
Anthracene	ND	5.00	"	"	"	"	"	"	
Benzidine	ND	50.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.00	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.00	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	5.00	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.00	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.00	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.00	"	"	"	"	"	"	
2-Chlorophenol	ND	5.00	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.00	"	"	"	"	"	"	
Chrysene	ND	5.00	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.00	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	5.00	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	5.00	"	"	"	"	"	"	
1,2 Diphenylhydrazine (as Azobenzene)	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	5.00	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.00	"	"	"	"	"	"	
Diethyl phthalate	ND	5.00	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.00	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	25.0	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	5.00	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	5.00	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10.0	"	"	"	"	"	"	
Fluoranthene	ND	5.00	"	"	"	"	"	"	
Fluorene	ND	5.00	"	"	"	"	"	"	

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P2K0645-02) Water					Sampled: 11/19/02 Received: 11/20/02				
Hexachlorobenzene	ND	5.00	ug/l	1	EPA 625	11/26/02	12/04/02	2110912	
Hexachlorobutadiene	ND	10.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10.0	"	"	"	"	"	"	
Hexachloroethane	ND	10.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.00	"	"	"	"	"	"	
Isophorone	ND	5.00	"	"	"	"	"	"	
Naphthalene	**10.3**	5.00	"	"	"	"	"	"	
Nitrobenzene	ND	5.00	"	"	"	"	"	"	
2-Nitrophenol	ND	5.00	"	"	"	"	"	"	
4-Nitrophenol	ND	25.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.00	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.00	"	"	"	"	"	"	
Pentachlorophenol	ND	10.0	"	"	"	"	"	"	
Phenanthrene	ND	5.00	"	"	"	"	"	"	
Phenol	ND	5.00	"	"	"	"	"	"	
Pyrene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	5.00	"	"	"	"	"	"	
Surr: 2-Fluorobiphenyl	*77.3 %*	*26-135*							
Surr: 2-Fluorophenol	*29.5 %*	*6-124*							
Surr: Nitrobenzene-d5	*78.2 %*	*23-147*							
Surr: Phenol-d6	*25.1 %*	*11-130*							
Surr: p-Terphenyl-d14	*82.8 %*	*38-149*							
Surr: 2,4,6-Tribromophenol	*74.8 %*	*19-126*							

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P2K0645-03) Water					Sampled: 11/19/02 Received: 11/20/02				
Acenaphthene	ND	5.00	ug/l	1	EPA 625	11/26/02	12/04/02	2110912	
Acenaphthylene	ND	5.00	"	"	"	"	"	"	
Anthracene	ND	5.00	"	"	"	"	"	"	
Benzidine	ND	50.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.00	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.00	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.00	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.00	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.00	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.00	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	5.00	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.00	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	10.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.00	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	10.0	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.00	"	"	"	"	"	"	
2-Chlorophenol	ND	5.00	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.00	"	"	"	"	"	"	
Chrysene	ND	5.00	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.00	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	5.00	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	5.00	"	"	"	"	"	"	
1,2 Diphenylhydrazine (as Azobenzene)	ND	5.00	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.00	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	5.00	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.00	"	"	"	"	"	"	
Diethyl phthalate	ND	5.00	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	10.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.00	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	25.0	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	5.00	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	5.00	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10.0	"	"	"	"	"	"	
Fluoranthene	ND	5.00	"	"	"	"	"	"	
Fluorene	ND	5.00	"	"	"	"	"	"	

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7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P2K0645-03) Water					Sampled: 11/19/02 Received: 11/20/02				
Hexachlorobenzene	ND	5.00	ug/l	1	EPA 625	11/26/02	12/04/02	2110912	
Hexachlorobutadiene	ND	10.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10.0	"	"	"	"	"	"	
Hexachloroethane	ND	10.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.00	"	"	"	"	"	"	
Isophorone	ND	5.00	"	"	"	"	"	"	
Naphthalene	ND	5.00	"	"	"	"	"	"	
Nitrobenzene	ND	5.00	"	"	"	"	"	"	
2-Nitrophenol	ND	5.00	"	"	"	"	"	"	
4-Nitrophenol	ND	25.0	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.00	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	10.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.00	"	"	"	"	"	"	
Pentachlorophenol	ND	10.0	"	"	"	"	"	"	
Phenanthrene	ND	5.00	"	"	"	"	"	"	
Phenol	ND	5.00	"	"	"	"	"	"	
Pyrene	ND	5.00	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.00	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	5.00	"	"	"	"	"	"	
Surr: 2-Fluorobiphenyl	*55.6 %*	*26-135*							
Surr: 2-Fluorophenol	*21.5 %*	*6-124*							
Surr: Nitrobenzene-d5	*57.0 %*	*23-147*							
Surr: Phenol-d6	*17.6 %*	*11-130*							
Surr: p-Terphenyl-d14	*70.4 %*	*38-149*							
Surr: 2,4,6-Tribromophenol	*63.7 %*	*19-126*							

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110841 - EPA 5030B										
Blank (2110841-BLK1)				Prepared & Analyzed: 11/25/02						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Gasoline Range Hydrocarbons	ND	80.0	"							
Surr: 4-BFB (FID)	*44.4*		"	*50.0*		*88.8*	*50-150*			
Surr: 4-BFB (PID)	*37.9*		"	*50.0*		*75.8*	*75-120*			
LCS (2110841-BS1)				Prepared & Analyzed: 11/25/02						
Gasoline Range Hydrocarbons	925	80.0	ug/l	1000		92.5	70-130			
Surr: 4-BFB (FID)	*47.1*		"	*50.0*		*94.2*	*50-150*			
LCS (2110841-BS2)				Prepared & Analyzed: 11/25/02						
Benzene	19.7	0.500	ug/l	20.0		98.5	70-130			
Toluene	19.7	0.500	"	20.0		98.5	70-130			
Ethylbenzene	18.3	0.500	"	20.0		91.5	70-130			
Xylenes (total)	55.9	1.00	"	60.0		93.2	70-130			
Surr: 4-BFB (PID)	*39.2*		"	*50.0*		*78.4*	*75-120*			
Duplicate (2110841-DUP1)	**Source: P2K0777-01**			Prepared: 11/25/02 Analyzed: 11/26/02						
Gasoline Range Hydrocarbons	817	80.0	ug/l		1060			25.9	50	
Surr: 4-BFB (FID)	*55.9*		"	*50.0*		*112*	*50-150*			
Batch 2110907 - EPA 5030B										
Blank (2110907-BLK1)				Prepared & Analyzed: 11/26/02						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Gasoline Range Hydrocarbons	ND	80.0	"							
Surr: 4-BFB (FID)	*48.8*		"	*50.0*		*97.6*	*50-150*			
Surr: 4-BFB (PID)	*41.7*		"	*50.0*		*83.4*	*75-120*			

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110907 - EPA 5030B										
LCS (2110907-BS1)				Prepared & Analyzed: 11/26/02						
Gasoline Range Hydrocarbons	1390	80.0	ug/l	1250		111	70-130			
Surr: 4-BFB (FID)	*56.8*		"	*50.0*		*114*	*50-150*			
LCS (2110907-BS2)				Prepared & Analyzed: 11/26/02						
Benzene	17.2	0.500	ug/l	20.0		86.0	70-130			
Toluene	19.8	0.500	"	20.0		99.0	70-130			
Ethylbenzene	18.0	0.500	"	20.0		90.0	70-130			
Xylenes (total)	56.3	1.00	"	60.0		93.8	70-130			
Surr: 4-BFB (PID)	*44.2*		"	*50.0*		*88.4*	*75-120*			
Duplicate (2110907-DUP1)		**Source: P2K0809-01**		Prepared & Analyzed: 11/26/02						
Gasoline Range Hydrocarbons	271	80.0	ug/l		304			11.5	50	
Surr: 4-BFB (FID)	*55.2*		"	*50.0*		*110*	*50-150*			
Duplicate (2110907-DUP2)		**Source: P2K0815-01**		Prepared & Analyzed: 11/26/02						
Gasoline Range Hydrocarbons	ND	80.0	ug/l		ND				50	
Surr: 4-BFB (FID)	*52.4*		"	*50.0*		*105*	*50-150*			
Matrix Spike (2110907-MS1)		**Source: P2K0746-01RE1**		Prepared & Analyzed: 11/26/02						
Benzene	196	2.50	ug/l	100	110	86.0	70-130			
Toluene	95.1	2.50	"	100	3.40	91.7	70-130			
Ethylbenzene	123	2.50	"	100	31.6	91.4	70-130			
Xylenes (total)	296	5.00	"	300	19.3	92.2	70-130			
Surr: 4-BFB (PID)	*46.7*		"	*50.0*		*93.4*	*75-120*			
Matrix Spike Dup (2110907-MSD1)		**Source: P2K0746-01RE1**		Prepared & Analyzed: 11/26/02						
Benzene	204	2.50	ug/l	100	110	94.0	70-130	4.00	15	
Toluene	96.5	2.50	"	100	3.40	93.1	70-130	1.46	15	
Ethylbenzene	126	2.50	"	100	31.6	94.4	70-130	2.41	15	
Xylenes (total)	300	5.00	"	300	19.3	93.6	70-130	1.34	15	
Surr: 4-BFB (PID)	*47.0*		"	*50.0*		*94.0*	*75-120*			

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110861 - EPA 3510 Fuels										
Blank (2110861-BLK1)				Prepared & Analyzed: 11/25/02						
Diesel Range Organics	ND	0.250	mg/l							
Heavy Oil Range Hydrocarbons	ND	0.500	"							
Surr: 1-Chlorooctadecane	*0.102*		"	*0.0960*		*106*	*50-150*			
LCS (2110861-BS1)				Prepared & Analyzed: 11/25/02						
Diesel Range Organics	2.45	0.250	mg/l	2.50		98.0	50-150			
Heavy Oil Range Hydrocarbons	1.46	0.500	"	1.50		97.3	50-150			
Surr: 1-Chlorooctadecane	*0.125*		"	*0.0960*		*130*	*50-150*			
LCS Dup (2110861-BSD1)				Prepared & Analyzed: 11/25/02						
Diesel Range Organics	2.45	0.250	mg/l	2.50		98.0	50-150	0.00	50	
Heavy Oil Range Hydrocarbons	1.49	0.500	"	1.50		99.3	50-150	2.03	50	
Surr: 1-Chlorooctadecane	*0.127*		"	*0.0960*		*132*	*50-150*			

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2120062 - EPA 1664										
Blank (2120062-BLK1)				Prepared: 12/03/02 Analyzed: 12/04/02						
Oil & Grease	ND	5.00	mg/l							
LCS (2120062-BS1)				Prepared: 12/03/02 Analyzed: 12/04/02						
Oil & Grease	63.7	5.00	mg/l	80.0		79.6	73-109			
LCS Dup (2120062-BSD1)				Prepared: 12/03/02 Analyzed: 12/04/02						
Oil & Grease	69.6	5.00	mg/l	80.0		87.0	73-109	8.85	18	

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KHM Environmental	Project: Tosco #0608, Portland, OR	
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Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Total Metals per EPA 200 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2120043 - EPA 200/3005										
Blank (2120043-BLK1)				Prepared: 12/02/02 Analyzed: 12/04/02						
Arsenic	ND	0.00100	mg/l							
Cadmium	ND	0.00100	"							
Chromium	ND	0.00100	"							
Copper	ND	0.00200	"							
Lead	ND	0.00100	"							
LCS (2120043-BS1)				Prepared: 12/02/02 Analyzed: 12/04/02						
Arsenic	0.0940	0.00100	mg/l	0.100		94.0	85-115			
Cadmium	0.102	0.00100	"	0.100		102	85-115			
Chromium	0.0915	0.00100	"	0.100		91.5	85-115			
Copper	0.0927	0.00200	"	0.100		92.7	85-115			
Lead	0.102	0.00100	"	0.100		102	85-115			
Duplicate (2120043-DUP1)		**Source: P2K0645-02**		Prepared: 12/02/02 Analyzed: 12/04/02						
Arsenic	0.0145	0.00100	mg/l		0.0146			0.687	20	
Cadmium	ND	0.00100	"		ND				20	
Chromium	ND	0.00100	"		ND				20	
Copper	0.00339	0.00200	"		0.00324			4.52	20	
Lead	0.00224	0.00100	"		0.00227			1.33	20	
Matrix Spike (2120043-MS1)		**Source: P2K0645-02**		Prepared: 12/02/02 Analyzed: 12/04/02						
Arsenic	0.127	0.00814	mg/l	0.100	0.0146	112	70-130			R-02
Cadmium	0.104	0.00100	"	0.100	ND	104	70-130			
Chromium	0.0976	0.00100	"	0.100	ND	97.6	70-130			
Copper	0.0997	0.00200	"	0.100	0.00324	96.5	70-130			
Lead	0.100	0.00100	"	0.100	0.00227	97.7	70-130			
Matrix Spike (2120043-MS2)		**Source: P2K0623-08**		Prepared: 12/02/02 Analyzed: 12/04/02						
Arsenic	0.0993	0.00100	mg/l	0.100	ND	99.3	70-130			
Cadmium	0.105	0.00100	"	0.100	ND	105	70-130			
Chromium	0.0942	0.00100	"	0.100	ND	93.2	70-130			
Copper	0.0957	0.00200	"	0.100	ND	94.5	70-130			
Lead	0.102	0.00100	"	0.100	ND	102	70-130			

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Purgeables per EPA Method 624 Modified - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110789 - EPA 5030B										
Blank (2110789-BLK1)				Prepared & Analyzed: 11/22/02						
Benzene	ND	2.00	ug/l							
Bromodichloromethane	ND	2.00	"							
Bromoform	ND	2.00	"							
Bromomethane	ND	10.0	"							
Carbon tetrachloride	ND	2.00	"							
Chlorobenzene	ND	2.00	"							
Chloroethane	ND	5.00	"							
Chloroform	ND	2.00	"							
Chloromethane	ND	5.00	"							
Dibromochloromethane	ND	2.00	"							
1,2-Dichlorobenzene	ND	2.00	"							
1,3-Dichlorobenzene	ND	2.00	"							
1,4-Dichlorobenzene	ND	2.00	"							
1,1-Dichloroethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
1,1-Dichloroethene	ND	2.00	"							
trans-1,2-Dichloroethene	ND	2.00	"							
1,2-Dichloropropane	ND	2.00	"							
cis-1,3-Dichloropropene	ND	2.00	"							
trans-1,3-Dichloropropene	ND	2.00	"							
Ethylbenzene	ND	2.00	"							
Methylene chloride	ND	5.00	"							
1,1,2,2-Tetrachloroethane	ND	2.00	"							
Tetrachloroethene	ND	2.00	"							
Toluene	ND	2.00	"							
1,1,1-Trichloroethane	ND	2.00	"							
1,1,2-Trichloroethane	ND	2.00	"							
Trichloroethene	ND	2.00	"							
Trichlorofluoromethane	ND	5.00	"							
Vinyl chloride	ND	2.00	"							
Surr: 4-BFB	*19.6*		"	*20.0*		*98.0*	*84.5-124*			
Surr: 1,2-DCA-d4	*20.7*		"	*20.0*		*104*	*77.9-123*			
Surr: Dibromofluoromethane	*20.3*		"	*20.0*		*102*	*83.5-119*			
Surr: Toluene-d8	*19.5*		"	*20.0*		*97.5*	*84.1-116*			

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Purgeables per EPA Method 624 Modified - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110789 - EPA 5030B										
LCS (2110789-BS1)				Prepared & Analyzed: 11/22/02						
Benzene	20.4	2.00	ug/l	20.0		102	80-120			
Chlorobenzene	20.2	2.00	"	20.0		101	80-120			
1,1-Dichloroethene	21.6	2.00	"	20.0		108	80-120			
Toluene	20.4	2.00	"	20.0		102	80-120			
Trichloroethene	21.5	2.00	"	20.0		108	80-124			
Surr: 4-BFB	*22.1*		"	*20.0*		*110*	*84.5-124*			
Surr: 1,2-DCA-d4	*21.1*		"	*20.0*		*106*	*77.9-123*			
Surr: Dibromofluoromethane	*21.1*		"	*20.0*		*106*	*83.5-119*			
Surr: Toluene-d8	*20.6*		"	*20.0*		*103*	*84.1-116*			
Matrix Spike (2110789-MS1)	Source: P2K0648-01			Prepared & Analyzed: 11/22/02						
Benzene	20.7	2.00	ug/l	20.0	ND	104	80-124			
Chlorobenzene	20.8	2.00	"	20.0	ND	104	72.9-134			
1,1-Dichloroethene	20.8	2.00	"	20.0	ND	104	79.3-127			
Toluene	21.1	2.00	"	20.0	ND	106	79.7-131			
Trichloroethene	21.3	2.00	"	20.0	ND	106	68.4-130			
Surr: 4-BFB	*21.3*		"	*20.0*		*106*	*84.5-124*			
Surr: 1,2-DCA-d4	*21.2*		"	*20.0*		*106*	*77.9-123*			
Surr: Dibromofluoromethane	*21.6*		"	*20.0*		*108*	*83.5-119*			
Surr: Toluene-d8	*20.5*		"	*20.0*		*102*	*84.1-116*			
Matrix Spike Dup (2110789-MSD1)	Source: P2K0648-01			Prepared & Analyzed: 11/22/02						
Benzene	20.2	2.00	ug/l	20.0	ND	101	80-124	2.44	25	
Chlorobenzene	20.4	2.00	"	20.0	ND	102	72.9-134	1.94	25	
1,1-Dichloroethene	20.4	2.00	"	20.0	ND	102	79.3-127	1.94	25	
Toluene	20.8	2.00	"	20.0	ND	104	79.7-131	1.43	25	
Trichloroethene	20.3	2.00	"	20.0	ND	102	68.4-130	4.81	25	
Surr: 4-BFB	*21.6*		"	*20.0*		*108*	*84.5-124*			
Surr: 1,2-DCA-d4	*20.9*		"	*20.0*		*104*	*77.9-123*			
Surr: Dibromofluoromethane	*21.2*		"	*20.0*		*106*	*83.5-119*			
Surr: Toluene-d8	*20.6*		"	*20.0*		*103*	*84.1-116*			

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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110912 - EPA 3510/600 Series										
Blank (2110912-BLK1)				Prepared: 11/26/02 Analyzed: 12/04/02						
Acenaphthene	ND	5.00	ug/l							
Acenaphthylene	ND	5.00	"							
Anthracene	ND	5.00	"							
Benzidine	ND	50.0	"							
Benzo (a) anthracene	ND	5.00	"							
Benzo (a) pyrene	ND	5.00	"							
Benzo (b) fluoranthene	ND	5.00	"							
Benzo (ghi) perylene	ND	5.00	"							
Benzo (k) fluoranthene	ND	5.00	"							
4-Bromophenyl phenyl ether	ND	5.00	"							
Butyl benzyl phthalate	ND	5.00	"							
4-Chloro-3-methylphenol	ND	5.00	"							
Bis(2-chloroethoxy)methane	ND	10.0	"							
Bis(2-chloroethyl)ether	ND	5.00	"							
Bis(2-chloroisopropyl)ether	ND	10.0	"							
2-Chloronaphthalene	ND	5.00	"							
2-Chlorophenol	ND	5.00	"							
4-Chlorophenyl phenyl ether	ND	5.00	"							
Chrysene	ND	5.00	"							
Di-n-butyl phthalate	ND	5.00	"							
Di-n-octyl phthalate	ND	5.00	"							
Dibenzo (a,h) anthracene	ND	5.00	"							
1,2 Diphenylhydrazine (as Azobenzene)	ND	5.00	"							
1,2-Dichlorobenzene	ND	5.00	"							
1,3-Dichlorobenzene	ND	5.00	"							
1,4-Dichlorobenzene	ND	5.00	"							
3,3'-Dichlorobenzidine	ND	5.00	"							
2,4-Dichlorophenol	ND	5.00	"							
Diethyl phthalate	ND	5.00	"							
2,4-Dimethylphenol	ND	10.0	"							
Dimethyl phthalate	ND	5.00	"							
4,6-Dinitro-2-methylphenol	ND	10.0	"							
2,4-Dinitrophenol	ND	25.0	"							
2,4-Dinitrotoluene	ND	5.00	"							
2,6-Dinitrotoluene	ND	5.00	"							
Bis(2-ethylhexyl)phthalate	ND	10.0	"							

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110912 - EPA 3510/600 Series										
Blank (2110912-BLK1)				Prepared: 11/26/02 Analyzed: 12/04/02						
Fluoranthene	ND	5.00	ug/l							
Fluorene	ND	5.00	"							
Hexachlorobenzene	ND	5.00	"							
Hexachlorobutadiene	ND	10.0	"							
Hexachlorocyclopentadiene	ND	10.0	"							
Hexachloroethane	ND	10.0	"							
Indeno (1,2,3-cd) pyrene	ND	5.00	"							
Isophorone	ND	5.00	"							
Naphthalene	ND	5.00	"							
Nitrobenzene	ND	5.00	"							
2-Nitrophenol	ND	5.00	"							
4-Nitrophenol	ND	25.0	"							
N-Nitrosodimethylamine	ND	5.00	"							
N-Nitrosodi-n-propylamine	ND	10.0	"							
N-Nitrosodiphenylamine	ND	5.00	"							
Pentachlorophenol	ND	10.0	"							
Phenanthrene	ND	5.00	"							
Phenol	ND	5.00	"							
Pyrene	ND	5.00	"							
1,2,4-Trichlorobenzene	ND	5.00	"							
2,4,6-Trichlorophenol	ND	5.00	"							
Surr: 2-Fluorobiphenyl	*51.9*		"	*75.0*		*69.2*	*26-135*			
Surr: 2-Fluorophenol	*53.4*		"	*150*		*35.6*	*6-124*			
Surr: Nitrobenzene-d5	*62.7*		"	*75.0*		*83.6*	*23-147*			
Surr: Phenol-d6	*48.6*		"	*150*		*32.4*	*11-130*			
Surr: p-Terphenyl-d14	*59.2*		"	*75.0*		*78.9*	*38-149*			
Surr: 2,4,6-Tribromophenol	*98.4*		"	*150*		*65.6*	*19-126*			

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2110912 - EPA 3510/600 Series										
LCS (2110912-BS1)				Prepared: 11/26/02 Analyzed: 12/04/02						
Acenaphthene	58.1	5.00	ug/l	75.0		77.5	40-110			
4-Chloro-3-methylphenol	77.5	5.00	"	150		51.7	40-110			
2-Chlorophenol	80.7	5.00	"	150		53.8	40-110			
1,4-Dichlorobenzene	37.6	5.00	"	75.0		50.1	20-90			
2,4-Dinitrotoluene	56.8	5.00	"	75.0		75.7	50-110			
4-Nitrophenol	35.4	25.0	"	150		23.6	15-100			
N-Nitrosodi-n-propylamine	49.7	10.0	"	75.0		66.3	40-110			
Pentachlorophenol	91.4	10.0	"	150		60.9	30-120			
Phenol	37.6	5.00	"	150		25.1	15-110			
Pyrene	56.2	5.00	"	75.0		74.9	40-110			
1,2,4-Trichlorobenzene	40.0	5.00	"	75.0		53.3	25-100			
Surr: 2-Fluorobiphenyl	*49.7*		"	*75.0*		*66.3*	*26-135*			
Surr: 2-Fluorophenol	*48.2*		"	*150*		*32.1*	*6-124*			
Surr: Nitrobenzene-d5	*60.2*		"	*75.0*		*80.3*	*23-147*			
Surr: Phenol-d6	*43.2*		"	*150*		*28.8*	*11-130*			
Surr: p-Terphenyl-d14	*57.2*		"	*75.0*		*76.3*	*38-149*			
Surr: 2,4,6-Tribromophenol	*97.7*		"	*150*		*65.1*	*19-126*			
LCS Dup (2110912-BSD1)				Prepared: 11/26/02 Analyzed: 12/04/02						
Acenaphthene	60.2	5.00	ug/l	75.0		80.3	40-110	3.55	36	
4-Chloro-3-methylphenol	81.3	5.00	"	150		54.2	40-110	4.79	43	
2-Chlorophenol	85.5	5.00	"	150		57.0	40-110	5.78	38	
1,4-Dichlorobenzene	36.8	5.00	"	75.0		49.1	20-90	2.15	43	
2,4-Dinitrotoluene	58.3	5.00	"	75.0		77.7	50-110	2.61	31	
4-Nitrophenol	36.5	25.0	"	150		24.3	15-100	3.06	36	
N-Nitrosodi-n-propylamine	53.0	10.0	"	75.0		70.7	40-110	6.43	37	
Pentachlorophenol	81.8	10.0	"	150		54.5	30-120	11.1	40	
Phenol	40.6	5.00	"	150		27.1	15-110	7.67	36	
Pyrene	60.0	5.00	"	75.0		80.0	40-110	6.54	31	
1,2,4-Trichlorobenzene	37.8	5.00	"	75.0		50.4	25-100	5.66	42	
Surr: 2-Fluorobiphenyl	*50.8*		"	*75.0*		*67.7*	*26-135*			
Surr: 2-Fluorophenol	*49.6*		"	*150*		*33.1*	*6-124*			
Surr: Nitrobenzene-d5	*61.5*		"	*75.0*		*82.0*	*23-147*			
Surr: Phenol-d6	*45.6*		"	*150*		*30.4*	*11-130*			
Surr: p-Terphenyl-d14	*60.0*		"	*75.0*		*80.0*	*38-149*			
Surr: 2,4,6-Tribromophenol	*98.5*		"	*150*		*65.7*	*19-126*			

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Acid and Base/Neutral Extractables per EPA Method 625 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 2110912 - EPA 3510/600 Series

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Crystal Jones, Project Manager

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	12/09/02 13:11

Notes and Definitions

A-01	The detected hydrocarbons appear to be due to the overlap of weathered gas, weathered diesel, and possibly biogenic interference.
R-02	The reporting limit for this analyte was raised due to the high analyte concentration present in the sample.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

nca™
North Creek Analytical, Inc.
Environmental Laboratory Network
www.ncalabs.com

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P3K0645

TOSCO CHAIN OF CUSTODY REPORT

TOSCO INFORMATION

Facility Number: 0608
Site Address: Willbridge Light Products Terminal
City, State, ZIP: Portland, OR
Project/AWO Code
Tosco Manager: Marty Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☑ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: KHM Project# B17-05H
Address: 7150 SW Hampton St # 220
Tigard, OR 97223
Phone: 503-639-8098 Fax: 503-639-8098
Project Manager: Scott Miller E-mail:
Sample Collection by: NWH

Quality Assurance Data Level:
[A] [B]
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days:
[10] [5] [3] [2] [1]
10 Day - Standard

○ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 3270 SIM or 8310	Lead: Total or Dissolved	Total or Dissolved RCRA Metals (circle one)	VOCs EPA 624	SVOCs EPA 625 (full target compound list)	EPA 625		NCA SAMPLE NUMBER
1. Pre	11-19-2	W	3				X		X													
2. Mid	11-19-2	W	5															X	X	X		
3. Post	11-19-2	W	5																		✓	
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

Hold

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.		KHM	11-19-02/17:30		NCA	11/19/02 1730
2.						
3.						

Comments: 16 hits on Sample 'Mid'. Run Post for 624/625/1664. Call w/ Prelims (or Email).

Page 1 of 1
Rev. Tbd 3.2.99

Comments: @ client 7.3°C

Distribution: White - Laboratory Yellow - Consultant Phoneppy - Tosco

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Originator: RCH

PM: _____

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Client Name: ~~Will~~ Phillips Petroleum Company

Site Name: Willbridge Terminal

Site Location: Portland, OR

Document Title: DMR

Document Type:

[ ] Letter [ ] Report [ ] Memo [ ] Proposal [ ] Table

[ ] Form [ ] Contract [ ] Transmittal [ ] GWM Report [X] Other

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ENVIRONMENTAL MANAGEMENT, INC.

FILE

LETTER OF TRANSMITTAL

To:	Mr. Eric De Berry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	February 25, 2003
Re:	Discharge Monitoring Report February 2003 Tosco-Chevron Remediation Site	**Project #:**	B17-05K Permit No. 500.015

Mr. De Berry,

Water samples were collected by KHM Environmental Management on February 14, 2003 (Grab). Samples were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
KHM Environmental Management, Inc.

R Scott Miller

cc: Martin Cramer, Philips Petroleum Company

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: March 15, 2003

SAMPLING PERIOD: February 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
02/14/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	APHA/EPA	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH		7.03	SU		5.0 - 11.5	N/A	
BTEX	EPA 624	ND	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 2/28/03

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P3B0418-01	Water	02/14/03 13:45	02/18/03 10:45
Mid	P3B0418-02	Water	02/14/03 13:55	02/18/03 10:45
Post	P3B0418-03	Water	02/14/03 13:56	02/18/03 10:45

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Lisa Domenighini For Crystal Jones, Project Manager

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3B0418-01RE1) Water					Sampled: 02/14/03 Received: 02/18/03				
Benzene	**1.99**	0.500	ug/l	1	EPA 8021B	02/19/03	02/19/03	3020598	
Toluene	**3.32**	0.500	"	"	"	"	"	"	
Ethylbenzene	**4.07**	0.500	"	"	"	"	"	"	
Xylenes (total)	**27.0**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*106 %*	*75-120*							
Mid (P3B0418-02) Water					Sampled: 02/14/03 Received: 02/18/03				
Benzene	**1.06**	0.500	ug/l	1	EPA 8021B	02/18/03	02/19/03	3020545	
Toluene	**0.586**	0.500	"	"	"	"	"	"	
Ethylbenzene	**0.790**	0.500	"	"	"	"	"	"	
Xylenes (total)	**3.67**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*102 %*	*75-120*							
Post (P3B0418-03) Water					Sampled: 02/14/03 Received: 02/18/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	02/18/03	02/19/03	3020545	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*96.0 %*	*75-120*							

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3B0418-01) Water					Sampled: 02/14/03 Received: 02/18/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	02/20/03	02/20/03	3020661	
Mid (P3B0418-02) Water					Sampled: 02/14/03 Received: 02/18/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	02/20/03	02/20/03	3020661	

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Lisa Domenighini For Crystal Jones, Project Manager

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

BTEX per EPA Method 8021B : Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020545 - EPA 5030B										
Blank (3020545-BLK1)				Prepared & Analyzed: 02/18/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*50.0*		"	*50.0*		*100*	*75-120*			
LCS (3020545-BS2)				Prepared & Analyzed: 02/18/03						
Benzene	24.4	0.500	ug/l	20.0		122	70-130			
Toluene	24.1	0.500	"	20.0		120	70-130			
Ethylbenzene	24.2	0.500	"	20.0		121	70-130			
Xylenes (total)	71.3	1.00	"	60.0		119	70-130			
Surr: 4-BFB (PID)	*50.6*		"	*50.0*		*101*	*75-120*			
Matrix Spike (3020545-MS1)	**Source: P3B0418-01**			Prepared & Analyzed: 02/18/03						
Benzene	990	25.0	ug/l	1000	ND	99.0	70-130			
Toluene	988	25.0	"	1000	ND	98.8	70-130			
Ethylbenzene	1010	25.0	"	1000	ND	101	70-130			
Xylenes (total)	2980	50.0	"	3000	35.5	98.2	70-130			
Surr: 4-BFB (PID)	*45.4*		"	*50.0*		*90.8*	*75-120*			
Matrix Spike Dup (3020545-MSD1)	**Source: P3B0418-01**			Prepared & Analyzed: 02/18/03						
Benzene	1150	25.0	ug/l	1000	ND	115	70-130	15.0	15	
Toluene	1140	25.0	"	1000	ND	114	70-130	14.3	15	
Ethylbenzene	1150	25.0	"	1000	ND	115	70-130	13.0	15	
Xylenes (total)	3420	50.0	"	3000	35.5	113	70-130	13.8	15	
Surr: 4-BFB (PID)	*51.2*		"	*50.0*		*102*	*75-120*			

COPPOR00006698

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020598 - EPA 5030B										
Blank (3020598-BLK1)				Prepared & Analyzed: 02/19/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*49.5*		"	*50.0*		*99.0*	*75-120*			
LCS (3020598-BS2)				Prepared & Analyzed: 02/19/03						
Benzene	19.4	0.500	ug/l	20.0		97.0	70-130			
Toluene	19.2	0.500	"	20.0		96.0	70-130			
Ethylbenzene	19.2	0.500	"	20.0		96.0	70-130			
Xylenes (total)	55.7	1.00	"	60.0		92.8	70-130			
Surr: 4-BFB (PID)	*45.8*		"	*50.0*		*91.6*	*75-120*			

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Lisa Domenighini For Crystal Jones, Project Manager

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020661 - EPA 1664										
Blank (3020661-BLK1)				Prepared & Analyzed: 02/20/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3020661-BS1)				Prepared & Analyzed: 02/20/03						
Oil & Grease	64.9	5.00	mg/l	80.0		81.1	73-109			

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

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FEB 27 2003

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P3B0418-01	Water	02/14/03 13:45	02/18/03 10:45
Mid	P3B0418-02	Water	02/14/03 13:55	02/18/03 10:45
Post	P3B0418-03	Water	02/14/03 13:56	02/18/03 10:45

North Creek Analytical - Portland

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Lisa Domenighini For Crystal Jones, Project Manager

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3B0418-01RE1) Water					Sampled: 02/14/03 Received: 02/18/03				
Benzene	**1.99**	0.500	ug/l	1	EPA 8021B	02/19/03	02/19/03	3020598	
Toluene	**3.32**	0.500	"	"	"	"	"	"	
Ethylbenzene	**4.07**	0.500	"	"	"	"	"	"	
Xylenes (total)	**27.0**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*106 %*	*75-120*							
Mid (P3B0418-02) Water					Sampled: 02/14/03 Received: 02/18/03				
Benzene	**1.06**	0.500	ug/l	1	EPA 8021B	02/18/03	02/19/03	3020545	
Toluene	**0.586**	0.500	"	"	"	"	"	"	
Ethylbenzene	**0.790**	0.500	"	"	"	"	"	"	
Xylenes (total)	**3.67**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*102 %*	*75-120*							
Post (P3B0418-03) Water					Sampled: 02/14/03 Received: 02/18/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	02/18/03	02/19/03	3020545	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*96.0 %*	*75-120*							

North Creek Analytical - Portland

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Lisa Domenighini For Crystal Jones, Project Manager

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907.334.9200 fax 907.334.9210

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3B0418-01) Water					Sampled: 02/14/03 Received: 02/18/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	02/20/03	02/20/03	3020661	
Mid (P3B0418-02) Water					Sampled: 02/14/03 Received: 02/18/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	02/20/03	02/20/03	3020661	

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020545 - EPA 5030B										
Blank (3020545-BLK1)				Prepared & Analyzed: 02/18/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*50.0*		"	*50.0*		*100*	*75-120*			
LCS (3020545-BS2)				Prepared & Analyzed: 02/18/03						
Benzene	24.4	0.500	ug/l	20.0		122	70-130			
Toluene	24.1	0.500	"	20.0		120	70-130			
Ethylbenzene	24.2	0.500	"	20.0		121	70-130			
Xylenes (total)	71.3	1.00	"	60.0		119	70-130			
Surr: 4-BFB (PID)	*50.6*		"	*50.0*		*101*	*75-120*			
Matrix Spike (3020545-MS1)	**Source: P3B0418-01**			Prepared & Analyzed: 02/18/03						
Benzene	990	25.0	ug/l	1000	ND	99.0	70-130			
Toluene	988	25.0	"	1000	ND	98.8	70-130			
Ethylbenzene	1010	25.0	"	1000	ND	101	70-130			
Xylenes (total)	2980	50.0	"	3000	35.5	98.2	70-130			
Surr: 4-BFB (PID)	*45.4*		"	*50.0*		*90.8*	*75-120*			
Matrix Spike Dup (3020545-MSD1)	**Source: P3B0418-01**			Prepared & Analyzed: 02/18/03						
Benzene	1150	25.0	ug/l	1000	ND	115	70-130	15.0	15	
Toluene	1140	25.0	"	1000	ND	114	70-130	14.3	15	
Ethylbenzene	1150	25.0	"	1000	ND	115	70-130	13.0	15	
Xylenes (total)	3420	50.0	"	3000	35.5	113	70-130	13.8	15	
Surr: 4-BFB (PID)	*51.2*		"	*50.0*		*102*	*75-120*			

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020598 - EPA 5030B										
Blank (3020598-BLK1)				Prepared & Analyzed: 02/19/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*49.5*		"	*50.0*		*99.0*	*75-120*			
LCS (3020598-BS2)				Prepared & Analyzed: 02/19/03						
Benzene	19.4	0.500	ug/l	20.0		97.0	70-130			
Toluene	19.2	0.500	"	20.0		96.0	70-130			
Ethylbenzene	19.2	0.500	"	20.0		96.0	70-130			
Xylenes (total)	55.7	1.00	"	60.0		92.8	70-130			
Surr: 4-BFB (PID)	*45.8*		"	*50.0*		*91.6*	*75-120*			

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland,OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3020661 - EPA 1664										
Blank (3020661-BLK1)				Prepared & Analyzed: 02/20/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3020661-BS1)				Prepared & Analyzed: 02/20/03						
Oil & Grease	64.9	5.00	mg/l	80.0		81.1	73-109			

North Creek Analytical - Portland

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05H	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	02/24/03 14:29

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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Lisa Domenighini For Crystal Jones, Project Manager

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P3B0418

TOSCO CHAIN OF CUSTODY REPORT

TOSCO INFORMATION

Facility Number: 0608
Site Address: Willbridge Light Products Terminal
City, State, ZIP: Portland, OR
Project/AWO Code
Tosco Manager: Mary Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☑ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: KHM Project# 817-05H
Address: Tigard, OR
Phone: 503-639-0098 Fax:
Project Manager: S. Miller E-mail:
Sample Collection by: K. Thurlow

Quality Assurance Data Level:
☐ A ☐ B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days:
10 ☒ 3 2 1
10 Day - Standard

○ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX (W,S,O)	# OF CONTAINERS	NCA SAMPLE NUMBER
1. Pre	2-14-03	1345	W	4	
2. Mid	↓	1355	↓	↓	
3. Post	↓	1356	↓	↓	
4.					
5.					
6.					
7.					
8.					
9.					
10.					

	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GCMS Volatiles EPA 8260	GCMS SemiVols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Oil/Grease EPA 625	BTEX 8021			
1.															X	X			
2.															X	X			
3.															X	X			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.		KHM	2/18/03 10:20		NCA	2/18/03 @ 10:20
2.					NCA	2/18/03 1045
3.						

Comments: Call Scott Miller with results for further analysis

Page 1 of 1
Rev. Tos3.3.2/99

Comments: 5.1°C

Distribution: White - Laboratory Yellow - Consultant Photocopy - Tosco

COPPOR0006709

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

Client: KHM

1. **Please sign for receipt and opening of** 1 **cooler or** _____ **other** _____

   By (print) Erica Nelson (sign) Erica Nelson

2. Date samples received: 2/18/03 Date opened: Same X or ___/___/___

3. Delivered by: X NCA courier ___ FedEx ___UPS ___Courier ___Client ___Other _____

   Airbill # if applicable _____ (Put copy of shipping papers in file)

4. There were 1 custody seals present, signed by BOB date 2/18/03

5. Were the custody seals unbroken and intact at the date and time of arrival? X Yes ___No

6. Was ice used? ___yes X no Type of ice: ___ blue ice ___gel ice ___real ice

   Temperature (degrees C) 5.1°C Raytek thermometer _____ Digi-Therm (probe temperature blank)

7. Are custody papers sealed in a plastic bag and taped inside to lid? X Yes ___No

8. Were custody papers filled out properly (ink, signed, etc.)? X Yes ___No

   If "no" please specify: _____

9. Was project identifiable from custody papers? X Yes ___No

   Name of project TOSCO 0608 (if applicable)

10. **Initial and date for unpacking:** EP **(initials)** **date** 2/18/03

11. Packing material: X bubble wrap/bag ___styrofoam ___cardboard _____other

12. Were samples in bags? X Yes ___No

13. Did all containers indicated on the COC arrive? X Yes ___No

    If "no" please indicate which containers were absent _____ X

14. Were all containers unbroken and labels in good condition? ___Yes ___No

    If "no" please indicate which containers _____

15. Were all bottle labels complete (ID, date, time, signature, etc.)? X Yes ___No

    Do the IDs, times, etc. agree with the COC? X Yes ___No

    If "no" please indicate which containers _____

16. Are containers properly preserved for indicated analysis? X Yes ___No

17. Is there adequate volume for the test(s) requested? X Yes ___No

18. If voa vials were submitted, are they free of bubbles? ___N/A X Yes ___No

19. **Log-in phase: Date samples were logged in:** 2/18/03 **Elm Project # P** 360418

20. Logged in by (print) Sara Passage (sign) _____

21. Was the project manager notified of status? (Use back of form as a record) ___Yes X No

KHM Processing / Filing Form

DUE DATE

Due to PM: _____ Due to Chem: _____

Regulatory Deadline: 04/15/03 Other: _____

Use This Section When Submitting to Vicki

Date Submitted: 04/11/03

Document is: [X] Final [ ] Draft

Format Check Completed: [ ]

Chain of Review Completed: [ ]

Originator: RKH

PM: RSM

Job No.: B17-05K

Time Allotted to Complete: _____

Client Name: Conoco Philips

Site Name: Willbridge Terminal

Site Location: Portland, OR

Document Title: DMR

Document Type:

[ ] Letter [ ] Report [ ] Memo [ ] Proposal [ ] Table

[ ] Form [ ] Contract [ ] Transmittal [ ] GWM Report [ ] Other

File Name and Network Subdirectory Containing Your Files: _____

Additional Instructions: _____

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM		
Professional Stamp:		

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail: Regular	Certified	UPS/Fed EX: Ground	Next Day	Fax	Email
Original:										
Eric Deberry	1			X	X		X			
Marion Cramer	1			X	X					
Internal Copies:										
RKH	1			X						
Administrative File	1									
Total No. of Copies	4									

Close Out Information: (To be completed by Word Processing)

Comments: _____

Date Sent: 4/14/03

Closed Out: _____

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KHM

LETTER OF TRANSMITTAL

To:	Mr. Eric De Berry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	April 11, 2003
Re:	Discharge Monitoring Report March 2003 Tosco-Chevron Remediation Site	**Project #:**	B17-05K Permit No. 500.015

Mr. De Berry,

Water samples were collected by a representative of KHM Environmental Management, Inc. on March 20, 2003 (Grab). Samples were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
KHM Environmental Management, Inc.

cc: Martin Cramer, Philips Petroleum Company

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: April 15, 2003

SAMPLING PERIOD: March 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received

Date Entered

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
03/20/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH		6.5	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.03628	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: [signature] Date: 4/11/03

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RECEIVED
APR 0 4 2003
BY:

KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P3C0676-01	Water	03/20/03 12:00	03/21/03 09:50
Post	P3C0676-02	Water	03/20/03 12:00	03/21/03 09:50

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3C0676-01RE1) Water					Sampled: 03/20/03 Received: 03/21/03				
Benzene	**1.34**	0.500	ug/l	1	NW-G, 8021B	03/24/03	03/24/03	3030733	
Toluene	**2.53**	0.500	"	"	"	"	"	"	
Ethylbenzene	**2.86**	0.500	"	"	"	"	"	"	
Xylenes (total)	**20.9**	1.00	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	**1810**	80.0	"	"	"	"	"	"	
Surr: 4-BFB (FID)	*110 %*	*50-150*							
Surr: 4-BFB (PID)	*107 %*	*75-120*							

North Creek Analytical - Portland

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3C0676-01) Water					Sampled: 03/20/03	Received: 03/21/03			
Diesel Range Organics	**8.00**	0.250	mg/l	1	NWTPH-Dx	03/27/03	03/27/03	3030887	D-17
Heavy Oil Range Hydrocarbons	**1.62**	0.500	"	"	"	"	"	"	D-15
Surr: 1-Chlorooctadecane	*84.6 %*	*50-150*							

North Creek Analytical - Portland

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7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3C0676-02RE1) Water					Sampled: 03/20/03 Received: 03/21/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	03/24/03	03/24/03	3030733	
Toluene	**0.558**	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	**3.07**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*95.8 %*	*75-120*							

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7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3C0676-01) Water					Sampled: 03/20/03 Received: 03/21/03				
Oil & Grease	**5.67**	5.00	mg/l	1	EPA 1664	04/01/03	04/01/03	3040010	
Post (P3C0676-02) Water					Sampled: 03/20/03 Received: 03/21/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	04/01/03	04/01/03	3040010	

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Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Gasoline Hydrocarbons per NW TPH-Gx Method and BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030723 - EPA 5030B										
Blank (3030723-BLK1)				Prepared & Analyzed: 03/21/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Gasoline Range Hydrocarbons	ND	80.0	"							
Surr: 4-BFB (FID)	*45.3*		"	*50.0*		*90.6*	*50-150*			
Surr: 4-BFB (PID)	*39.5*		"	*50.0*		*79.0*	*75-120*			
LCS (3030723-BS1)				Prepared & Analyzed: 03/21/03						
Gasoline Range Hydrocarbons	1190	80.0	ug/l	1250		95.2	70-130			
Surr: 4-BFB (FID)	*46.4*		"	*50.0*		*92.8*	*50-150*			
LCS (3030723-BS2)				Prepared & Analyzed: 03/21/03						
Benzene	15.8	0.500	ug/l	20.0		79.0	70-130			
Toluene	20.0	0.500	"	20.0		100	70-130			
Ethylbenzene	19.9	0.500	"	20.0		99.5	70-130			
Xylenes (total)	57.3	1.00	"	60.0		95.5	70-130			
Surr: 4-BFB (PID)	*39.4*		"	*50.0*		*78.8*	*75-120*			
Duplicate (3030723-DUP1)	**Source: P3C0653-01**			Prepared: 03/21/03 Analyzed: 03/22/03						
Gasoline Range Hydrocarbons	ND	4000	ug/l		ND				50	
Surr: 4-BFB (FID)	*44.7*		"	*50.0*		*89.4*	*50-150*			
Matrix Spike (3030723-MS1)	**Source: P3C0606-02**			Prepared & Analyzed: 03/21/03						
Benzene	660	25.0	ug/l	1000	62.6	59.7	70-130			Q-01
Toluene	872	25.0	"	1000	ND	87.2	70-130			
Ethylbenzene	910	25.0	"	1000	62.6	84.7	70-130			
Xylenes (total)	2660	50.0	"	3000	308	78.4	70-130			
Surr: 4-BFB (PID)	*35.6*		"	*50.0*		*71.2*	*75-120*			*S-03*

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North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030723 - EPA 5030B										
Matrix Spike Dup (3030723-MSD1)	**Source: P3C0606-02**			Prepared & Analyzed: 03/21/03						
Benzene	617	25.0	ug/l	1000	62.6	55.4	70-130	6.73	15	Q-01
Toluene	815	25.0	"	1000	ND	81.5	70-130	6.76	15	
Ethylbenzene	844	25.0	"	1000	62.6	78.1	70-130	7.53	15	
Xylenes (total)	2470	50.0	"	3000	308	72.1	70-130	7.41	15	
Surr: 4-BFB (PID)	*34.6*		"	*50.0*		*69.2*	*75-120*			*S-03*
Batch 3030733 - EPA 5030B										
Blank (3030733-BLK1)				Prepared & Analyzed: 03/24/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Gasoline Range Hydrocarbons	ND	80.0	"							
Surr: 4-BFB (FID)	*46.6*		"	*50.0*		*93.2*	*50-150*			
Surr: 4-BFB (PID)	*45.3*		"	*50.0*		*90.6*	*75-120*			
LCS (3030733-BS1)				Prepared & Analyzed: 03/24/03						
Gasoline Range Hydrocarbons	880	80.0	ug/l	1000		88.0	70-130			
Surr: 4-BFB (FID)	*54.5*		"	*50.0*		*109*	*50-150*			
LCS (3030733-BS2)				Prepared & Analyzed: 03/24/03						
Benzene	17.8	0.500	ug/l	20.0		89.0	70-130			
Toluene	17.7	0.500	"	20.0		88.5	70-130			
Ethylbenzene	18.9	0.500	"	20.0		94.5	70-130			
Xylenes (total)	53.7	1.00	"	60.0		89.5	70-130			
Surr: 4-BFB (PID)	*46.4*		"	*50.0*		*92.8*	*75-120*			

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Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030887 - EPA 3510 Fuels										
Blank (3030887-BLK1)				Prepared & Analyzed: 03/27/03						
Diesel Range Organics	ND	0.250	mg/l							
Heavy Oil Range Hydrocarbons	ND	0.500	"							
Surr: 1-Chlorooctadecane	*0.0839*		"	*0.0960*		*87.4*	*50-150*			
LCS (3030887-BS1)				Prepared & Analyzed: 03/27/03						
Diesel Range Organics	2.08	0.250	mg/l	2.50		83.2	50-150			
Heavy Oil Range Hydrocarbons	1.39	0.500	"	1.50		92.7	50-150			
Surr: 1-Chlorooctadecane	*0.0758*		"	*0.0960*		*79.0*	*50-150*			
LCS Dup (3030887-BSD1)				Prepared & Analyzed: 03/27/03						
Diesel Range Organics	1.90	0.250	mg/l	2.50		76.0	50-150	9.05	50	
Heavy Oil Range Hydrocarbons	1.34	0.500	"	1.50		89.3	50-150	3.66	50	
Surr: 1-Chlorooctadecane	*0.0717*		"	*0.0960*		*74.7*	*50-150*			

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BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030723 - EPA 5030B										
Blank (3030723-BLK1)				Prepared & Analyzed: 03/21/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*39.5*		"	*50.0*		*79.0*	*75-120*			
LCS (3030723-BS2)				Prepared & Analyzed: 03/21/03						
Benzene	15.8	0.500	ug/l	20.0		79.0	70-130			
Toluene	20.0	0.500	"	20.0		100	70-130			
Ethylbenzene	19.9	0.500	"	20.0		99.5	70-130			
Xylenes (total)	57.3	1.00	"	60.0		95.5	70-130			
Surr: 4-BFB (PID)	*39.4*		"	*50.0*		*78.8*	*75-120*			
Matrix Spike (3030723-MS1)	**Source: P3C0606-02**			Prepared & Analyzed: 03/21/03						
Benzene	660	25.0	ug/l	1000	62.6	59.7	70-130			Q-01
Toluene	872	25.0	"	1000	ND	87.2	70-130			
Ethylbenzene	910	25.0	"	1000	62.6	84.7	70-130			
Xylenes (total)	2660	50.0	"	3000	308	78.4	70-130			
Surr: 4-BFB (PID)	*35.6*		"	*50.0*		*71.2*	*75-120*			*S-03*
Matrix Spike Dup (3030723-MSD1)	**Source: P3C0606-02**			Prepared & Analyzed: 03/21/03						
Benzene	617	25.0	ug/l	1000	62.6	55.4	70-130	6.73	15	Q-01
Toluene	815	25.0	"	1000	ND	81.5	70-130	6.76	15	
Ethylbenzene	844	25.0	"	1000	62.6	78.1	70-130	7.53	15	
Xylenes (total)	2470	50.0	"	3000	308	72.1	70-130	7.41	15	
Surr: 4-BFB (PID)	*34.6*		"	*50.0*		*69.2*	*75-120*			*S-03*

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BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3030733 - EPA 5030B										
Blank (3030733-BLK1)				Prepared & Analyzed: 03/24/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*45.3*		"	*50.0*		*90.6*	*75-120*			
LCS (3030733-BS2)				Prepared & Analyzed: 03/24/03						
Benzene	17.8	0.500	ug/l	20.0		89.0	70-130			
Toluene	17.7	0.500	"	20.0		88.5	70-130			
Ethylbenzene	18.9	0.500	"	20.0		94.5	70-130			
Xylenes (total)	53.7	1.00	"	60.0		89.5	70-130			
Surr: 4-BFB (PID)	*46.4*		"	*50.0*		*92.8*	*75-120*			

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KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3040010 - EPA 1664										
Blank (3040010-BLK1)				Prepared & Analyzed: 04/01/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3040010-BS1)				Prepared & Analyzed: 04/01/03						
Oil & Grease	70.1	5.00	mg/l	80.0		87.6	73-109			

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503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

KHM Environmental	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Kelly Kline	04/01/03 17:01

Notes and Definitions

D-15	Detected hydrocarbons have non-petroleum peaks or elution pattern that suggests the presence of biogenic interference.
D-17	Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel or possibly biogenic interference.
Q-01	The spike recovery, and/or RPD, for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
S-03	Surrogate recovery is outside of NCA established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

nca
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Environmental Laboratory Network
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CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT P3C0676

CHEVRON INFORMATION

Facility Number: 100-1868
Site Address: 5531 NW Doan Ave
City, State, ZIP: Portland, OR 97210
Service Code: ☐ Site Assesment
Service Order: ☑ Remediation
Cost Element: 75100100 ☐ O & M
Chevron Project Manager: ☐ GWM

CONSULTANT INFORMATION

Name: KHM Project# B17-05K
Address: 7150 SW Hampton St #220
Tigard, OR 97223
Phone: 503-639-8098 Fax: 639-[illegible]
Project Manager: R Scott Miller Airbill#:
Sample Collection by: NWH

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☐ 10 Business Days
☐ 3 Day Air Samples (Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON-TAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Total or Grease 1664					NCA SAMPLE NUMBER
1. Pre	3-20-03	W	5				X		X									X					
2. Post	3-20-03	W	4			X												X					
3.																							
4.																							
5.																							
6.																							
7.																							
8.																							
9.																							
10.																							

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	KHM	3/21/03 @ 9:30	[signature]	NCA	3/21/03 @ 9:30
2.	[signature]			[signature]	NCA	3/21/03 950
3.						

Additional Comments:
1.2°C

Page 1 of 1 Chev CoC, Rev. 3.3, 2/99

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Regulatory Deadline: 05/15/03

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Chain of Review Completed: [ ]

Originator: RCH

PM: RSM

Job No.: B17-01 ~~BK~~

Time Allotted to Complete:

Client Name: ~~Hillmedge~~ KMLT

Site Name: Willmedge

Site Location: POX

Document Title: DMR

Document Type:

[ ] Letter [ ] Report [ ] Memo [ ] Proposal [ ] Table

[ ] Form [ ] Contract [ ] Transmittal [ ] GWM Report [ ] Other List (Enr

File Name and Network Subdirectory Containing Your Files: B17-01H/Discharge Permit/April.doc

Additional Instructions:

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PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM		
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ENVIRONMENTAL MANAGEMENT, INC.

KHM

LETTER OF TRANSMITTAL

To:	Mr. Eric De Berry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	May 13, 2003
Re:	Discharge Monitoring Report April 2003 Tosco-Chevron Remediation Site	**Project #:**	B17-05K Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of KHM Environmental Management, Inc. (KHM is integrating its business with Delta Environmental, Consultants, Inc.) on April 17, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
KHM Environmental Management, Inc.

cc: Martin Cramer, Philips Petroleum Company

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: May 15, 2003

SAMPLING PERIOD: April 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
04/17/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH		6.27	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	ND	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 5/9/03

www.ncalabs.com

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/23/03 09:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P3D0611-01	Water	04/17/03 15:15	04/17/03 16:55

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/23/03 09:52

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3D0611-01) Water					Sampled: 04/17/03 Received: 04/17/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	04/18/03	04/18/03	3040661	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*92.4 %*	*75-120*							

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/23/03 09:52

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3D0611-01) Water					Sampled: 04/17/03 Received: 04/17/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	04/21/03	04/22/03	3040664	F-02

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/23/03 09:52

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3040661 - EPA 5030B										
Blank (3040661-BLK1)				Prepared & Analyzed: 04/18/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*47.5*		"	*50.0*		*95.0*	*75-120*			
LCS (3040661-BS2)				Prepared & Analyzed: 04/18/03						
Benzene	15.7	0.500	ug/l	20.0		78.5	70-130			
Toluene	19.2	0.500	"	20.0		96.0	70-130			
Ethylbenzene	18.6	0.500	"	20.0		93.0	70-130			
Xylenes (total)	57.6	1.00	"	60.0		96.0	70-130			
Surr: 4-BFB (PID)	*48.5*		"	*50.0*		*97.0*	*75-120*			
Matrix Spike (3040661-MS1)	**Source: P3D0612-01**			Prepared & Analyzed: 04/18/03						
Benzene	769	25.0	ug/l	1000	ND	76.9	70-130			
Toluene	860	25.0	"	1000	ND	86.0	70-130			
Ethylbenzene	995	25.0	"	1000	ND	99.5	70-130			
Xylenes (total)	2970	50.0	"	3000	ND	99.0	70-130			
Surr: 4-BFB (PID)	*47.8*		"	*50.0*		*95.6*	*75-120*			
Matrix Spike Dup (3040661-MSD1)	**Source: P3D0612-01**			Prepared & Analyzed: 04/18/03						
Benzene	662	25.0	ug/l	1000	ND	66.2	70-130	15.0	15	Q-01
Toluene	760	25.0	"	1000	ND	76.0	70-130	12.3	15	
Ethylbenzene	887	25.0	"	1000	ND	88.7	70-130	11.5	15	
Xylenes (total)	2670	50.0	"	3000	ND	89.0	70-130	10.6	15	
Surr: 4-BFB (PID)	*47.6*		"	*50.0*		*95.2*	*75-120*			

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/23/03 09:52

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3040664 - EPA 1664										
Blank (3040664-BLK1)				Prepared: 04/21/03 Analyzed: 04/22/03						
Oil & Grease	ND	5.00	mg/l							
Oil & Grease (non-polar)	ND	5.00	"							
Oil & Grease (polar)	ND	5.00	"							
LCS (3040664-BS1)				Prepared: 04/21/03 Analyzed: 04/22/03						
Oil & Grease	67.3	5.00	mg/l	80.0		84.1	73-109			
Oil & Grease (non-polar)	30.0	5.00	"	40.0		75.0	57-113			

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

KHM Environmental	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/23/03 09:52

Notes and Definitions

F-02	Since Total Oil & Grease was ND for sample, Non-polar hydrocarbon analysis was not performed.
Q-01	The spike recovery, and/or RPD, for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

P3D0611

TOSCO CHAIN OF CUSTODY REPORT

TOSCO INFORMATION

Facility Number: Willbridge
Site Address:
City, State, ZIP: Portland, OR
Project/AWO Code
Tosco Manager: Martin Cramer
FACILITY TYPE: (check one) [ ] BP/Ⓚ [X] Terminal/Bulk Plant
[ ] Brown Bear [ ] Former 76 Site [ ] Other

CONSULTANT INFORMATION

Firm: KHM Project# B17-05K
Address: Tigard, OR
Phone: 503 639 8098 Fax:
Project Manager: Ruth Hu E-mail:
Sample Collection by: J. Neal

Quality Assurance Data Level: A B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ~~10~~ 5 3 2 1
10 Day - Standard

☑ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON-TAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS SemiVols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	HEM Oil+Grease Total APHA/EPA 1664					NCA SAMPLE NUMBER
1. Post	4/17/03 1515	W	4			X												X					
2.																							
3.																							
4.																							
5.																							
6.																							
7.																							
8.																							
9.																							
10.																							

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1. [signature]	KHM	4/17/03 1700	[signature]	NCA	4/17/03 1655
2.					
3.					

Comments: pH 6.27 3.0°C cc client

Page 1 of 1
Rev. Tos3.3.2/99

Comments:

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Date Submitted: 05/28/03

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Chain of Review Completed: ☐

Originator: RKH PM: RKH

Job No.: B17-01K Time Allotted to Complete: _____

Client Name: Tosco

Site Name: Willbridge Terminal

Site Location: Portland OR

Document Title: DMR

Document Type:

☐ Letter ☐ Report ☐ Memo ☐ Proposal ☐ Table

☐ Form ☐ Contract ☐ Transmittal ☐ GWM Report ☒ Other

File Name and Network Subdirectory Containing Your Files: Willbridge / B17-05H / Discharge Permit

Additional Instructions: _____

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM		
Professional Stamp:		

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Martin Cramer	1			X	X					
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Tigard, Oregon 97223 USA

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Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric De Berry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	June 9, 2003
Re:	Discharge Monitoring Report May 2003 Tosco-Chevron Remediation Site	**Project #:**	B17-05K Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of KHM Environmental Management, Inc. (KHM is integrating its business with Delta Environmental, Consultants, Inc.) on May 13, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: June 15, 2003

SAMPLING PERIOD: May 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
05/13/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH		7.4	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.014	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 6/4/03

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P3E0517-01	Water	05/13/03 12:00	05/15/03 13:00

North Creek Analytical - Portland

Crystal Jones, Project Manager

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7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3E0517-01RE1) Water					Sampled: 05/13/03 Received: 05/15/03				
Benzene	**0.818**	0.500	ug/l	1	EPA 8021B	05/21/03	05/21/03	3050836	
Toluene	**1.34**	0.500	"	"	"	"	"	"	
Ethylbenzene	**1.52**	0.500	"	"	"	"	"	"	
Xylenes (total)	**10.4**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*107 %*	*75-120*							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

Conventional Chemistry Parameters by APHA/EPA Methods

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3E0517-01) Water					Sampled: 05/13/03 Received: 05/15/03				
Oil & Grease (HEM)	ND	4.76	mg/l	1	EPA 1664	05/20/03	05/21/03	3E20025	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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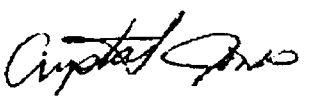
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3050772 - EPA 5030B										
Blank (3050772-BLK1)				Prepared & Analyzed: 05/20/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*51.4*		"	*50.0*		*103*	*75-120*			
LCS (3050772-BS2)				Prepared & Analyzed: 05/20/03						
Benzene	18.0	0.500	ug/l	20.0		90.0	70-130			
Toluene	19.8	0.500	"	20.0		99.0	70-130			
Ethylbenzene	20.2	0.500	"	20.0		101	70-130			
Xylenes (total)	60.4	1.00	"	60.0		101	70-130			
Surr: 4-BFB (PID)	*52.5*		"	*50.0*		*105*	*75-120*			
Matrix Spike (3050772-MS1)		**Source: P3E0452-07**		Prepared & Analyzed: 05/20/03						
Benzene	19.5	0.500	ug/l	20.0	ND	97.5	70-130			
Toluene	21.5	0.500	"	20.0	ND	108	70-130			
Ethylbenzene	21.5	0.500	"	20.0	ND	108	70-130			
Xylenes (total)	64.3	1.00	"	60.0	ND	107	70-130			
Surr: 4-BFB (PID)	*53.9*		"	*50.0*		*108*	*75-120*			
Matrix Spike Dup (3050772-MSD1)		**Source: P3E0452-07**		Prepared & Analyzed: 05/20/03						
Benzene	18.6	0.500	ug/l	20.0	ND	93.0	70-130	4.72	15	
Toluene	20.6	0.500	"	20.0	ND	103	70-130	4.28	15	
Ethylbenzene	20.7	0.500	"	20.0	ND	104	70-130	3.79	15	
Xylenes (total)	61.7	1.00	"	60.0	ND	103	70-130	4.13	15	
Surr: 4-BFB (PID)	*53.2*		"	*50.0*		*106*	*75-120*			

North Creek Analytical - Portland



Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3050836 - EPA 5030B										
Blank (3050836-BLK1)				Prepared & Analyzed: 05/21/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*51.1*		"	*50.0*		*102*	*75-120*			
LCS (3050836-BS2)				Prepared & Analyzed: 05/21/03						
Benzene	18.3	0.500	ug/l	20.0		91.5	70-130			
Toluene	20.3	0.500	"	20.0		102	70-130			
Ethylbenzene	21.1	0.500	"	20.0		106	70-130			
Xylenes (total)	63.6	1.00	"	60.0		106	70-130			
Surr: 4-BFB (PID)	*49.8*		"	*50.0*		*99.6*	*75-120*			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3E20025 - Grav. Preparation										
Blank (3E20025-BLK1)				Prepared: 05/20/03 Analyzed: 05/21/03						
Oil & Grease (HEM)	ND	5.00	mg/l							
LCS (3E20025-BS1)				Prepared: 05/20/03 Analyzed: 05/21/03						
Oil & Grease (HEM)	38.1	5.00	mg/l	40.0		95.2	78-107			
LCS Dup (3E20025-BSD1)				Prepared: 05/20/03 Analyzed: 05/21/03						
Oil & Grease (HEM)	36.9	5.00	mg/l	40.0		92.2	78-107	3.20	10	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	05/23/03 09:35

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Environmental Consultants, Inc.

Solving environment-related business problems worldwide

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Tigard, Oregon 97223 USA

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Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	July 9, 2003
Re:	Discharge Monitoring Report June 2003 Tosco-Chevron Remediation Site	**Project #:**	B17-05K Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on June 12, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: July 15, 2003

SAMPLING PERIOD: June 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
06/12/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH		6.9	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.009	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 7/8/03

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P3F0527-01	Water	06/12/03 15:00	06/13/03 12:40

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3F0527-01) Water					Sampled: 06/12/03 Received: 06/13/03				
Benzene	**0.972**	0.500	ug/l	1	EPA 8021B	06/23/03	06/24/03	3060879	
Toluene	**0.969**	0.500	"	"	"	"	"	"	
Ethylbenzene	**1.19**	0.500	"	"	"	"	"	"	
Xylenes (total)	**6.35**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*106 %*	*75-120*							

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3F0527-01) Water					Sampled: 06/12/03 Received: 06/13/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	06/18/03	06/18/03	3060679	

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3060879 - EPA 5030B										
Blank (3060879-BLK1)				Prepared & Analyzed: 06/23/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*51.5*		"	*50.0*		*103*	*75-120*			
LCS (3060879-BS1)				Prepared & Analyzed: 06/23/03						
Benzene	16.3	0.500	ug/l	20.0		81.5	70-130			
Toluene	19.1	0.500	"	20.0		95.5	70-130			
Ethylbenzene	21.1	0.500	"	20.0		106	70-130			
Xylenes (total)	60.3	1.00	"	60.0		100	70-130			
Surr: 4-BFB (PID)	*49.8*		"	*50.0*		*99.6*	*75-120*			
Matrix Spike (3060879-MS1)	**Source: P3F0501-02**			Prepared & Analyzed: 06/23/03						
Benzene	15.7	0.500	ug/l	20.0	ND	78.5	70-130			
Toluene	19.2	0.500	"	20.0	ND	96.0	70-130			
Ethylbenzene	21.2	0.500	"	20.0	ND	106	70-130			
Xylenes (total)	61.2	1.00	"	60.0	ND	102	70-130			
Surr: 4-BFB (PID)	*47.0*		"	*50.0*		*94.0*	*75-120*			
Matrix Spike Dup (3060879-MSD1)	**Source: P3F0501-02**			Prepared & Analyzed: 06/23/03						
Benzene	17.1	0.500	ug/l	20.0	ND	85.5	70-130	8.54	15	
Toluene	20.4	0.500	"	20.0	ND	102	70-130	6.06	15	
Ethylbenzene	22.5	0.500	"	20.0	ND	112	70-130	5.95	15	
Xylenes (total)	64.7	1.00	"	60.0	ND	108	70-130	5.56	15	
Surr: 4-BFB (PID)	*51.6*		"	*50.0*		*103*	*75-120*			

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3060947 - EPA 5030B										
Blank (3060947-BLK1)				Prepared & Analyzed: 06/24/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*50.8*		"	*50.0*		*102*	*75-120*			
LCS (3060947-BS2)				Prepared & Analyzed: 06/24/03						
Benzene	21.5	0.500	ug/l	20.0		108	70-130			
Toluene	22.0	0.500	"	20.0		110	70-130			
Ethylbenzene	22.3	0.500	"	20.0		112	70-130			
Xylenes (total)	44.4	1.00	"	60.0		74.0	70-130			
Surr: 4-BFB (PID)	*48.0*		"	*50.0*		*96.0*	*75-120*			

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3060679 - EPA 1664										
Blank (3060679-BLK1)				Prepared & Analyzed: 06/18/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3060679-BS1)				Prepared & Analyzed: 06/18/03						
Oil & Grease	72.3	5.00	mg/l	80.0		90.4	73-109			

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	06/25/03 16:42

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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TOSCO CHAIN OF CUSTODY REPORT

P3F0527

TOSCO INFORMATION

Facility Number: 0608
Site Address: 5528 NW Doane Ave
City, State, ZIP: Portland OR 97210
Project/AWO Code
Tosco Manager: Marty Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☑ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: Delta Env Project# B17-05K
Address: 7150 SW Hampton St #220
Tigard OR 97223
Phone: 503-639-~~7611~~ 8098 Fax: 639-7619
Project Manager: ~~K. Kline~~ R.S. Miller E-mail:
Sample Collection by: NWH

Quality Assurance Data Level: A B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: 10 5 3 2 1
10 Day - Standard

○ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON-TAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS SemiVols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)		Hem Oil & Gr. EPA 1664			Hold	NCA SAMPLE NUMBER
1. Pre	6-12-3/15:00	W	5			X													X				
2. Post	6-12-3/15:10	W	5																			X	
3.																							
4.																							
5.																							
6.																							
7.																							
8.																							
9.																							
10.																							

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1. [signature]	Delta	6-13-3 12:40	Erica [signature]	NCA	6/13/03 12:40
2.					
3.					

Comments: CCC Left 3.0°C

Page 1 of 1
Rev. Tos3.3.2/99

Comments:

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Chain of Review Completed: [ ]

Originator: KH PM: _____

Job No.: B17-05K Time Allocated to Complete: _____

Client Name: Conoco Phillips Petroleum

Site Name: Williams Bridge

Site Location: POX

Document Title: QMR

Document Type:

[ ] Letter [ ] Report [ ] Memo [ ] Proposal [ ] Table

[ ] Form [ ] Contract [ ] Transmittal [ ] GWM Report [ ] Other

File Name and Network Subdirectory Containing Your Files: Will/Bridge/B17-05H/LOT(July).doc

Additional Instructions: July 03.doc

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PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: KH		
Principal: RSM	RSM	8/05/2003
Professional Stamp:		

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DEPT OF ENVIRONMENTAL QUALITY
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LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	August 11, 2003
Re:	Discharge Monitoring Report July 2003 Tosco-Chevron Remediation Site	**Project #:**	B17-05K Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on July 17, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: August 15, 2003

SAMPLING PERIOD: July 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
07/17/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	**EPA 1664**	12.0	mg/L	5.00	**N/A**	**N/A**	
HEM Oil and Grease (Non-Polar)	**APHA/EPA**		mg/L	5.00	**110 mg/L**	**N/A**	Not analyzed
HEM Oil and Grease (Polar)	**APHA/EPA**		mg/L	5.00		**N/A**	Not analyzed
pH		7.8	SU		**5.0 - 11.5**	**N/A**	
BTEX	**EPA 8021B**	0.005	mg/L	0.00100	**0.75 mg/L**		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 8/8/03

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	07/25/03 11:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pre	P3G0640-01	Water	07/17/03 11:30	07/18/03 10:00

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	07/25/03 11:20

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3G0640-01) Water					Sampled: 07/17/03 Received: 07/18/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	07/21/03	07/21/03	3070728	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	4.69	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*92.2 %*	*75-120*							

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	07/25/03 11:20

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Pre (P3G0640-01) Water						Sampled: 07/17/03	Received: 07/18/03		
Oil & Grease	**12.0**	5.00	mg/l	1	EPA 1664	07/23/03	07/24/03	3070851	

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	07/25/03 11:20

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3070728 - EPA 5030B										
Blank (3070728-BLK1)				Prepared & Analyzed: 07/21/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*53.4*		"	*50.0*		*107*	*75-120*			
LCS (3070728-BS1)				Prepared & Analyzed: 07/21/03						
Benzene	24.7	0.500	ug/l	20.0		124	70-130			
Toluene	23.9	0.500	"	20.0		120	70-130			
Ethylbenzene	24.0	0.500	"	20.0		120	70-130			
Xylenes (total)	69.9	1.00	"	60.0		116	70-130			
Surr: 4-BFB (PID)	*39.8*		"	*50.0*		*79.6*	*75-120*			
LCS Dup (3070728-BSD1)				Prepared & Analyzed: 07/21/03						
Benzene	23.7	0.500	ug/l	20.0		118	70-130	4.13	15	
Toluene	23.5	0.500	"	20.0		118	70-130	1.69	15	
Ethylbenzene	23.6	0.500	"	20.0		118	70-130	1.68	15	
Xylenes (total)	68.7	1.00	"	60.0		114	70-130	1.73	15	
Surr: 4-BFB (PID)	*46.1*		"	*50.0*		*92.2*	*75-120*			
Matrix Spike (3070728-MS1)	**Source: P3G0628-07**			Prepared & Analyzed: 07/21/03						
Benzene	22.2	0.500	ug/l	20.0	ND	111	70-130			
Toluene	21.6	0.500	"	20.0	ND	108	70-130			
Ethylbenzene	21.4	0.500	"	20.0	ND	107	70-130			
Xylenes (total)	63.2	1.00	"	60.0	ND	105	70-130			
Surr: 4-BFB (PID)	*45.6*		"	*50.0*		*91.2*	*75-120*			
Matrix Spike Dup (3070728-MSD1)	**Source: P3G0628-07**			Prepared & Analyzed: 07/21/03						
Benzene	23.6	0.500	ug/l	20.0	ND	118	70-130	6.11	15	
Toluene	22.6	0.500	"	20.0	ND	113	70-130	4.52	15	
Ethylbenzene	22.8	0.500	"	20.0	ND	114	70-130	6.33	15	
Xylenes (total)	66.9	1.00	"	60.0	ND	112	70-130	5.69	15	
Surr: 4-BFB (PID)	*44.2*		"	*50.0*		*88.4*	*75-120*			

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	07/25/03 11:20

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3070851 - EPA 1664										
Blank (3070851-BLK1)				Prepared: 07/23/03 Analyzed: 07/24/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3070851-BS1)				Prepared: 07/23/03 Analyzed: 07/24/03						
Oil & Grease	71.1	5.00	mg/l	80.0		88.9	73-109			

North Creek Analytical - Portland

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541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: B17-05K	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	07/25/03 11:20

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT

P360640

CHEVRON INFORMATION

Facility Number: 100-1868
Site Address: 5538 NW Doane Ave
City, State, ZIP: Portland, OR 97210
Service Code: ☐ Site Assesment
Service Order: ☐ Remediation
Cost Element: 75100100 ☒ O & M
Chevron Project Manager: ☐ GWM

CONSULTANT INFORMATION

Name: Delta Environmental Project# B17-05K
Address: 7150 SW Hampton #220
Tigard OR 97223
Phone: 503-639-8098 Fax: 639-7619
Project Manager: Scott Miller Airbill#:
Sample Collection by: Nate Hemphill

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days
☐ 3 Day Air Samples (Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS SemiVols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	HEM or Grease Total Anhydrous EPA -1664-				Hold	NCA SAMPLE NUMBER
1. Pre	7-17-3/11:30	W	3			X												X					
2. Post	7-17-3/11:25	W	4																			X	
3.																							
4.																							
5.																							
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7.																							
8.																							
9.																							
10.																							

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1.	[signature]	Delta	7/18/03@9:45	[signature]	NCA	7/18/03@9:45
2.	[signature]			Carrie Detsloff	NCA	7/18 1000
3.						

Additional Comments: 1.8°

Page 1 of 1

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Client Name: Conoco Phillips

Site Name: Willbridge Terminal

Site Location: PDX

Document Title: DMR

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LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	September 3, 2003
Re:	Discharge Monitoring Report August 2003 Tosco-Chevron Remediation Site	***Project #:***	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on August 14, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: September 15, 2003

SAMPLING PERIOD: August 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
08/14/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.31	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.005	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 9/2/03

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P3H0486-01	Water	08/14/03 09:50	08/15/03 10:00

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3H0486-01RE1) Water					Sampled: 08/14/03 Received: 08/15/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	08/19/03	08/20/03	3080642	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	**4.74**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*91.6 %*	*75-120*							

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

Conventional Chemistry Parameters by APHA/EPA Methods

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3H0486-01) Water					Sampled: 08/14/03 Received: 08/15/03				
Fats, Oil & Grease (total)	ND	5.00	mg/l	1	EPA 1664	08/19/03	08/21/03	3H19030	
Fats, Oil & Grease (non-polar)	ND	5.00	"	"	"	"	"	"	
Fats, Oil & Grease (polar)	ND	5.00	"	"	"	"	"	"	

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3080566 - EPA 5030B										
Blank (3080566-BLK1)				Prepared & Analyzed: 08/18/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*51.0*		"	*50.0*		*102*	*75-120*			
LCS (3080566-BS1)				Prepared & Analyzed: 08/18/03						
Benzene	20.8	0.500	ug/l	20.0		104	70-130			
Toluene	19.9	0.500	"	20.0		99.5	70-130			
Ethylbenzene	20.8	0.500	"	20.0		104	72.7-127			
Xylenes (total)	63.0	1.00	"	60.0		105	73.1-127			
Surr: 4-BFB (PID)	*50.2*		"	*50.0*		*100*	*75-120*			
Matrix Spike (3080566-MS1)	**Source: P3H0452-01**			Prepared & Analyzed: 08/18/03						
Benzene	20.7	0.500	ug/l	20.0	56.8	-180	70-130			Q-01
Toluene	19.7	0.500	"	20.0	ND	98.5	70-130			
Ethylbenzene	20.9	0.500	"	20.0	2.79	90.6	70-130			
Xylenes (total)	63.0	1.00	"	60.0	3.06	99.9	70-130			
Surr: 4-BFB (PID)	*50.4*		"	*50.0*		*101*	*75-120*			
Matrix Spike Dup (3080566-MSD1)	**Source: P3H0452-01**			Prepared & Analyzed: 08/18/03						
Benzene	75.6	0.500	ug/l	20.0	56.8	94.0	70-130	114	15	Q-01
Toluene	20.9	0.500	"	20.0	ND	104	70-130	5.91	15	
Ethylbenzene	22.6	0.500	"	20.0	2.79	99.0	70-130	7.82	15	
Xylenes (total)	62.4	1.00	"	60.0	3.06	98.9	70-130	0.957	15	
Surr: 4-BFB (PID)	*50.2*		"	*50.0*		*100*	*75-120*			

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	Reported:
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3080642 - EPA 5030B										
Blank (3080642-BLK1)				Prepared & Analyzed: 08/19/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*45.9*		"	*50.0*		*91.8*	*75-120*			
LCS (3080642-BS1)				Prepared & Analyzed: 08/19/03						
Benzene	21.0	0.500	ug/l	20.0		105	70-130			
Toluene	21.2	0.500	"	20.0		106	70-130			
Ethylbenzene	21.6	0.500	"	20.0		108	72.7-127			
Xylenes (total)	66.7	1.00	"	60.0		111	73.1-127			
Surr: 4-BFB (PID)	*49.3*		"	*50.0*		*98.6*	*75-120*			

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3H19030 - Gravimetric (hexane)										
Blank (3H19030-BLK1)				Prepared: 08/19/03 Analyzed: 08/21/03						
Fats, Oil & Grease (total)	ND	5.00	mg/l							
Fats, Oil & Grease (non-polar)	ND	5.00	"							
Fats, Oil & Grease (polar)	ND	5.00	"							
LCS (3H19030-BS1)				Prepared: 08/19/03 Analyzed: 08/21/03						
Fats, Oil & Grease (total)	35.2	5.00	mg/l	40.1		87.8	78-107			
Fats, Oil & Grease (non-polar)	15.9	5.00	"	20.0		79.5	65-132			
LCS Dup (3H19030-BSD1)				Prepared: 08/19/03 Analyzed: 08/21/03						
Fats, Oil & Grease (total)	38.0	5.00	mg/l	40.1		94.8	78-107	7.65	10	
Fats, Oil & Grease (non-polar)	14.0	5.00	"	20.0		70.0	65-132	12.7	20	

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB 05K-2	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	08/22/03 16:12

Notes and Definitions

Q-01	The spike recovery, and/or RPD, for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

TOSCO CHAIN OF CUSTODY REPORT

P3H0486

TOSCO INFORMATION

Facility Number: 0608
Site Address: 5528 NW Doane Ave
City, State, ZIP: Portland OR 97210
Project/AWO Code
Tosco Manager: Marty Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☑ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: Delta Env. Project# 2TWB 05K-2
Address: 7150 SW Hampton #220
Tigard OR 97223
Phone: 503-639-8098 Fax:
Project Manager: Ruth Ha E-mail: RHa@DeltaENV.com
Sample Collection by: NWH

Quality Assurance Data Level: A B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: 10 5 3 2 1
10 Day - Standard

○ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Hem Oil & Grease (Total) AIPH/EPA -1664-				NCA SAMPLE NUMBER
1. Post	8-14-03 09:50	W	4			X												X				
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

	Relinquished By:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	Delta	8/15/03 @ 9:30	[signature]	NCA	8/15/03 @ 9:30
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LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	October 15, 2003
Re:	Discharge Monitoring Report September 2003 Tosco-Chevron Remediation Site	**Project #:**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on September 10, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: October 15, 2003

SAMPLING PERIOD: September 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received

Date Entered

Entered By

Comments

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
09/10/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	7.01	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.00794	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: [signature] Date: 10/15/03

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503.906.9200 fax 503.906.9210
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541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Mid	P3I0368-01	Water	09/10/03 08:50	09/10/03 12:40
Post	P3I0368-02	Water	09/10/03 08:40	09/10/03 12:40

North Creek Analytical - Portland

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

Crystal Jones, Project Manager

North Creek Analytical, Inc.
Environmental Laboratory Network

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

Selected Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P310368-01) Water					Sampled: 09/10/03 Received: 09/10/03				
Benzene	ND	0.500	ug/l	1	EPA 8260B	09/17/03	09/17/03	3090693	
Toluene	0.840	0.500	"	"	"	"	"	"	
Ethylbenzene	1.23	0.500	"	"	"	"	"	"	
Xylenes (total)	13.0	1.00	"	"	"	"	"	"	
Surr: 4-BFB	*98.0 %*	*80-120*							
Surr: 1,2-DCA-d4	*97.0 %*	*77-135*							
Surr: Dibromofluoromethane	*98.5 %*	*80-122*							
Surr: Toluene-d8	*100 %*	*80-120*							
Post (P310368-02) Water					Sampled: 09/10/03 Received: 09/10/03				
Benzene	ND	0.500	ug/l	1	EPA 8260B	09/17/03	09/17/03	3090693	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	7.94	1.00	"	"	"	"	"	"	
Surr: 4-BFB	*93.5 %*	*80-120*							
Surr: 1,2-DCA-d4	*104 %*	*77-135*							
Surr: Dibromofluoromethane	*102 %*	*80-122*							
Surr: Toluene-d8	*106 %*	*80-120*							

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

Conventional Chemistry Parameters by APHA/EPA Methods

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Mid (P310368-01) Water					Sampled: 09/10/03 Received: 09/10/03				
Oil & Grease (HEM)	ND	4.72	mg/l	1	EPA 1664	09/18/03	09/22/03	3118017	
Post (P310368-02) Water					Sampled: 09/10/03 Received: 09/10/03				
Oil & Grease (HEM)	ND	4.72	mg/l	1	EPA 1664	09/16/03	09/17/03	3116005	

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3090693 - EPA 5030B										
Blank (3090693-BLK1)				Prepared & Analyzed: 09/17/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB	*18.4*		"	*20.0*		*92.0*	*80-120*			
Surr: 1,2-DCA-d4	*19.6*		"	*20.0*		*98.0*	*77-135*			
Surr: Dibromofluoromethane	*19.8*		"	*20.0*		*99.0*	*80-122*			
Surr: Toluene-d8	*19.9*		"	*20.0*		*99.5*	*80-120*			
LCS (3090693-BS1)				Prepared & Analyzed: 09/17/03						
Benzene	19.2	0.500	ug/l	20.0		96.0	80-120			
Toluene	18.9	0.500	"	20.0		94.5	80-120			
Ethylbenzene	16.3	0.500	"	20.0		81.5	80-120			
Xylenes (total)	52.4	1.00	"	60.0		87.3	80-120			
Surr: 4-BFB	*19.0*		"	*20.0*		*95.0*	*80-120*			
Surr: 1,2-DCA-d4	*18.8*		"	*20.0*		*94.0*	*77-135*			
Surr: Dibromofluoromethane	*20.6*		"	*20.0*		*103*	*80-122*			
Surr: Toluene-d8	*20.0*		"	*20.0*		*100*	*80-120*			
Matrix Spike (3090693-MS1)	Source: P310368-01			Prepared & Analyzed: 09/17/03						
Benzene	20.9	0.500	ug/l	20.0	0.280	98.6	80-124			
Toluene	20.0	0.500	"	20.0	0.840	95.8	79.7-131			
Ethylbenzene	20.2	0.500	"	20.0	1.23	94.8	80-124			
Xylenes (total)	63.1	1.00	"	60.0	13.0	83.5	44.6-154			
Surr: 4-BFB	*21.0*		"	*20.0*		*105*	*80-120*			
Surr: 1,2-DCA-d4	*20.5*		"	*20.0*		*102*	*77-135*			
Surr: Dibromofluoromethane	*21.3*		"	*20.0*		*108*	*80-122*			
Surr: Toluene-d8	*21.8*		"	*20.0*		*109*	*80-120*			

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3090693 - EPA 5030B										
Matrix Spike Dup (3090693-MSD1)	**Source: P3I0368-01**			**Prepared & Analyzed: 09/17/03**						
Benzene	19.4	0.500	ug/l	20.0	0.280	95.6	80-124	3.05	25	
Toluene	19.5	0.500	"	20.0	0.840	93.3	79.7-131	2.53	25	
Ethylbenzene	20.3	0.500	"	20.0	1.23	95.4	80-124	0.494	25	
Xylenes (total)	63.6	1.00	"	60.0	13.0	84.3	44.6-154	0.789	25	
Surr: 4-BFB	*19.1*		"	*20.0*		*95.5*	*80-120*			
Surr: 1,2-DCA-d4	*20.5*		"	*20.0*		*102*	*77-135*			
Surr: Dibromofluoromethane	*21.7*		"	*20.0*		*108*	*80-122*			
Surr: Toluene-d8	*21.8*		"	*20.0*		*109*	*80-120*			

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3I16005 - Grav. Preparation										
Blank (3I16005-BLK1)				Prepared: 09/16/03 Analyzed: 09/17/03						
Oil & Grease (HEM)	ND	5.00	mg/l							
LCS (3I16005-BS1)				Prepared: 09/16/03 Analyzed: 09/17/03						
Oil & Grease (HEM)	39.1	5.00	mg/l	38.0		103	78-107			
LCS Dup (3I16005-BSD1)				Prepared: 09/16/03 Analyzed: 09/17/03						
Oil & Grease (HEM)	36.0	5.00	mg/l	38.0		94.7	78-107	8.26	10	
Batch 3I18017 - Gravimetric (hexane)										
Blank (3I18017-BLK1)				Prepared: 09/18/03 Analyzed: 09/22/03						
Oil & Grease (HEM)	ND	5.00	mg/l							
LCS (3I18017-BS1)				Prepared: 09/18/03 Analyzed: 09/22/03						
Oil & Grease (HEM)	35.0	5.00	mg/l	38.0		92.1	78-107			
LCS Dup (3I18017-BSD1)				Prepared: 09/18/03 Analyzed: 09/22/03						
Oil & Grease (HEM)	34.0	5.00	mg/l	38.0		89.5	78-107	2.90	10	

North Creek Analytical - Portland

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7150 SW Hampton - Suite 220	Project Number: PTWB-05L	Reported:
Tigard, OR 97223	Project Manager: Scott Miller	10/14/03 11:28

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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OCT-14-2003 14:26 NCALABS.COM P.09

P3I0368

TOSCO CHAIN OF CUSTODY REPORT

TOSCO INFORMATION

Facility Number:
Site Address: Conoco Willbridge
City, State, ZIP:
Project/AWO Code
Tosco Manager: Martin Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☒ Terminal/Bulk Plant ☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: Delta Environmental Project# PTWB-056
Address: Tigard
Phone: 503 639 8098 Fax:
Project Manager: R. Scott Miller E-mail:
Sample Collection by: JMW

Quality Assurance Data Level: A B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ☒ 5 3 2 1
10 Day - Standard

○ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SO Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAHs: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Hexane Oil + Grease Total + Phosphate 1664				Hold Please	NCA SAMPLE NUMBER
1. Mid	9/10/03 0850	W	4			X												X					
2. Port	↓ 0840	↓	4																			X	Call if any detections
3.																							
4.																							
5.																							May need to run Port Sample
6.																							
7.																							
8.																							
9.																							
10.																							

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1. [signature]	Delta	9/10/03 1240	[signature]	NCA	9-10-03 1240
2.					
3.					

Comments: pH 7.01 Call w by Harriba 5.7°C [illegible]

Page 1 of 1
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Comments:

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Regulatory Deadline: 11/15/03 Other: _____

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Job No.: PTWB Time Allotted to Complete: _____

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Site Name: Willbridge

Site Location: Portland, OR

Document Title: QMR

Document Type:

☐ Letter ☐ Report ☐ Memo ☐ Proposal ☐ Table

☐ Form ☐ Contract ☐ Transmittal ☐ GWM Report ☒ Other

File Name and Network Subdirectory Containing Your Files: Willbridge / B17-05H / Discharge Permit / October 03.doc
10T (Oct2003).doc

Additional Instructions: _____

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH	RKH	10/23
Principal: RSM	RSM	10/23
Professional Stamp:		

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Solving environment-related business problems worldwide

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Tigard, Oregon 97223 USA

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Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	October 29, 2003
Re:	Discharge Monitoring Report October 2003 Tosco-Chevron Remediation Site	**Project #:**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on October 14, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: November 15, 2003

SAMPLING PERIOD: October 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
10/14/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.8	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	ND	mg/L	0.00100	0.75 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 10/24/03

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	10/22/03 15:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P3J0537-01	Water	10/14/03 10:12	10/15/03 13:22

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Tigard, OR 97223	Project Manager: Ruth Ha	10/22/03 15:38

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3J0537-01) Water					Sampled: 10/14/03 Received: 10/15/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	10/15/03	10/15/03	3100593	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*92.8 %*	*67-119*							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	10/22/03 15:38

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3J0537-01) Water					Sampled: 10/14/03 Received: 10/15/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	10/16/03	10/17/03	3100607	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	10/22/03 15:38

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3100593 - EPA 5030B										
Blank (3100593-BLK1)				Prepared & Analyzed: 10/15/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*47.4*		"	*50.0*		*94.8*	*67-119*			
LCS (3100593-BS1)				Prepared & Analyzed: 10/15/03						
Benzene	16.2	0.500	ug/l	20.0		81.0	65-131			
Toluene	17.0	0.500	"	20.0		85.0	68-135			
Ethylbenzene	19.3	0.500	"	20.0		96.5	73-127			
Xylenes (total)	57.0	1.00	"	60.0		95.0	73-125			
Surr: 4-BFB (PID)	*44.4*		"	*50.0*		*88.8*	*67-119*			
Matrix Spike (3100593-MS1)	Source: P3J0537-01			Prepared & Analyzed: 10/15/03						
Benzene	18.3	0.500	ug/l	20.0	ND	91.5	62-138			
Toluene	19.8	0.500	"	20.0	0.0620	98.7	67-130			
Ethylbenzene	22.0	0.500	"	20.0	ND	110	70-131			
Xylenes (total)	66.2	1.00	"	60.0	0.316	110	66-128			
Surr: 4-BFB (PID)	*46.4*		"	*50.0*		*92.8*	*67-119*			
Matrix Spike Dup (3100593-MSD1)	Source: P3J0537-01			Prepared & Analyzed: 10/15/03						
Benzene	18.4	0.500	ug/l	20.0	ND	92.0	62-138	0.545	15	
Toluene	19.5	0.500	"	20.0	0.0620	97.2	67-130	1.53	15	
Ethylbenzene	22.1	0.500	"	20.0	ND	110	70-131	0.454	15	
Xylenes (total)	65.6	1.00	"	60.0	0.316	109	66-128	0.910	15	
Surr: 4-BFB (PID)	*46.7*		"	*50.0*		*93.4*	*67-119*			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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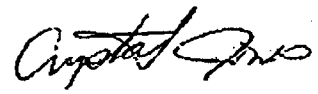
Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	10/22/03 15:38

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3100607 - EPA 1664										
Blank (3100607-BLK1)				Prepared: 10/16/03 Analyzed: 10/17/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3100607-BS1)				Prepared: 10/16/03 Analyzed: 10/17/03						
Oil & Grease	62.1	5.00	mg/l	80.0		77.6	73-109			

North Creek Analytical - Portland



Crystal Jones, Project Manager

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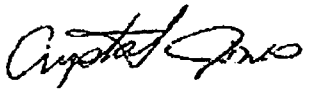
Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	10/22/03 15:38

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland



Crystal Jones, Project Manager

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Environmental Laboratory Network
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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

P330937

CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT

CHEVRON INFORMATION

Facility Number: 100 1868
Site Address: 5531 NW Doane Ave
City, State, ZIP: Portland OR 97210
Service Code: ☐ Site Assesment
Service Order: ☐ Remediation
Cost Element: 75100100 ☑ O & M
Chevron Project Manager: Gerald O'Ryan ☐ GWM

CONSULTANT INFORMATION

Name: Delta Env. Project# PTWB05L
Address: 7150 SW Hampton #220
Tigard OR 97223
Phone: 639-8098 Fax: 639-7619
Project Manager: Ruth Ha Airbill#:
Sample Collection by: NWH

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days
☐ 3 Day Air Samples
(Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Alpha/EPA 1664 (oil)	NCA SAMPLE NUMBER
1. Post	10-14-03/10:12	W	5			X													
2.																			
3.																			
4.																			
5.																			
6.																			
7.																			
8.																			
9.																			
10.																			

Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	Delta	10/15/03 @ 12:55		NCA	10/15/03 @ 12:55
2.			Erica Dahl	NCA	10/15/03 1322
3.					

Additional Comments:
3.1 °C
raytek

Page 1 of 1

Chev CoC, Rev. 3.3, 2/99

COPPOR0006798

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

Client: Delta

1. **Please sign for receipt and opening of** 1 **cooler or** ____ **other** ____
   By (print) Erica Dolan (sign) Erica Dolan
2. Date samples received 10/15/03 Date opened: Same X or ___/___/___
3. Delivered by: X NCA courier ___ FedEx ___UPS ___Courier ___Client ___Other ____
   Airbill # if applicable ____ (Put copy of shipping papers in file)
4. There were 0 custody seals present, signed by ____ date ___/___/___.
5. Were the custody seals unbroken and intact at the date and time of arrival? ___Yes ___No
6. Was ice used? X yes ___no Type of ice: ___blue ice ___gel ice X real ice
   Temperature (degrees C) 3.1°C Raytek thermometer ____ Digi-Therm (probe temperature blank)
7. Are custody papers sealed in a plastic bag and taped inside to lid? X Yes ___No
8. Were custody papers filled out properly (ink, signed, etc.)? X Yes ___No
   If "no" please specify: ____
9. Was project identifiable from custody papers? X Yes ___No
   Name of project CHEVRON PTW8056 (if applicable)
10. **Initial and date for unpacking:** ____ **(initials)** **date** ___/___/___
11. Packing material: ___bubble wrap/bag ___styrofoam ___cardboard none other
12. Were samples in bags? ___Yes X No
13. Did all containers indicated on the COC arrive? X Yes ___No
    If "no" please indicate which containers were absent ____
14. Were all containers unbroken and labels in good condition? X Yes ___No
    If "no" please indicate which containers ____
15. Were all bottle labels complete (ID, date, time, signature, etc.)? X Yes ___No
    Do the IDs, times, etc. agree with the COC? X Yes ___No
    If "no" please indicate which containers ____
16. Are containers properly preserved for indicated analysis? X Yes ___No
17. Is there adequate volume for the test(s) requested? X Yes ___No
18. If voa vials were submitted, are they free of bubbles? ___N/A X Yes ___No
19. **Log-in phase: Date samples were logged in:** 10/15/03 **Elm Project # P** 330537
20. Logged in by (print) Sarah Passarge (sign) Sarah Passarge
21. Was the project manager notified of status? (Use back of form as a record) ___Yes X No

KHM Processing / Filing Form

DUE DATE

Due to PM: _____ Due to Client: _____

Regulatory Deadline: 12/15/03 Other: _____

Use This Section When Submitting to Vicki

Date Submitted: 11/20/03

Document is: ☐ Final ☐ Draft

Format Check Completed: ☐

Chain of Review Completed: ☐

Originator: RKH

PM: _____

Job No. BTWB

Time Allotted to Complete: _____

Client Name: ~~Will~~ CP

Site Name: Willmidge

Site Location: PDX

Document Title: DMR

Document Type:

☐ Letter ☐ Report ☐ Memo ☐ Proposal ☐ Table

☐ Form ☐ Contract ☐ Transmittal ☐ GWM Report ☐ Other

File Name and Network Subdirectory Containing Your Files: Willmidge/Discharge Permit/2003/

Additional Instructions: LOT (Eric ~~September~~ November).doc

~~Sept~~ November03.doc

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM		
Professional Stamp:		

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail: Regular	Certified	UPS/Fed EX: Ground	Next Day	Fax	Email
Original:										
Eric DeBerry	1			X	X ✓					
Martin Chauvel	1			X	X ✓					
Internal Copies:										
RKH	1			X ✓						
Administrative File	1									
Total No. of Copies	4									

Close Out Information: (To be completed by Word Processing)

Comments: _____

Date Sent: 11/25/03

Closed Out: _____

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Environmental Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

7150 SW Hampton • Suite 220
Tigard, Oregon 97223 USA

503.639.8098 800.477.7411
Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	November 25, 2003
Re:	Discharge Monitoring Report November 2003 Tosco-Chevron Remediation Site	**Project #:**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on November 14, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory-prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: December 15, 2003

SAMPLING PERIOD: November 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
11/14/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.6	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	ND	mg/L	0.00100	0.75 mg/L		
Totalizer Reading	Field		gal		N/A	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Date: 11/24/03

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BY:

Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	11/20/03 15:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P3K0432-01	Water	11/14/03 12:25	11/14/03 15:00

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	11/20/03 15:45

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3K0432-01) Water					Sampled: 11/14/03 Received: 11/14/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	11/17/03	11/17/03	3110520	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*105 %*	*70-130*							

North Creek Analytical - Portland

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Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	11/20/03 15:45

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3K0432-01) Water					Sampled: 11/14/03 Received: 11/14/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	11/19/03	11/19/03	3110586	

North Creek Analytical - Portland

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	11/20/03 15:45

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3110520 - EPA 5030B										
Blank (3110520-BLK1)				Prepared & Analyzed: 11/17/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*50.0*		"	*50.0*		*100*	*70-130*			
LCS (3110520-BS1)				Prepared & Analyzed: 11/17/03						
Benzene	18.8	0.500	ug/l	20.0		94.0	70-130			
Toluene	18.5	0.500	"	20.0		92.5	70-130			
Ethylbenzene	19.8	0.500	"	20.0		99.0	70-130			
Xylenes (total)	59.9	1.00	"	60.0		99.8	70-130			
Surr: 4-BFB (PID)	*50.5*		"	*50.0*		*101*	*70-130*			
Matrix Spike (3110520-MS1)	**Source: P3K0436-02**			Prepared & Analyzed: 11/17/03						
Benzene	283	5.00	ug/l	200	80.7	101	70-130			
Toluene	200	5.00	"	200	10.8	94.6	70-130			
Ethylbenzene	572	5.00	"	200	367	102	70-130			
Xylenes (total)	854	10.0	"	600	227	104	70-130			
Surr: 4-BFB (PID)	*63.7*		"	*50.0*		*127*	*70-130*			
Matrix Spike Dup (3110520-MSD1)	**Source: P3K0436-02**			Prepared & Analyzed: 11/17/03						
Benzene	281	5.00	ug/l	200	80.7	100	70-130	0.709	20	
Toluene	197	5.00	"	200	10.8	93.1	70-130	1.51	20	
Ethylbenzene	561	5.00	"	200	367	97.0	70-130	1.94	20	
Xylenes (total)	825	10.0	"	600	227	99.7	70-130	3.45	20	
Surr: 4-BFB (PID)	*60.4*		"	*50.0*		*121*	*70-130*			

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	11/20/03 15:45

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3110586 - EPA 1664										
Blank (3110586-BLK1)				Prepared & Analyzed: 11/19/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3110586-BS1)				Prepared & Analyzed: 11/19/03						
Oil & Grease	74.6	5.00	mg/l	80.0		93.2	73-109			

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	11/20/03 15:45

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 (509) 924-9200 FAX 924-9290
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 (503) 906-9200 FAX 906-9210
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

P3K0432

TOSCO CHAIN OF CUSTODY REPORT

TOSCO INFORMATION

Facility Number:
Site Address:
City, State, ZIP:
Project/AWO Code
Tosco Manager:
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☒ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: Project#
Address:
Phone: Fax:
Project Manager: E-mail:
Sample Collection by:

Quality Assurance Data Level: [A] [B]
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: [10] [5] [3] [2] [1]
10 Day - Standard

○ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON-TAINERS	TPH-HCID	TPH-Gas	BTEX	EPA 8021 Mod. TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs: Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)					NCA SAMPLE NUMBER
1. Prof	11-14-03	W	3	X																		
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.			11-14-03 1500		NCA	11.14.3 15:00
2.						
3.						

Comments:

1.6 °C corrected

Page 1 of 1
Rev. Tos3.1, 2/99

Comments:

Distribution: White - Laboratory Yellow - Consultant Photocopy - Tosco

COPPOR0006809

Delta Environmental Processing / Filing Form

DUE DATE

Due to PM: _____ Due to Client: 1/07/04

Regulatory Deadline: 01/15/04 Other: _____

Use This Section When Submitting to Vicki

Date Submitted: 12/26/03

Document is: ☒ Final ☒ Draft Format Check Completed: ☐

Originator: RLH Chain of Review Completed: ☐

Job No. PTWB PM: _____

Time Allotted to Complete: _____

Client Name: Conoco Phillips

Site Name: Willbridge Terminal

Site Location: Portland, OR

Document Title: DMR

Document Type:

☐ Letter ☐ Report ☐ Memo ☐ Proposal ☐ Table

☐ Form ☐ Contract ☐ Transmittal ☐ GWM Report ☒ Other

File Name and Network Subdirectory Containing Your Files: B17-05H/Discharge Permit/2003/

Additional Instructions: Draft → to MC for signature LOT(December).doc

Email → DEQ upon receipt of draft December03.doc

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RLH		
Principal: RSM		
Professional Stamp:		

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail: Regular	US Mail: Certified	UPS/Fed EX: Ground	UPS/Fed EX: Next Day	Fax	Email
Original										
Eric De Berry	1			X	X					
Martin Cramer	1			X	X					
Internal Copies:										
RLH	1			X						
Administrative File	1									
Total No. of Copies	(4)									

Close Out Information: (To be completed by Word Processing)

Comments: _____

Date Sent: 1/9/04

Closed Out: _____

FILE

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www.deltaenv.com

7150 SW Hampton • Suite 220
Tigard, Oregon 97223 USA

503.639.8098 800.477.7411
Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	January 9, 2004
Re:	Discharge Monitoring Report December 2003 Tosco-Chevron Remediation Site	**Project No.**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on December 10, 2003. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: January 15, 2003

SAMPLING PERIOD: December 2003

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments: _____

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
12/10/03	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.5	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	ND	mg/L	0.00100	0.75 mg/L		
Totalizer Reading	Field		gal		N/A	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 12/31/03

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BY:

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	12/24/03 09:51

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P3L0483-01	Water	12/10/03 09:30	12/12/03 10:40

North Creek Analytical - Portland

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

Lisa Domenighini For Crystal Jones, Project Manager

www.ncalabs.com

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	12/24/03 09:51

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3L0483-01) Water					Sampled: 12/10/03 Received: 12/12/03				
Benzene	ND	0.500	ug/l	1	EPA 8021B	12/12/03	12/12/03	3120523	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*98.0 %*	*70-130*							

North Creek Analytical - Portland

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

Lisa Domenighini For Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	12/24/03 09:51

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P3L0483-01) Water					Sampled: 12/10/03 Received: 12/12/03				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	12/17/03	12/18/03	3120672	

North Creek Analytical - Portland

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

Lisa Domenighini For Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	12/24/03 09:51

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120523 - EPA 5030B										
Blank (3120523-BLK1)				Prepared & Analyzed: 12/12/03						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*51.0*		"	*50.0*		*102*	*70-130*			
LCS (3120523-BS2)				Prepared & Analyzed: 12/12/03						
Benzene	19.3	0.500	ug/l	20.0		96.5	70-130			
Toluene	19.2	0.500	"	20.0		96.0	70-130			
Ethylbenzene	20.3	0.500	"	20.0		102	70-130			
Xylenes (total)	59.1	1.00	"	60.0		98.5	70-130			
Surr: 4-BFB (PID)	*44.0*		"	*50.0*		*88.0*	*70-130*			
Matrix Spike (3120523-MS1)	**Source: P3L0471-01**			Prepared & Analyzed: 12/12/03						
Benzene	20.1	0.500	ug/l	20.0	ND	100	70-130			
Toluene	20.1	0.500	"	20.0	0.337	98.8	70-130			
Ethylbenzene	20.7	0.500	"	20.0	ND	104	70-130			
Xylenes (total)	60.0	1.00	"	60.0	0.647	98.9	70-130			
Surr: 4-BFB (PID)	*46.9*		"	*50.0*		*93.8*	*70-130*			
Matrix Spike Dup (3120523-MSD1)	**Source: P3L0471-01**			Prepared & Analyzed: 12/12/03						
Benzene	19.8	0.500	ug/l	20.0	ND	99.0	70-130	1.50	20	
Toluene	19.8	0.500	"	20.0	0.337	97.3	70-130	1.50	20	
Ethylbenzene	20.6	0.500	"	20.0	ND	103	70-130	0.484	20	
Xylenes (total)	59.8	1.00	"	60.0	0.647	98.6	70-130	0.334	20	
Surr: 4-BFB (PID)	*50.6*		"	*50.0*		*101*	*70-130*			

North Creek Analytical - Portland

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

Lisa Domenighini For Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	12/24/03 09:51

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120672 - EPA 1664										
Blank (3120672-BLK1)				Prepared: 12/17/03 Analyzed: 12/18/03						
Oil & Grease	ND	5.00	mg/l							
LCS (3120672-BS1)				Prepared: 12/17/03 Analyzed: 12/18/03						
Oil & Grease	78.3	5.00	mg/l	80.0		97.9	73-109			

North Creek Analytical - Portland

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

Lisa Domenighini For Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05L	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	12/24/03 09:51

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

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

Lisa Domenighini For Crystal Jones, Project Manager

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CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT P340483

CHEVRON INFORMATION

Facility Number: 100-1868
Site Address: 5531 NW Doane Ave
City, State, ZIP: Portland, OR 97210
Service Code:
Service Order:
Cost Element: 75100100
Chevron Project Manager: Gerald Ridgeway

☐ Site Assesment
☐ Remediation
☒ O & M
☐ GWM

CONSULTANT INFORMATION

Name: Delta ENV Project# PTW305L
Address: 7150 SW Hampton # 220
Tigard, OR 97223
Phone: 503-639-6741 Fax: 11-11-7619
8048
Project Manager: Ruth Ita Airbill#:
Sample Collection by: NWH

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☐ 10 Business Days (STD)
☐ 3 Day Air Samples
(Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CON-TAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Moth.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)		Heavy Oil (Hexane) RAH (EPA 1664)			NCA SAMPLE NUMBER
1. Post	12-10-3 10:30	W	3			X													X			
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.		Delta	12/12/03 @ 10:15		NCA	12/12/03 @ 10:15
2.					NCA	12.12.3 10:40
3.						

Additional Comments:
pH = 6.5 (Field)
Ambient = 40°F w/ Rain
1.2°C

Chev CoC. Rev. 3.3, 2/99

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DUE DATE

Due to PM: _____ Due to Client: 02/07/04

Regulatory Deadline: 02/15/04 Other: _____

Use This Section When Submitting to Vicki

Date Submitted: 01/22/04

Document is: [X] Final [X] Draft

Format Check Completed: [ ]

Chain of Review Completed: [ ]

Originator: RKH

PM: _____

Job No. PTWB

Time Allotted to Complete: _____

Client Name: Cnoco Phillips

Site Name: Willbridge

Site Location: Portland, OR

Document Title: DMR

Document Type:

[ ] Letter [ ] Report [ ] Memo [ ] Proposal [ ] Table

[ ] Form [ ] Contract [ ] Transmittal [ ] GWM Report [ ] Other

File Name and Network Subdirectory Containing Your Files: Khmz/B17-05H/Discharge permit/2004

Additional Instructions: _____

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM		
Professional Stamp:		

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail Regular	Certified	UPS/Fed EX Ground	Next Day	Fax	Email
Original										
Martin Cramer	1				X					
Eric DeBerry	1				X					
Internal Copies:										
RKH	1				X					
Administrative File	1									
Total No. of Copies	4									

X ← hand delivery. put on NB's chair 1/27

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Comments: _____

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Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	February 4, 2004
Re:	Discharge Monitoring Report December 2003 Tosco-Chevron Remediation Site	**Project No.**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on January 13, 2004. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

NDUSTRY NAME: Tosco-Chevron Remediation Site

?ERMIT NUMBER: 500.015

REPORT DUE DATE: February 15, 2004

SAMPLING PERIOD: January 2004

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
01/13/04	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.5	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.00190	mg/L	0.00100	0.75 mg/L		
Totalizer Reading	Field	1,257,060	gal		N/A	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 1/30/04

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- Chain of Custody form
- Analytical Results with Method Detection Limits (MDL)
- QA/QC Results, if applicable
- Signed Signatory Certification Statement (Printed on bottom of SMR)
- Completed Self Monitoring Report form

Whenever appropriate:

- Hand Composite Sample form
- Copies of pH charts showing the violation
- Calculations of monthly average
- Any other required reports

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Eric Deberry

www.ncalabs.com

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Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05N	Reported:
Tigard, OR 97223	Project Manager: Ruth Ha	01/21/04 13:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P4A0262-01	Water	01/13/04 09:00	01/14/04 15:55

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	01/21/04 13:18

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4A0262-01) Water					Sampled: 01/13/04 Received: 01/14/04				
Benzene	ND	0.500	ug/l	1	EPA 8021B	01/16/04	01/16/04	4010430	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	**1.90**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*134 %*	*70-130*							*S-09*

North Creek Analytical - Portland

Crystal Jones, Project Manager

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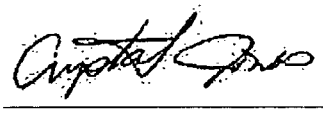
Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	01/21/04 13:18

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4A0262-01) Water					Sampled: 01/13/04 Received: 01/14/04				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	01/16/04	01/21/04	4010412	F-02

North Creek Analytical - Portland



Crystal Jones, Project Manager

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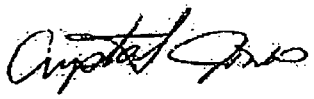
7150 SW Hampton - Suite 220	Project Number: PTWB05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	01/21/04 13:18

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010430 - EPA 5030B										
Blank (4010430-BLK1)				Prepared & Analyzed: 01/16/04						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*52.8*		"	*50.0*		*106*	*70-130*			
LCS (4010430-BS1)				Prepared & Analyzed: 01/16/04						
Benzene	21.7	0.500	ug/l	20.0		108	70-130			
Toluene	21.5	0.500	"	20.0		108	70-130			
Ethylbenzene	23.1	0.500	"	20.0		116	70-130			
Xylenes (total)	68.6	1.00	"	60.0		114	70-130			
Surr: 4-BFB (PID)	*63.9*		"	*50.0*		*128*	*70-130*			
LCS Dup (4010430-BSD1)				Prepared & Analyzed: 01/16/04						
Benzene	22.1	0.500	ug/l	20.0		110	70-130	1.83	15	
Toluene	22.0	0.500	"	20.0		110	70-130	2.30	15	
Ethylbenzene	22.6	0.500	"	20.0		113	70-130	2.19	15	
Xylenes (total)	65.7	1.00	"	60.0		110	70-130	4.32	15	
Surr: 4-BFB (PID)	*61.7*		"	*50.0*		*123*	*70-130*			

North Creek Analytical - Portland



Crystal Jones, Project Manager

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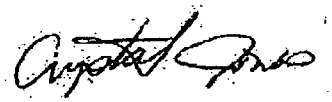
Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	01/21/04 13:18

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4010412 - EPA 1664										
Blank (4010412-BLK1)				Prepared: 01/16/04 Analyzed: 01/21/04						
Oil & Grease	ND	5.00	mg/l							
Oil & Grease (non-polar)	ND	5.00	"							
Oil & Grease (polar)	ND	5.00	"							
LCS (4010412-BS1)				Prepared: 01/16/04 Analyzed: 01/21/04						
Oil & Grease	67.7	5.00	mg/l	80.0		84.6	73-109			
Oil & Grease (non-polar)	37.3	5.00	"	40.0		93.2	57-113			

North Creek Analytical - Portland



Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	01/21/04 13:18

Notes and Definitions

F-02	Since Total Oil & Grease was ND for sample, Non-polar hydrocarbon analysis was not performed.
S-09	Surrogate recovery is outside control limits due to matrix interference.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Environmental Laboratory Network
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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

P4A 0262

TOSCO CHAIN OF CUSTODY REPORT

TOSCO INFORMATION

Facility Number: 0608
Site Address: 5528 NW Doane Ave
City, State, ZIP: Portland OR 97210
Project/AWO Code
Tosco Manager: Marty Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☑ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: Delta Project# PTW B05N
Address: Tigard office
Phone: 503-639-8098 Fax: 639-7619
Project Manager: Ruth Ha E-mail:
Sample Collection by: NWH

Quality Assurance Data Level: A B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: 10 5 3 2 1
10 Day - Standard

☑ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS SemiVols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals(8)	Total Hem Oil & Grease EPA/APHA 1664			NCA SAMPLE NUMBER
1. Post	1-13-4/0942	W	3			X												X			
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	Delta	1/14/04 @ 15:40	[signature]	NCA	1/14/04 @ 15:40
2.	[signature]			[signature]	NCA	1/14/04 @ 1555
3.						

Comments: pH = 6.5 By OAKton Meter
4.3°C

Page 1 of 1
Rev. Tos3.3.2/99

Comments:

Distribution: White - Laboratory Yellow - Consultant Photocopy - Tosco

COPPOR00006830

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

Client: Delta

1. **Please sign for receipt and opening of** 1 **cooler or** ____ **other** ____

   By (print) Erica Dahan (sign) Erica Dahan

2. Date samples received 1/14/04 Date opened: Same X or ___/___/___

3. Delivered by: X (FX) NCA courier ___ FedEx ___UPS ___Courier ___Client ___Other ____

   Airbill # if applicable ____ (Put copy of shipping papers in file)

4. There were 0 custody seals present, signed by ____ date ___/___/___.

5. Were the custody seals unbroken and intact at the date and time of arrival? ___Yes ___No

6. Was ice used? X yes ___no Type of ice: ___ blue ice X gel ice ___real ice

   Temperature (degrees C) 4.3°C Raytek thermometer ____ Digi-Therm (probe temperature blank)

7. Are custody papers sealed in a plastic bag and taped inside to lid? X Yes ___No

8. Were custody papers filled out properly (ink, signed, etc.)? X Yes ___No

   If "no" please specify: ____

9. Was project identifiable from custody papers? X Yes ___No

   Name of project 0605 (if applicable)

10. **Initial and date for unpacking:** ____ **(initials)** **date** ___/___/___

11. Packing material: ___bubble wrap/bag X styrofoam ___cardboard ____other

12. Were samples in bags? ___Yes X No

13. Did all containers indicated on the COC arrive? X Yes ___No

    If "no" please indicate which containers were absent ____

14. Were all containers unbroken and labels in good condition? X Yes ___No

    If "no" please indicate which containers ____

15. Were all bottle labels complete (ID, date, time, signature, etc.)? X Yes ___No

    Do the IDs, times, etc. agree with the COC? X Yes ___No

    If "no" please indicate which containers ____

16. Are containers properly preserved for indicated analysis? X Yes ___No

17. Is there adequate volume for the test(s) requested? X Yes ___No

18. If voa vials were submitted, are they free of bubbles? ___N/A X Yes ___No

19. **Log-in phase: Date samples were logged in:** 1/15/04 **Elm Project # P** 4402b2

20. Logged in by (print) Erica Dahan (sign) Erica Dahan

21. Was the project manager notified of status? (Use back of form as a record) ___Yes ___No

Delta Environmental Processing / Filing Form

DUE DATE

Due to PM: _____ Due to Client: 03/05/04

Regulatory Deadline: 03/15/04 Other: _____

Use This Section When Submitting to Vicki

Date Submitted: 03/02/04

Document is: [X] Final [X] Draft

Format Check Completed: [ ]

Chain of Review Completed: [ ]

Originator: RKH

PM: RKH

Job No. PTWB-05K.2001

Time Allotted to Complete: 1.5

Client Name: ~~Willbridge~~ COP

Site Name: Willbridge Terminal

Site Location: PDX

Document Title: DMR

Document Type:

[ ] Letter [ ] Report [ ] Memo [ ] Proposal [ ] Table

[ ] Form [ ] Contract [ ] Transmittal [ ] GWM Report [X] Other

File Name and Network Subdirectory Containing Your Files: Khm 2 / Willbridge / B17-05H / 2004

Additional Instructions:

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM	RSM	
Professional Stamp:		

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail Regular	US Mail Certified	UPS/Fed EX Ground	UPS/Fed EX Next Day	Fax	Email
Original										
Martin Cranwell	1			X	X					
Eric DeBarry	1			X	X					
Internal Copies:										
RKH	1			X	X					
Administrative File	1									
Total No. of Copies	4									

Close Out Information: (To be completed by Word Processing)

Comments:

Date Sent: 3/12/04

Closed Out:

X Call to hand delivers

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Solving environment-related business problems worldwide

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LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	March 12, 2004
Re:	Discharge Monitoring Report February 2004 Tosco-Chevron Remediation Site	**Project No.**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on February 16, 2004. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: March 15, 2004

SAMPLING PERIOD: February 2004

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
02/16/04	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.6	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.000610	mg/L	0.00100	0.75 mg/L		
Totalizer Reading	Field	2,003,370	gal	--	N/A	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 3/8/04

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- Chain of Custody form
- Analytical Results with Method Detection Limits (MDL)
- QA/QC Results, if applicable
- Signed Signatory Certification Statement (Printed on bottom of SMR)
- Completed Self Monitoring Report form

Whenever appropriate:

- Hand Composite Sample form
- Copies of pH charts showing the violation
- Calculations of monthly average
- Any other required reports

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Eric Deberry

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	03/02/04 14:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P4B0627-01	Water	02/16/04 10:55	02/19/04 10:55

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Tigard, OR 97223	Project Manager: Ruth Ha	03/02/04 14:22

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4B0627-01) Water					Sampled: 02/16/04 Received: 02/19/04				
Benzene	ND	0.500	ug/l	1	EPA 8021B	02/19/04	02/19/04	4020769	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	**0.610**	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*106 %*	*70-130*							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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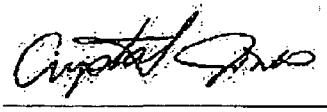
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	03/02/04 14:22

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4B0627-01) Water					Sampled: 02/16/04 Received: 02/19/04				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	02/24/04	02/25/04	4020936	F-02

North Creek Analytical - Portland



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541.383.9310 fax 541.382.7588

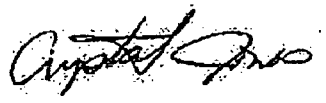
Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	03/02/04 14:22

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4020769 - EPA 5030B										
Blank (4020769-BLK1)				Prepared & Analyzed: 02/19/04						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*49.0*		"	*50.0*		*98.0*	*70-130*			
LCS (4020769-BS1)				Prepared: 02/19/04 Analyzed: 02/20/04						
Benzene	56.1	0.500	ug/l	50.0		112	70-130			
Toluene	49.4	0.500	"	50.0		98.8	70-130			
Ethylbenzene	50.6	0.500	"	50.0		101	70-130			
Xylenes (total)	162	1.00	"	150		108	70-130			
Surr: 4-BFB (PID)	*49.2*		"	*50.0*		*98.4*	*70-130*			
Matrix Spike (4020769-MS1)	**Source: P4B0594-09**			Prepared & Analyzed: 02/19/04						
Benzene	66.9	0.500	ug/l	50.0	7.93	118	70-130			
Toluene	100	0.500	"	50.0	43.9	112	70-130			
Ethylbenzene	88.8	0.500	"	50.0	15.5	147	70-130			Q-03
Xylenes (total)	375	1.00	"	150	86.2	193	70-130			Q-03
Surr: 4-BFB (PID)	*114*		"	*50.0*		*228*	*70-130*			*S-09*
Matrix Spike Dup (4020769-MSD1)	**Source: P4B0594-09**			Prepared & Analyzed: 02/19/04						
Benzene	63.5	0.500	ug/l	50.0	7.93	111	70-130	5.21	20	
Toluene	88.3	0.500	"	50.0	43.9	88.8	70-130	12.4	20	
Ethylbenzene	64.2	0.500	"	50.0	15.5	97.4	70-130	32.2	20	Q-03
Xylenes (total)	252	1.00	"	150	86.2	111	70-130	39.2	20	Q-03
Surr: 4-BFB (PID)	*52.1*		"	*50.0*		*104*	*70-130*			

North Creek Analytical - Portland



Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	03/02/04 14:22

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4020936 - EPA 1664										
Blank (4020936-BLK1)				Prepared: 02/24/04 Analyzed: 02/25/04						
Oil & Grease	ND	5.00	mg/l							
Oil & Grease (non-polar)	ND	5.00	"							
Oil & Grease (polar)	ND	5.00	"							
LCS (4020936-BS1)				Prepared: 02/24/04 Analyzed: 02/25/04						
Oil & Grease	74.1	5.00	mg/l	80.0		92.6	73-109			
Oil & Grease (non-polar)	32.0	5.00	"	40.0		80.0	57-113			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	03/02/04 14:22

Notes and Definitions

F-02	Since Total Oil & Grease was ND for sample, Non-polar hydrocarbon analysis was not performed.
Q-03	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already present in the sample.
S-09	Surrogate recovery is outside control limits due to matrix interference.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Jones, Project Manager

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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT

P4B0627

CHEVRON INFORMATION

Facility Number: 100-1868
Site Address: 5531 NW Doane Ave
City, State, ZIP: Portland OR 97210
Service Code: ☐ Site Assesment
Service Order: ☐ Remediation
Cost Element: 75100100 ☑ O & M
Chevron Project Manager: Gerald O'Regan ☐ GWM

CONSULTANT INFORMATION

Name: Delta Environmental Project# PTWB-05L
Address: 7150 SW Hampton #220
Tigard, OR 97223
Phone: 503-639-8098 Fax:
Project Manager: Ruth Ha Airbill#:
Sample Collection by: NWH

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days
☐ 3 Day Air Samples (Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W.S.O)	# OF CON-TAINERS	TPH-HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Total Hm VOCs Gasoline EPA/APHA 1664					NCA SAMPLE NUMBER
1. Post	2-16-4 / 10:55	W	3			X												X					
2.																							
3.																							
4.																							
5.																							
6.																							
7.																							
8.																							
9.																							
10.																							

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	Delta		[signature]	NCA	2/19/04 @ 10:43
2.	[signature]	NCA	2/19/04 @ 10:55	[signature]	NCA	2/19/04 1055
3.						

Additional Comments: pH = 6.6 Su
Volume = 2,003,370 (Cumulative)

Page 1 of 1 Chev CoC, Rev. 3.3, 2/99

1-7

COPPOR00006842

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

Client: _____

1. **Please sign for receipt and opening of** 1 **cooler or** _____ **other** _____

   By (print) Kim Davis (sign) [signature]

2. Date samples received 2/19/04 Date opened: Same X or ___/___/___

3. Delivered by: X NCA courier ___ FedEx ___ UPS ___ Courier ___ Client ___ Other _____

   Airbill # if applicable _____ (Put copy of shipping papers in file)

4. There were C custody seals present, signed by _____ date ___/___/___.

5. Were the custody seals unbroken and intact at the date and time of arrival? ___ Yes ___ No

6. Was ice used? X yes ___ no Type of ice: ___ blue ice ___ gel ice X real ice

   Temperature (degrees C) _____ Raytek thermometer 1.7 Digi-Therm (probe temperature blank)

7. Are custody papers sealed in a plastic bag ~~and taped inside to lid~~? X Yes ___ No

8. Were custody papers filled out properly (ink, signed, etc.)? ___ Yes ___ No

   If "no" please specify: _____

9. Was project identifiable from custody papers? ___ Yes ___ No

   Name of project _____ (if applicable)

10. **Initial and date for unpacking:** KD **(initials)** **date** 2/19/04

11. Packing material: NA bubble wrap/bag ___ styrofoam ___ cardboard _____ other

12. Were samples in bags? ___ Yes X No

13. Did all containers indicated on the COC arrive? X Yes ___ No

    If "no" please indicate which containers were absent _____

14. Were all containers unbroken and labels in good condition? X Yes ___ No

    If "no" please indicate which containers _____

15. Were all bottle labels complete (ID, date, time, signature, etc.)? X Yes ___ No

    Do the IDs, times, etc. agree with the COC? X Yes ___ No

    If "no" please indicate which containers _____

16. Are containers properly preserved for indicated analysis? X Yes ___ No

17. Is there adequate volume for the test(s) requested? X Yes ___ No

18. If voa vials were submitted, are they free of bubbles? X N/A ___ Yes ___ No

19. **Log-in phase: Date samples were logged in:** 2/19/04 **Elm Project #** PB0627

20. Logged in by (print) ERICA DUGAN (sign) Erica Dugan

21. Was the project manager notified of status? (Use back of form as a record) ___ Yes ___ No

Delta
Environmental
Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

7150 SW Hampton • Suite 220
Tigard, Oregon 97223 USA

503.639.8098 800.477.7411
Fax 503.639.7619

FILE

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	April 12, 2004
Re:	Discharge Monitoring Report March 2004 Tosco-Chevron Remediation Site	**Project No.**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on March 18, 2004. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: April 15, 2004

SAMPLING PERIOD: March 2004

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
03/18/04	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total)[1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.2	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	ND	mg/L	0.0005	0.75 mg/L		
Totalizer Reading	Field	2,512,540	gal		N/A	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 4/12/04

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	04/02/04 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P4C0678-01	Water	03/18/04 11:15	03/19/04 12:18

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	04/02/04 14:49

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4C0678-01) Water					Sampled: 03/18/04 Received: 03/19/04				
Benzene	ND	0.500	ug/l	1	EPA 8021B	03/24/04	03/24/04	4030959	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*83.6 %*	*70-130*							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	04/02/04 14:49

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4C0678-01) Water					Sampled: 03/18/04 Received: 03/19/04				
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	03/24/04	03/29/04	4030947	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	04/02/04 14:49

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4030959 - EPA 5030B										
Blank (4030959-BLK1)				Prepared & Analyzed: 03/24/04						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*48.1*		"	*50.0*		*96.2*	*70-130*			
LCS (4030959-BS1)				Prepared & Analyzed: 03/24/04						
Benzene	52.3	0.500	ug/l	50.0		105	70-130			
Toluene	49.8	0.500	"	50.0		99.6	70-130			
Ethylbenzene	50.0	0.500	"	50.0		100	70-130			
Xylenes (total)	143	1.00	"	150		95.3	70-130			
Surr: 4-BFB (PID)	*44.9*		"	*50.0*		*89.8*	*70-130*			
Matrix Spike (4030959-MS1)	**Source: P4C0558-01**			Prepared & Analyzed: 03/24/04						
Benzene	61.6	0.500	ug/l	50.0	ND	123	70-130			
Toluene	58.3	0.500	"	50.0	ND	117	70-130			
Ethylbenzene	59.8	0.500	"	50.0	0.606	118	70-130			
Xylenes (total)	173	1.00	"	150	0.826	115	70-130			
Surr: 4-BFB (PID)	*53.6*		"	*50.0*		*107*	*70-130*			
Matrix Spike Dup (4030959-MSD1)	**Source: P4C0558-01**			Prepared & Analyzed: 03/24/04						
Benzene	44.4	0.500	ug/l	50.0	ND	88.8	70-130	32.5	20	Q-01
Toluene	41.9	0.500	"	50.0	ND	83.8	70-130	32.7	20	Q-01
Ethylbenzene	43.1	0.500	"	50.0	0.606	85.0	70-130	32.5	20	Q-01
Xylenes (total)	123	1.00	"	150	0.826	81.4	70-130	33.8	20	Q-01
Surr: 4-BFB (PID)	*45.8*		"	*50.0*		*91.6*	*70-130*			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	04/02/04 14:49

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4030947 - EPA 1664										
Blank (4030947-BLK1)				Prepared: 03/24/04 Analyzed: 03/29/04						
Oil & Grease	ND	5.00	mg/l							
LCS (4030947-BS1)				Prepared: 03/24/04 Analyzed: 03/29/04						
Oil & Grease	64.0	5.00	mg/l	80.0		80.0	79-114			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Tosco #0608, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Scott Miller	04/02/04 14:49

Notes and Definitions

Q-01	The spike recovery, and/or RPD, for this QC sample is outside of established control limits. Review of associated batch QC indicates the recovery for this analyte does not represent an out-of-control condition for the batch.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Jones, Project Manager

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TOSCO CHAIN OF CUSTODY REPORT

P4C0678

TOSCO INFORMATION

Facility Number: 0608
Site Address: 5528 NW Doane Ave
City, State, ZIP: Portland, OR
Project/AWO Code
Tosco Manager: Martin Cramer
FACILITY TYPE: (check one) ☐ BP/Ⓚ ☒ Terminal/Bulk Plant
☐ Brown Bear ☐ Former 76 Site ☐ Other

CONSULTANT INFORMATION

Firm: Delta Env Project# PTWB-05N
Address: 7150 SW Hampton St., Ste 220
Tigard, OR
Phone: 503-639-8098 Fax:
Project Manager: S. Miller E-mail:
Sample Collection by: C. Fleming

Quality Assurance Data Level: A B
A: Standard Summary
B: Standard + Chromatograms

Laboratory Turnaround Days: ☒ 10 5 3 2 1
10 Day - Standard

☒ OR ○ WA ○ AK ○ NW Series ○ ID

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W,S,O)	# OF CONTAINERS	TPH-HCID	TPH-Gas	BTEX EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS Semi Vols. EPA 8270	PAH's: 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	HEM 0.1 + Grease Total Aphajecta 1664				NCA SAMPLE NUMBER
1. Post	3/18/04 1115	W	5			✓												✓				
2.																						
3.																						
4.																						
5.																						
6.																						
7.																						
8.																						
9.																						
10.																						

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	Delta	3/19/04 1220	Eric Dalton	NCA	3/19/04 1218
2.						
3.						

Comments:
Totalizer = 2,512,540
pH = 6.2

Page 1 of 1
Rev. Tos3.3.2/99

Comments: 5.8°C, 2.1°C
Distribution: White - Laboratory Yellow - Consultant Photocopy - Tosco

COPPOR00006852

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

Client: Delta

1. **Please sign for receipt and opening of** 2 **cooler or** _____ **other** _____

   By (print) Erica Dalan (sign) Erica Dalan

2. Date samples received 3/19/04 Date opened: Same X or ___/___/___

3. Delivered by: ___NCA courier ___ FedEx X UPS ___Courier ___Client ___Other_____

   Airbill # if applicable _____ (Put copy of shipping papers in file)

4. There were 0 custody seals present, signed by _____ date ___/___/___.

5. Were the custody seals unbroken and intact at the date and time of arrival? ____Yes ____No

6. Was ice used? X yes ~~X~~ no Type of ice: ____ blue ice ____gel ice X real ice

   Temperature (degrees C) 5.8, 2.1 Raytek thermometer _____ Digi-Therm (probe temperature blank)

7. Are custody papers sealed in a plastic bag and taped inside to lid? X Yes ___No

8. Were custody papers filled out properly (ink, signed, etc.)? X Yes ___No

   If "no" please specify: _____

9. Was project identifiable from custody papers? X Yes ___No

   Name of project TXO0008 (if applicable)

10. **Initial and date for unpacking:** _____ **(initials)** **date** ___/___/___

11. Packing material: ____bubble wrap/bag ____styrofoam ____cardboard none other

12. Were samples in bags? X Yes ___No

13. Did all containers indicated on the COC arrive? X Yes ___No

    If "no" please indicate which containers were absent _____

14. Were all containers unbroken and labels in good condition? X Yes ___No

    If "no" please indicate which containers _____

15. Were all bottle labels complete (ID, date, time, signature, etc.)? ✓ Yes ___No

    Do the IDs, times, etc. agree with the COC? ✓ Yes ___No

    If "no" please indicate which containers _____

16. Are containers properly preserved for indicated analysis? X Yes ___No

17. Is there adequate volume for the test(s) requested? X Yes ___No

18. If voa vials were submitted, are they free of bubbles? ____ N/A X Yes ___No

19. **Log-in phase: Date samples were logged in:** 3/19/04 **Elm Project #** P4C0618

20. Logged in by (print) Erica Dalan (sign) Erica Dalan

21. Was the project manager notified of status? (Use back of form as a record) ____Yes ____No

UPLOADED WEBX
5-13-04

Delta Environmental Processing / Filing Form

DUE DATE

Due to PM: _____ Due to Client: ~~C4~~ 05/03/04

Regulatory Deadline: _____ Other: _____

Use This Section When Submitting to Vicki

Date Submitted: ~~C5~~ 04/30/04

Document is: ☒ Final ☒ Draft

Format Check Completed: ☐

Chain of Review Completed: ☐

Originator: RKH

PM: RSM

Job No.: PTWB

Time Allotted to Complete: _____

Client Name: CIP

Site Name: Willbridge

Site Location: Portland

Document Title: DMR

Document Type:

☐ Letter ☐ Report ☐ Memo ☐ Proposal ☐ Table

☐ Form ☐ Contract ☐ Transmittal ☐ GWM Report ☐ Other

File Name and Network Subdirectory Containing Your Files: Willbridge / B17-05H / Discharge Permit / 2004 / LOT (End-April) April 04

Additional Instructions: _____

Chain of Review:

PM/Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: RKH		
Principal: RSM		
Professional Stamp:		

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail: Regular	Certified	UPS/Fed EX: Ground	Next Day	Fax	Email	
Original: Eric Delaney	1			✓	X ✓						
~~Ex~~ Marty Cramer	1			X	X ✓	gave	to Cole	4/30			X
Internal Copies:											
RKH	1			X ✓							
Administrative File	1										
Total No. of Copies	4										

Close Out Information: (To be completed by Word Processing)

Comments: _____

Date Sent: 5/7/04

Closed Out: _____

COPPOR00006854

Delta
Environmental
Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

7150 SW Hampton • Suite 220
Tigard, Oregon 97223 USA

503.639.8098 800.477.7411
Fax 503.639.7619

LETTER OF TRANSMITTAL

To:	Mr. Eric DeBerry	**From:**	R. Scott Miller
Company:	Industrial Source Control Division Water Pollution Control 6543 N. Burlington Avenue Portland, OR 97203-5452	**Date:**	May 7, 2004
Re:	Discharge Monitoring Report April 2004 Tosco-Chevron Remediation Site	**Project No.**	PTWB-05K-2.0001 Permit No. 500.015

Mr. DeBerry:

Water samples were collected by a representative of Delta Environmental Consultants, Inc. on April 15, 2004. Samples (Grab) were collected by discharging water from sample ports on the process piping directly into laboratory prepared containers. The sample containers were sealed, labeled, placed in a cooler with ice, and transported to the project laboratory. The effluent samples were analyzed for HEM Oil and Grease (EPA Method 1664) and benzene, toluene, ethylbenzene, and xylene (BTEX) (EPA Method 8021B). Laboratory analysis was performed by North Creek Analytical (NCA) in Beaverton, Oregon. A copy of the laboratory analytical reports is included.

The monitoring was conducted in accordance with the industrial wastewater discharge Permit No. 500.015. The discharge monitoring report (DMR) is being submitted as the self-monitoring report and is included. All parameters monitored were within the limits listed in the facility's discharge permit.

If you have any questions regarding the enclosed DMR, please feel free to contact me at (503) 639-8098. Thank you.

R. Scott Miller
Delta Environmental Consultants, Inc.

cc: Martin Cramer, Philips Petroleum Company

A member of:
Inogen Environmental Alliance

CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT

INDUSTRY NAME: Tosco-Chevron Remediation Site

PERMIT NUMBER: 500.015

REPORT DUE DATE: May 15, 2004

SAMPLING PERIOD: April 2004

For Industrial Source Control Division Use Only

Date Postmarked/Received **Date Entered**

Entered By:

Comments:

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
04/15/04	1A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY	LIMITS MONTHLY	COMMENTS
HEM Oil & Grease (Total) [1]	EPA 1664	ND	mg/L	5.00	N/A	N/A	
HEM Oil and Grease (Non-Polar)	APHA/EPA		mg/L	5.00	110 mg/L	N/A	Not analyzed
HEM Oil and Grease (Polar)	APHA/EPA		mg/L	5.00		N/A	Not analyzed
pH	Field Meter	6.6	SU		5.0 - 11.5	N/A	
BTEX	EPA 8021B	0.00278	mg/L	0.0005	0.75 mg/L		
Totalizer Reading	Field	2,906,700	gal		N/A	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: 5/3/04

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/29/04 17:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Post	P4D0596-01	Water	04/15/04 08:40	04/16/04 15:20

North Creek Analytical - Portland

Crystal Jones, Project Manager

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

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7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/29/04 17:03

BTEX per EPA Method 8021B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4D0596-01) Water					Sampled: 04/15/04 Received: 04/16/04				
Benzene	ND	0.500	ug/l	1	EPA 8021B	04/20/04	04/21/04	4040794	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	**2.78**	1.00	"	"	"	"	"	"	
Surr: 4-BFB (PID)	*108 %*	*70-130*							

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/29/04 17:03

Oil and Grease Analysis per EPA Method 1664

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
Post (P4D0596-01) Water						Sampled: 04/15/04	Received: 04/16/04		
Oil & Grease	ND	5.00	mg/l	1	EPA 1664	04/28/04	04/29/04	4041123	

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/29/04 17:03

BTEX per EPA Method 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4040794 - EPA 5030B										
Blank (4040794-BLK1)				Prepared: 04/20/04 Analyzed: 04/21/04						
Benzene	ND	0.500	ug/l							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surr: 4-BFB (PID)	*50.3*		"	*50.0*		*101*	*70-130*			
LCS (4040794-BS1)				Prepared: 04/20/04 Analyzed: 04/21/04						
Benzene	58.0	0.500	ug/l	50.0		116	70-130			
Toluene	52.0	0.500	"	50.0		104	70-130			
Ethylbenzene	56.2	0.500	"	50.0		112	70-130			
Xylenes (total)	166	1.00	"	150		111	70-130			
Surr: 4-BFB (PID)	*52.8*		"	*50.0*		*106*	*70-130*			
Duplicate (4040794-DUP1)	Source: P4D0427-04			Prepared: 04/20/04 Analyzed: 04/22/04						
Benzene	ND	0.500	ug/l		ND			NA	15	
Toluene	ND	0.500	"		0.906				15	
Ethylbenzene	ND	0.500	"		ND			NA	15	
Xylenes (total)	0.612	1.00	"		ND				15	
Surr: 4-BFB (PID)	*48.3*		"	*50.0*		*96.6*	*70-130*			
Matrix Spike (4040794-MS1)	Source: P4D0511-01			Prepared: 04/20/04 Analyzed: 04/21/04						
Benzene	109	0.500	ug/l	50.0	49.6	119	70-130			
Toluene	70.2	0.500	"	50.0	18.8	103	70-130			
Ethylbenzene	58.0	0.500	"	50.0	0.870	114	70-130			
Xylenes (total)	175	1.00	"	150	5.37	113	70-130			
Surr: 4-BFB (PID)	*81.2*		"	*100*		*81.2*	*70-130*			
Matrix Spike Dup (4040794-MSD1)	Source: P4D0511-01			Prepared: 04/20/04 Analyzed: 04/21/04						
Benzene	94.0	0.500	ug/l	50.0	49.6	88.8	70-130	14.8	20	
Toluene	58.6	0.500	"	50.0	18.8	79.6	70-130	18.0	20	
Ethylbenzene	45.4	0.500	"	50.0	0.870	89.1	70-130	24.4	20	Q-01
Xylenes (total)	137	1.00	"	150	5.37	87.8	70-130	24.4	20	Q-01
Surr: 4-BFB (PID)	*42.3*		"	*50.0*		*84.6*	*70-130*			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/29/04 17:03

Oil and Grease Analysis per EPA Method 1664 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4041123 - EPA 1664										
Blank (4041123-BLK1)				Prepared: 04/28/04 Analyzed: 04/29/04						
Oil & Grease	ND	5.00	mg/l							
LCS (4041123-BS1)				Prepared: 04/28/04 Analyzed: 04/29/04						
Oil & Grease	90.5	5.00	mg/l	80.0		113	79-114			

North Creek Analytical - Portland

Crystal Jones, Project Manager

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541.383.9310 fax 541.382.7588

Delta Environmental Consultants - Tigard	Project: Chevron #100-1868, Portland, OR	
7150 SW Hampton - Suite 220	Project Number: PTWB-05N	**Reported:**
Tigard, OR 97223	Project Manager: Ruth Ha	04/29/04 17:03

Notes and Definitions

Q-01	The matrix spike recovery, and/or RPD, for this QC sample is outside of established control limits. Failure of a matrix spike QC sample does not represent an out-of-control condition for the batch.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet	Sample results reported on a wet weight basis (as received)
RPD	Relative Percent Difference

North Creek Analytical - Portland

Crystal Jones, Project Manager

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

P4D0596

nca™
North Creek Analytical, Inc.
Environmental Laboratory Network
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20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (541) 383-9310 FAX 382-7588

CHEVRON U.S.A., Inc. CHAIN OF CUSTODY REPORT

CHEVRON INFORMATION

Facility Number: 100-1868
Site Address: 5531 NW Doane Ave
City, State, ZIP: Portland, OR 97210
Service Code: ☐ Site Assesment
Service Order: ☐ Remediation
Cost Element: 75100100 ☒ O & M
Chevron Project Manager: Gerald O'Regan ☐ GWM

CONSULTANT INFORMATION

Name: Delta Environmental Project# PTWB-05N
Address: Tigard, OR
Phone: 503-639-8098 Fax:
Project Manager: Ruth Ha Airbill#:
Sample Collection by: NWH

Laboratory Turnaround Time

☐ 1 Business Day
☐ 3 Business Days
☐ 5 Business Days
☒ 10 Business Days
☐ 3 Day Air Samples (Please Select One)

☐ AK ☐ OR ☐ WA ☐ NW Series

SAMPLE INDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W.S.O)	# OF CON-TAINERS	TPH HCID	TPH-Gas	BTEX Only EPA 8021 Mod.	TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Ext. w/SG Cleanup	Halogen. Volatiles EPA 8021	Pesticides/PCBs or PCBs Only	GC/MS Volatiles EPA 8260	GC/MS SemiVols. EPA 8270	PAH's 8270 SIM or 8310	Lead: Total or Dissolved	TCLP or RCRA Metals (8)	Hem 0.1 Grease EPA/APHA 1664					NCA SAMPLE NUMBER
1. Post	4-15-04 / 0840	W	3			X												X					
2.																							
3.																							
4.																							
5.																							
6.																							
7.																							
8																							
9																							
10																							

	Relinquished by:	Firm:	Date & Time	Received by:	Firm:	Date & Time
1.	[signature]	Delta	4-16-4 1530	[signature]	NCA	4/16 1520
2.						
3.						

Additional Comments:
Email to NHEMPHILL@Deltaenv.com
and RHA@Deltaenv.com
pH=6.6 // Flow = 2906.700 ml

COPPOR00006863

NORTH CREEK ANALYTICAL COOLER RECEIPT FORM

(Army Corp. compliant)

Client: Delta

1. **Please sign for receipt and opening of** 1 **cooler or** _____ **other** _____

   By (print) Carrie Fahsholz (sign) Carrie Fahsholz

2. Date samples received 4/16/04 Date opened: Same X or ___/___/___

3. Delivered by: ___NCA courier ___ FedEx ___UPS ___Courier X Client ___Other _____

   Airbill # if applicable _____ (Put copy of shipping papers in file)

4. There were 0 custody seals present, signed by _____ date ___/___/___.

5. Were the custody seals unbroken and intact at the date and time of arrival? ___Yes ___No

6. Was ice used? ✓ yes ___no Type of ice: ___ blue ice ___gel ice X real ice

   Temperature (degrees C) 3.1 Raytek thermometer _____ Digi-Therm (probe temperature blank)

7. Are custody papers sealed in a plastic bag and taped inside to lid? ___Yes X No

8. Were custody papers filled out properly (ink, signed, etc.)? X Yes ___No

   If "no" please specify: _____

9. Was project identifiable from custody papers? X Yes ___No

   Name of project Chevron 100-1868 (if applicable)

10. **Initial and date for unpacking:** KD **(initials)** **date** 4/16/04

11. Packing material: NA bubble wrap/bag ___styrofoam ___cardboard _____other

12. Were samples in bags? ___Yes X No

13. Did all containers indicated on the COC arrive? X Yes ___No

    If "no" please indicate which containers were absent _____

14. Were all containers unbroken and labels in good condition? X Yes ___No

    If "no" please indicate which containers _____

15. Were all bottle labels complete (ID, date, time, signature, etc.)? X Yes ___No

    Do the IDs, times, etc. agree with the COC? X Yes ___No

    If "no" please indicate which containers _____

16. Are containers properly preserved for indicated analysis? X Yes ___No

17. Is there adequate volume for the test(s) requested? X Yes ___No

18. If voa vials were submitted, are they free of bubbles? ___N/A X Yes ___No

19. **Log-in phase: Date samples were logged in:** 4/16/04 **Elm Project #** PH0596

20. Logged in by (print) Kim Davis (sign) Kim Davis

21. Was the project manager notified of status? (Use back of form as a record) ___Yes ___No

DELTA **Document Control Sheet**

DUE DATE

Due to PM: 5/15/2008 Due to Client: _____

Regulatory Deadline: _____ Other: _____

Client Name: KMEP/COP/CHEVRON Author: C. Fleming PM: B. Pletcher

Site: Willbridge Job No. ORE09226GW8 Time Allotted to Complete: _____

Document Title: Semi-Annual GWM Report (Oct 07 - Mar 08)

File Name and Network Subdirectory Containing Your Files: T:\Willbridge\GWM Program\2008 GWMP\

Document is: [V] Final [ ] Draft Semi-Annual Report - Willbridge - 1008 - Draft

Additional Instructions:

* SEE FLAG FOR TABLES
BRIAN - DONT FORGET "PM QA/QC"

Chain of Review:		
Reviewer:	Reviewer's Initials	Reviewer's Date:
Project Manager: B. Pletcher		
Client: KMEP/COP/Chevron		
Professional Stamp: B. Pletcher		

Administrative

Check once completed:

Format check for client review [V]

Finalize (final format check, print on letterhead, print color figures, fresh tables, etc.) [V]

Final QA/QC [ ]

Distribute Report [ ] Date Sent: _____

PM's QA/QC

Report appearance (text/formatting): Okay [ ] See Comments _____

Figures: Okay [ ] See Comments _____

Tables: Okay [ ] See Comments _____

Attachments: Okay [ ] See Comments _____

* will make CD once report signed

Send To:	No. of Copies	Document Format: Bind	Clip	Staple	Mailing/Delivery Instructions: US Mail: Regular	US Mail: Certified	UPS/Fed EX: Ground	UPS/Fed EX: Next Day	Fax	Email	Web or PDF/CD
Original: Mike Romero w/CD	NA	✓						✓			✓
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cc: Mr. Mike Noll, ConocoPhillips
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SEMI-ANNUAL GROUNDWATER MONITORING REPORT
(October 2007 through March 2008)

Willbridge Bulk Fuel Facilities

Portland, Oregon

Consent Order WMCSR-NWR-94-06
Delta Project ORZ0922GW-8

May 15, 2008

Prepared for:

Willbridge Terminal Group

DELTA

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1.0 EXECUTIVE SUMMARY

The Willbridge Facility is comprised of terminals owned by Chevron Products Company (Chevron), Kinder Morgan Liquid Terminals, LLC (KMLT), and ConocoPhillips Company (ConocoPhillips). This report fulfills the requirement of Section 7F of Oregon Department of Environmental Quality (DEQ) Consent Order WMCSR-NW-94-06.

Delta Consultants (Delta), ARCADIS U.S., Inc. (Arcadis), and Stantec (formerly SECOR International) performed monthly separate-phase hydrocarbon recovery, quarterly well gauging (December 2007 and March 2008), and semi-annual (March 2008) groundwater sampling as part of the remedial investigation/feasibility study work at the Willbridge Bulk Fuel Facilities (Willbridge Facility). New monitoring wells were installed in October 2007 (CR-33), December 2007 and January 2008 to evaluate the effectiveness of the cut off walls and deeper groundwater zones. In January 2008, the new groundwater wells were sampled in addition to the quarterly gauging events. Results of the January 2008 sampling event are detailed in the *Sheet Pile Cut-Off/ Recovery System Monitoring Well Installation Report* dated March 28, 2008.

Results of the March 2008 groundwater monitoring event were compared to the screening level values (SLVs) presented in Table 3-1 of the *Portland Harbor Joint Source Control Strategy (PHJSCS)* guidance document, dated December 2005. The groundwater trends and results will be evaluated and reported in a Groundwater Pathway Evaluation Report after additional groundwater data is collected quarterly from the cluster wells and cut-off wall monitoring well networks.

2.0 GROUNDWATER MONITORING AND SAMPLING

Groundwater monitoring and sampling activities, along with separate-phase hydrocarbon (SPH) recovery were performed at the Willbridge Facility from October 2007 through March 2008. The Willbridge Facility is located in northwest Portland, Oregon on Northwest Front Avenue, along the Willamette River (see Figure 1). Groundwater and sampling activities were conducted in accordance with the following sampling plans.

- *Sampling and Analysis Plan Addendum* dated September 22, 2006
- *Sheet Pile Cut-Off/Recovery System Performance Monitoring Plan* dated March 30, 2007
- *Locality of Facility Work Plan* dated June 26, 2007

Monitoring activities were performed on December 17, 2007 (fourth quarter 2007) and March 24 through March 27, 2008 (first quarter 2008) and consisted of measuring depth to groundwater and SPH thickness in all wells. Sampling activities performed at the Chevron, KMLT, and ConocoPhillips Terminals on March 24 through March 27, 2008, consisted of measuring depth to groundwater and collecting groundwater samples from select wells. Groundwater samples were analyzed for dissolved petroleum hydrocarbon constituents and selected metals. Monitoring and sampling activities are described in the following sections.

Additional monitoring wells were installed in October 2007, December 2007 and January 2008 in the vicinity of the dock area to evaluate the performance of the former 27-inch storm sewer outfall cut-off wall and the 60-inch storm sewer cut-off wall treatment systems and to evaluate groundwater quality in deeper groundwater zones. A separate monitoring event was conducted on January 22, 2008 to obtain baseline data following installation of these wells.

Based upon results of the previous quarterly monitoring activities, several wells are monitored for the presence of SPH on a monthly basis. SPH recovery was performed on a monthly basis for wells containing measurable amounts of SPH between October 2007 and March 2008.

2.1 Hydrogeologic Analysis

Depth-to-groundwater measurements were collected from each monitoring well in December 2007 and March 2008 (see Tables 1A through 1C). In January 2008 depth-to groundwater measurements were collected from wells associated with the WTG Dock Areas only. March 2008 depth-to-groundwater data was misplaced for ConocoPhillips wells B-1, B-2, B-3, B-5, B-6, B-16 and B-17. Site facility maps showing groundwater elevation contours of shallow wells and SPH thicknesses measured in wells in December 2007 March 2008 are presented as Figure 2 (Fourth Quarter 2007) and Figure 3 (First Quarter 2008). Figure 4 shows the groundwater elevation contours and SPH thicknesses measured in wells located northeast of Front Avenue (Dock Area wells) from March 2008. March 2008 depth-to-groundwater data was misplaced for ConocoPhillips wells B-1, B-2, B-3, B-5, B-6 B-16 and B-17. The depths to groundwater data for these wells were then collected on April 16, 2008 and are included to generate the groundwater elevation contours for Figure 3 and Figure 4. In future quarterly events depth-to-groundwater measurements will be collected from recovery wells RW-1 through RW-6 at the 60-inch storm sewer cut-off wall and wells EW-1 through EW-4 at the former 27-inch storm sewer outfall cut-off wall to evaluate the cut-off walls effectiveness.

During the fourth quarter 2007 and first quarter 2008, groundwater elevations across the facility ranged from approximately 8.45 feet to 34.22 feet above mean sea level. Groundwater flow direction is generally northeasterly, toward the Willamette River. Table 2 summarizes the well construction and screen interval for Dock Area wells.

2.2 Willamette River

The daily mean Willamette River stage, measured at the Morrison Bridge river gauge and converted to the City of Portland (COP) datum during the fourth quarter 2007 and first quarter of 2008 ranged from a high of 12.42 feet (COP datum) on December 5, 2007 to a low of 4.30 feet (COP datum) on November 4, 2007. The average river stage elevation was approximately 7.56 feet (COP datum) between October 1, 2007 and March 31, 2008. Precipitation and river stage data are presented on Figure 5.

2.3 Groundwater Analytical Results

Groundwater samples were collected from selected Chevron, KMLT, and ConocoPhillips monitoring wells on March 24 through 26, 2008, and analyzed in accordance with consent order WMCSR-NWR-94-06, the revised sampling agreement (May 11, 2001), and the 2006 Groundwater Monitoring Sampling and Analysis Plan Addendum (September 22, 2006). The list of analytes included benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tert-butyl ether (MTBE) using Environmental Protection Agency (EPA) Method 8260B, polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270M-SIM, and total RCRA metals (arsenic, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc) using EPA Method 6000/7000 Series Methods. Wells located in the vicinity of the dock area were additionally analyzed for total petroleum hydrocarbons (TPH) in the gasoline range (TPH-G) using Northwest Method NWTPH-Gx, diesel range (TPH-D), and heavy oil range (TPH-O) using Northwest Method NWTPH-Dx with silica gel cleanup. Groundwater samples were not collected from wells containing observable sheens or measurable quantities of SPH. Analytical results are presented in Tables 3 through 5. Groundwater sampling procedures are presented in Appendix A.

All groundwater samples were analyzed using lower level reporting limits consistent with the EPA's 2004 National Recommended Water Quality Criteria (NRWQC) screening levels to provide usable comparison data for evaluating groundwater source control, including selected wells not addressed by the cut-off walls located at the Chevron and ConocoPhillips facilities.

Portland Harbor Joint Source Control Screening Level Comparisons of Select Wells

Groundwater analytical results from the shallow aquifer and deeper well sets were compared to the screening level values (SLVs) presented in Table 3-1 of the *Portland Harbor Joint Source Control Strategy (PHJSCS)* guidance document, dated December 2005. Chevron wells B-10, CR-1, CR-28A, CR-29A, CR-30A, CR-31A, CR-32A and CR-33, Kinder Morgan wells MW-33, MW-34, MW-36, MW-37, and MW-40, and ConocoPhillips wells B-40, P-1A, U-5, U-22A, U-23, U-24A, and U-25 through U-28 represent the shallow Dock Area wells (completed in sand fill unit). Chevron wells CR-

28B, CR-29B, CR-30B, CR-31B, and CR-32B, Kinder Morgan wells MW-41B, and MW42B, and ConocoPhillips wells U-29B represent wells completed in the silt unit. Chevron wells CR-27C, CR-28C and CR-32C, Kinder Morgan wells MW-41C, and MW42C, and ConocoPhillips well U29C represent the groundwater at the contact of the silt unit and the Columbia River Basalt Group (deep wells). Where applicable, analytical results were compared to the EPA's 2004 NRWQC (organism only) SLVs for human health (fish consumption) and SLVs for ecological receptors (chronic); the DEQ's 2004 AWQC (organism only) SLVs and SLVs for Human Health and ecological receptors (chronic); maximum contaminant levels (MCLs) for drinking water, established under the Safe Drinking Water Act.

Portland Harbor Joint Source Control (PHJSC) groundwater screening level comparisons of TPH, BTEX, MTBE, and total metals detected in shallow Dock Area wells are presented in Table 6. PHJSC groundwater screening level comparisons of PAHs detected in shallow Dock Area wells are presented in Table 7. Clustered well sets (shallow, intermediate and deep) screening level comparisons of TPH, VOCs, and total metals are presented in Table 8 and PAHs are presented in Table 9. Laboratory analytical reports and chain-of-custody documentation are included in Appendix A.

Evaluation of the groundwater data collected from the selected wells from the March 2008 sampling event identifies Chevron well B-10, B-11, B-19, B-26, B-33, CR-26, CR-27C, CR28A, CR-28B, CR-28C, CR-29A CR-30A, CR-31A, CR-32A and CR-32C, Kinder Morgan well MW-37, and ConocoPhillips wells B-40, U-22A U-23 and U-29B monitoring points which exceed PHJSCS screening levels for PAHs in groundwater. All source control evaluation monitoring wells exceeded one or more metals screening levels. None of the source control monitoring wells exceeded the BTEX and MTBE screening levels with the exception of B-11, B-26 and CR-28A.

2.4 Separate Phase Hydrocarbon Occurrence

Based upon the results of the previous quarterly monitoring activities, appropriate wells were monitored for the presence of SPH on a monthly basis. SPH recovery was performed monthly on wells containing measurable amounts of SPH between October 2007 and March 2008. The detected SPH thicknesses measured during the December 2007 and March 2008 monitoring events are included in Table 1A to 1D. Observable

sheens and SPH thicknesses measured during the December 2007 and March 2008 monitoring event are presented in Figure 2 and Figure 3 respectively.

Chevron

Arcadis conducted quarterly groundwater monitoring in December 2007 in conjunction with monthly SPH monitoring. Chevron wells B-14, B-20, B-24, B-30, CR-6, CR-10, CR-15, CR-16, CR-19, CR-25, GPW-2, GPW-3, and GPW-4 contained measurable SPH in December 2007. The observed SPH thickness ranged from 0.02 feet in multiple wells, to 1.03 feet in CR-19. Well CR-21A historically contains measurable SPH, but was inaccessible during the groundwater monitoring event. Additionally, wells B-7, B-9A, B-10, B-33, and GPW-1 contained trace SPH. SPH was manually recovered from wells CR-10, CR-15, CR-21A, and CR-25 in October and November 2007, and January and March, 2008. SPH occurrences during the December 2007 event were consistent with historical measurements.

During quarterly groundwater monitoring in March 2008, eleven Chevron wells (B-24, B-30, CR-10, CR-12, CR-15, CR-19, CR-21A, CR-25, and GPW-2 through GPW-4) contained measurable thicknesses of SPH, ranging from 0.01 foot in wells B-30, CR-12, and GPW-3 to 0.47 foot in well GPW-2. Additionally, trace SPH was observed in wells CR-7, CR-8, and CR-16. SPH thicknesses were consistent with historical measurements with the exception of wells CR-12 and CR-8. Neither well had displayed the presence of SPH in the past.

KMLT

During quarterly groundwater monitoring in December 2007, two KMLT wells (MW-7 and MW-28) contained measurable SPH thicknesses of 0.14 foot and 0.01 foot, respectively. Additionally, a sheen was observed in well MW-23. SPH was observed in well MW-24; however, a thickness could not be measured due to fouling of the oil/water interface probe by highly viscous SPH in the well.

During quarterly groundwater monitoring in March 2008, two KMLT wells (MW-6 and MW-7) contained measurable SPH thicknesses of 0.01 foot and 0.05 foot, respectively. SPH was observed in Well MW-24; however, a thickness could not be measured due to fouling of the oil/water interface probe by highly viscous SPH. Additionally, measurable SPH (0.02 foot) was observed in well MW-28 during a separate gauging event conducted in January.

ConocoPhillips

During quarterly groundwater monitoring in December 2007, three ConocoPhillips wells (B-5, B-40, and U-13) contained measurable thicknesses of SPH, ranging from 0.03 foot in well B-5 to 0.11 foot in well U-13).

During quarterly groundwater monitoring in March 2008, four ConocoPhillips wells (RW-5, U-4, U-5A, U-13 and U-29A) contained measurable thicknesses of SPH, ranging from 0.05 foot in wells U-4 and U-13 to 0.15 foot in well U-29A). Additionally, a sheen was observed in well U-5.

3.0 SEPARATE PHASE HYDROCARBON RECOVERY

Monthly manual recovery of SPH was initiated at the Willbridge Facility in February 1997. SPH recovery is performed in each well where measurable SPH is observed during the previous quarterly gauging event. Manual SPH recovery consists of bailing, pumping, or the use of a sorbent sock installed in the well.

Approximately 183 gallons of SPH have been removed to date by the above-referenced manual recovery methods. Recovered SPH volumes for this reporting period (October 2007 to March 2008) totaled approximately 5 gallons.

In November and December 2001, a "U"-shaped cut-off wall encompassing the stormwater trench backfill was installed on the ConocoPhillips Terminal. The cut-off wall was designed to intercept SPH and groundwater migrating along the backfill of a 60-inch diameter storm sewer trench. The cut-off wall was constructed with 20-foot-long steel sheet-pile with sealed joints between the sheet-piles. A groundwater and SPH recovery system is used to extract groundwater and SPH from a series of wells (RW-1 through RW-5) located behind the cut-off wall.

In addition to the monthly SPH recovery events, SPH recovery has also been conducted near the outfall of the 60-inch storm sewer outfall. Since December of 2001, SPH recovery is performed using permanent recovery wells (RW-1 through RW-5) installed behind the cut-off wall. Approximately 4,385 gallons of SPH have been recovered to date from the backfill material around the storm sewer outfall. During the fourth quarter of 2007 and first quarter of 2008, the treatment system continued to recover SPH. During this reporting period, the recovered SPH reached capacity in the batch tank and was transported from the site to Oil-Re-Refining in Portland, Oregon for recycling.

Containment booms currently border the shoreline between the Chevron and ConocoPhillips docks, and from the south edge of the ConocoPhillips dock to the southern property line (beyond the current 60-inch storm sewer outfall). Secondary and tertiary containment booms are located inside of the primary boom around the 60-inch storm sewer outfall.

A groundwater recovery system had been installed in the 1988 trench at the mouth of the Holbrook slough and periodically operated since July 2004. The system included a

total fluids double diaphragm pump with a float control system set to maintain a depressed water level in the recovery sump and trench. Since July 30, 2004, 2,515,105 gallons of water had been recovered and treated at the water treatment system at the Chevron terminal. The system had been in operation during periods of low river levels. The system was decommissioned during the third quarter of 2006 and replaced by a sheet pile cut-off wall.

A sheet pile cut-off wall at the former 27-inch storm sewer outfall was installed during the third quarter of 2006. This wall replaced the Holbrook Slough recovery sump and trench. The design consists of a near linear, 200-foot-length sheet-pile wall along the shoreline in the area between the Chevron and ConocoPhillips docks. Similar to the existing cut-off wall around the 60-inch storm sewer outfall, extraction wells were installed behind the wall to remove impacted groundwater and recovery SPH.

The former 27-inch storm sewer outfall cut-off wall treatment system began operation in January 2007. The existing treatment system for the 60-inch storm sewer cut-off wall is used to separate recovered SPH and treat impacted groundwater from the former 27-inch storm sewer area.

4.0 ISSUES ENCOUNTERED DURING THE FOURTH QUARTER OF 2007 AND FIRST QUARTER OF 2008

During the fourth quarter of 2007, ConocoPhillips completed the repair of the storm sewer system laterals form the Tank Farms to the Doane Avenue storm sewer system. Periodic sheen was observed at the 60-inch storm sewer outfall (City of Portland outfall 22). The source of the sheen was determined to be groundwater and SPH infiltrating the 60-inch storm sewer piping joints. ConocoPhillips and Chevron are in the process of permitting and planning the lining of the 60-inch storm sewer pipe to mitigate the infiltration. Chevron and ConocoPhillips initiated a sheen response program, implemented upon notification of sheen at City of Portland outfall 22. The purpose of this program is to promptly identify and respond to releases of sheen.

Inspection of Chevron well CR-4, in March 2008 indicated that the casing had a leak and that the well's use was compromised. Well CR-4 was removed from the monitoring program. Chevron is preparing the specifications to replace the well.

5.0 ACTIVITIES SCHEDULED FOR THE SECOND AND THIRD QUARTER OF 2008 (APRIL THROUGH SEPTEMBER 2008)

The following tasks are planned for the second and third quarter of 2008:

- Measure depth to water and SPH in all Willbridge Facility wells during the second quarter (June 2008) and third quarter (September 2008) monitoring events.
- Sample wells (June 2008) associated with the cut-off wall performance monitoring plan and deep aquifer characterization plan.
- Sample selected Willbridge Facility wells during the September (third quarter) 2008 sampling event.
- Perform monthly SPH recovery from wells that have historically contained SPH.
- Continue operation of the 60-inch storm sewer outfall cut-off wall and the former 27-inch storm sewer outfall cut-off wall treatment system.
- Evaluation of the Pre-1973 sump at the Chevron Terminal
- Permit and line City of Portland 60 inch storm sewer pipe at outfall 22.
- Clean catch basins and collect storm water samples at ConocoPhillips Terminal

6.0 REMARKS

The services described in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

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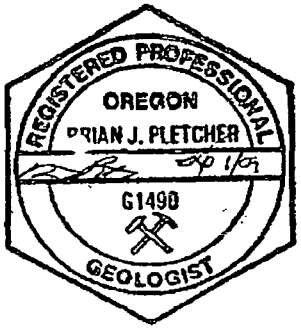

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-7	2/14/2000	18.33	NP	-	17.40	0.1
(35.73)	5/22/2000	18.60	NP	-	17.13	NA
	8/22/2000	19.31	19.30	0.01	16.43	0.1
	11/27/2000	19.47	sheen	-	16.26	NA
	2/20/2001	19.37	NP	-	16.36	NA
	5/15/2001	19.36	sheen	-	16.37	NA
	9/19/2001	19.74	NP	-	15.99	NA
	12/20/2001	18.30	NP	-	17.43	NA
	3/15/2002	18.28	NP	-	17.45	NA
	9/23/2002	18.79	18.78	0.01	16.95	NA
	12/19/2002	19.78	19.79	0.01	15.96	NA
	3/19/2003	18.58	18.57	0.01	17.16	NA
	6/24/2003	19.02	18.97	0.05	16.75	NA
	9/24/2003	19.72	19.71	0.01	16.02	NA
	12/26/2003	18.90	18.85	0.05	16.87	NA
	3/30/2004	18.70	18.66	0.04	17.06	NA
	6/24/2004	19.19	19.18	0.01	16.55	NA
	9/27/2004	19.85	NP	-	15.88	NA
	12/24/2004	19.27	NP	-	16.46	NA
	3/7/2005	19.45	NP	-	16.28	NA
	6/23/2005	19.12	NP	-	16.61	NA
	9/19/2005	19.79	NP	-	15.94	NA
	12/12/2005	19.00	NP	-	16.73	NA
	1/30/2006	17.19	NP	-	18.54	NA
	3/13/2006	18.05	NP	-	17.68	NA
	6/26/2006	18.66	NP	-	17.07	NA
	9/25/2006	16.98	NP	-	18.75	NA
	12/11/2006	16.34	NP	-	19.39	NA
	3/19/2007	16.13	NP	-	19.60	NA
(33.85)	6/18/2007	16.76	NP	-	17.09	NA
	9/17/2007	17.23	NP	-	16.62	NA
	12/17/2007	16.49	NP	-	17.36	NA
	1/22/2008	15.93	Trace	-	17.92	NA
	3/24/2008	16.76	NP	-	18.09	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-9	2/14/2000	16.29	16.20	0.09	19.35	0.0
(35.57)	5/22/2000	16.90	NP	-	18.67	NA
	8/22/2000	17.48	NP	-	18.09	NA
	11/27/2000	17.29	NP	-	18.28	NA
	2/20/2001	17.41	NP	-	18.16	NA
	5/15/2001	17.04	NP	-	18.53	NA
	9/19/2001	17.84	NP	-	17.73	NA
	12/20/2001	15.92	NP	-	19.65	NA
	3/5/2002	15.92	NP	-	19.65	NA
	9/23/2002	17.75	NP	-	17.82	NA
	12/19/2002	17.28	NP	-	18.29	NA
	3/19/2003	16.18	NP	-	19.39	NA
	6/24/2003	16.63	NP	-	18.94	NA
	9/24/2003	17.82	NP	-	17.75	NA
	12/26/2003	Well covered by truck				
	3/30/2004	15.93	NP	-	19.64	NA
	6/24/2004	17.12	NP	-	18.45	NA
	9/27/2004	17.97	NP	-	17.60	NA
	12/24/2004	17.32	NP	-	18.25	NA
	3/7/2005	17.42	NP	-	18.15	NA
	6/22/2005	16.19	NP	-	19.38	NA
	9/19/2005	17.77	NP	-	17.80	NA
	12/12/2005	16.81	NP	-	18.76	NA
	1/30/2006	15.02	NP	-	20.55	NA
	3/13/2006	18.65	NP	-	16.92	NA
	6/26/2006	16.64	NP	-	18.93	NA
	9/25/2006	16.45	NP	-	19.12	NA
	12/11/2006	15.39	NP	-	20.18	NA
	3/19/2007	15.45	NP	-	20.12	NA
(33.89)	6/18/2007	16.14	NP	-	17.75	NA
		Abandoned				
B-9A	9/17/2007	16.23	Trace	-	17.35	NA
(33.58)	12/17/2007	15.53	NP	-	18.05	NA
	1/22/2008	14.93	NP	-	18.65	NA
	3/24/2008	14.90	NP	-	18.68	NA

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-10	2/14/2000	15.10	NP	-	19.66	NA
(34.76)	5/22/2000	15.67	NP	-	19.09	NA
	8/22/2000	16.35	NP	-	18.41	NA
	11/27/2000	16.64	NP	-	18.12	NA
	2/20/2001	16.41	NP	-	18.35	NA
	5/15/2001	16.42	NP	-	18.34	NA
	9/19/2001	16.95	NP	-	17.81	NA
	12/20/2001	15.42	NP	-	19.34	NA
	3/15/2002	14.99	NP	-	19.77	NA
	9/23/2002	16.64	NP	-	18.12	NA
	12/19/2002	16.56	NP	-	18.20	NA
	3/19/2003	15.24	NP	-	19.52	NA
	6/24/2003	15.70	NP	-	19.06	NA
	9/24/2003	16.62	NP	-	18.14	NA
	12/26/2003	15.98	NP	-	18.78	NA
	3/30/2004	15.29	NP		19.47	NA
	6/24/2004	16.13	NP	-	18.63	NA
	9/27/2004	16.73	NP	-	18.03	NA
	12/14/2004	16.48	NP	-	18.28	NA
	3/7/2005	Well Inaccessible				
	9/19/2005	16.64	NP	-	18.12	NA
	12/12/2005	15.90	NP	-	18.86	NA
	1/30/2006	14.13	NP	-	20.63	NA
	3/13/2006	14.73	NP	-	20.03	NA
	6/26/2006	15.67	NP	-	19.09	NA
	9/25/2006	16.45	NP	-	18.31	NA
	12/11/2006	15.44	NP	-	19.32	NA
	3/19/2007	14.92	NP	-	19.84	NA
(34.78)	6/18/2007	15.88	NP	-	18.90	NA
	9/17/2007	16.46	NP	-	18.32	NA
	12/17/2007	15.63	NP	-	19.15	NA
	1/22/2008	14.84	14.83	0.01	19.95	NA
	3/24/2008	**15.01**	**NP**	-	**19.77**	**NA**
B-11	5/22/2000	15.41	NP	-	19.55	NA
(34.96)	8/22/2000	16.14	NP	-	18.82	NA
	11/27/2000	16.57	NP	-	18.39	0.1
	2/20/2001	16.30	sheen	-	18.66	NA
	5/15/2001	16.30	NP	-	18.66	NA
	9/19/2001	16.82	NP	-	18.14	NA
	12/20/2001	15.44	NP	-	19.52	NA
	3/15/2002	14.80	NP	-	20.16	NA
	9/23/2002	16.49	NP	-	18.47	NA
	12/19/2002	16.61	sheen	-	18.35	NA
	3/19/2003	15.11	NP	-	19.85	NA
	6/24/2003	15.52	NP	-	19.44	NA
	9/24/2003	16.48	NP	-	18.48	NA
	12/26/2003	15.85	NP	-	19.11	NA
	3/30/2004	15.09	NP	-	19.87	NA
	6/24/2004	15.98	NP	-	18.98	NA
	9/27/2004	16.67	NP	-	18.29	NA
	12/14/2004	16.34	NP	-	18.62	NA
	3/7/2005	16.14	NP	-	18.82	NA
	6/22/2005	15.80	NP	-	19.16	NA
	9/19/2005	16.48	NP	-	18.48	NA
	12/12/2005	15.79	NP	-	19.17	NA
	1/30/2006	13.94	NP	-	21.02	NA
	3/13/2006	14.53	NP	-	20.43	NA
	6/26/2006	15.49	NP	-	19.47	NA
	9/25/2006	16.36	Trace	-	18.60	NA
	12/11/2006	15.35	NP	-	19.61	NA
	3/19/2007	14.74	NP	-	20.22	NA
(34.99)	6/18/2007	15.74	NP	-	19.25	NA
	9/17/2007	16.54	NP	-	18.45	NA
	12/17/2007	15.60	NP	-	19.39	NA
	1/22/2008	14.55	NP	-	20.44	NA
	3/24/2008	**14.85**	**NP**	-	**20.14**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-12	2/14/2000	15.38	NP	-	19.76	NA
(35.14)	5/22/2000	15.85	NP	-	19.29	NA
	8/22/2000	16.55	NP	-	18.59	NA
	11/27/2000	16.98	NP	-	18.16	NA
	2/20/2001	16.73	NP	-	18.41	NA
	5/15/2001	16.72	NP	-	18.42	NA
	9/19/2001	17.20	NP	-	17.94	NA
	12/20/2001	15.94	NP	-	19.20	NA
	3/15/2002	15.32	NP	-	19.82	NA
	9/23/2002	16.89	NP	-	18.25	NA
	12/19/2002	17.01	NP	-	18.13	NA
	3/19/2003	15.56	NP	-	19.58	NA
	6/24/2003	Not Located				
	9/24/2003	Not Located				
	12/26/2003	Not Located				
	3/30/2004	Not Located				
	6/24/2004	16.40	NP	-	18.74	NA
	9/27/2004	17.00	NP	-	18.14	NA
	12/14/2004	16.75	NP	-	18.39	NA
	3/7/2005	16.52	NP	-	18.62	NA
	9/19/2005	16.87	NP	-	18.27	NA
	12/12/2005	16.20	NP	-	18.94	NA
	1/30/2006	14.49	NP	-	20.65	NA
	3/13/2006	15.02	NP	-	20.12	NA
	6/26/2006	15.95	NP	-	19.19	NA
	9/25/2006	16.78	NP	-	18.36	NA
	12/11/2006	15.84	NP	-	19.30	NA
	3/19/2007	15.24	NP	-	19.90	NA
(35.17)	6/18/2007	16.18	NP	-	18.99	NA
	9/17/2007	16.92	NP	-	18.25	NA
	12/17/2007	16.06	NP	-	19.11	NA
	1/22/2008	15.12	NP	-	20.05	NA
	3/24/2008	**15.33**	**NP**	-	**19.84**	**NA**
B-13	2/14/2000	15.46	NP	-	19.30	NA
(34.76)	5/22/2000	15.86	NP	-	18.90	NA
	8/22/2000	16.46	NP	-	18.30	NA
	11/27/2000	19.91	NP	-	14.85	NA
	2/20/2001	16.65	NP	-	18.11	NA
	5/15/2001	16.65	NP	-	18.11	NA
	9/19/2001	17.09	NP	-	17.67	NA
	12/22/2001	15.94	NP	-	18.82	NA
	3/15/2002	15.37	NP	-	19.39	NA
	9/23/2002	16.82	NP	-	17.94	NA
	12/19/2002	16.95	NP	-	17.81	NA
	3/19/2003	15.62	NP	-	19.14	NA
	6/24/2003	15.96	NP	-	18.80	NA
	9/24/2003	16.82	NP	-	17.94	NA
	12/26/2003	16.29	NP	-	18.47	NA
	3/30/2004	15.58	NP	-	19.18	NA
	6/24/2004	16.34	NP	-	18.42	NA
	9/27/2004	16.90	NP	-	17.86	NA
	12/24/2004	16.71	NP	-	18.05	NA
	3/7/2005	16.49	NP	-	18.27	NA
	9/19/2005	16.79	NP	-	17.97	NA
	12/12/2005	16.16	NP	-	18.60	NA
	1/30/2006	14.54	NP	-	20.22	NA
	3/13/2006	15.04	NP	-	19.72	NA
	6/26/2006	15.95	NP	-	18.81	NA
	9/25/2006	16.78	NP	-	17.98	NA
	12/11/2006	15.82	NP	-	18.94	NA
	3/19/2007	15.26	NP	-	19.50	NA
(34.87)	6/18/2007	16.14	NP	-	18.73	NA
	Abandoned					

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-14	2/14/2000	17.27	NP	-	19.32	NA
(36.59)	5/22/2000	17.69	NP	-	18.90	NA
	8/22/2000	18.31	NP	-	18.28	NA
	11/27/2000	18.72	NP	-	17.87	NA
	2/20/2001	18.50	NP	-	18.09	NA
	5/15/2001	18.49	NP	-	18.10	NA
	9/19/2001	18.87	NP	-	17.72	NA
	12/22/2001	17.74	NP	-	18.85	NA
	3/15/2002	17.21	NP	-	19.38	NA
	9/23/2002	18.64	NP	-	17.95	NA
	12/19/2002	18.79	NP	-	17.80	NA
	3/19/2003	17.47	NP	-	19.12	NA
	6/24/2003	17.78	NP	-	18.81	NA
	9/24/2003	18.64	NP	-	17.95	NA
	12/26/2003	18.10	NP	-	18.49	NA
	3/30/2004	17.39	NP	-	19.20	NA
	6/24/2004	18.17	NP	-	18.42	NA
	9/27/2004	18.73	NP	-	17.86	NA
	12/14/2004	18.54	NP	-	18.05	NA
	3/7/2005	18.30	NP	-	18.29	NA
	9/19/2005	18.63	NP	-	17.96	NA
	12/12/2005	17.99	NP	-	18.60	NA
	1/30/2006	16.43	NP	-	20.16	NA
	3/13/2006	16.86	NP	-	19.73	NA
	6/26/2006	17.72	NP	-	18.87	NA
	9/25/2006	18.45	NP	-	18.14	NA
	12/11/2006	17.62	NP	-	18.97	NA
	3/19/2007	17.04	NP	-	19.55	NA
(36.62)	6/18/2007	17.92	NP	-	18.70	NA
	9/17/2007	18.58	NP	-	18.04	NA
	12/17/2007	17.81	NP	-	18.81	NA
	1/22/2008	16.98	Trace	-	19.64	NA
	3/24/2008	**17.13**	**NP**	-	**19.49**	**NA**
B-15	2/14/2000	16.48	NP	-	19.07	NA
(35.55)	5/22/2000	16.88	NP	-	18.67	NA
	8/22/2000	17.53	NP	-	18.02	NA
	11/27/2000	17.89	NP	-	17.66	NA
	2/20/2001	17.38	NP	-	18.17	NA
	5/15/2001	17.66	NP	-	17.89	NA
	9/19/2001	18.12	NP	-	17.43	NA
	12/20/2001	16.92	NP	-	18.63	NA
	3/15/2002	16.36	NP	-	19.19	NA
	9/23/2002	17.84	NP	-	17.71	NA
	12/19/2002	18.01	NP	-	17.54	NA
	3/19/2003	16.66	NP	-	18.89	NA
	6/24/2003	16.98	NP	-	18.57	NA
	9/24/2003	17.84	NP	-	17.71	NA
	12/26/2003	17.27	NP	-	18.28	NA
	3/30/2004	16.58	NP	-	18.97	NA
	6/24/2004	17.37	NP	-	18.18	NA
	9/27/2004	17.94	NP	-	17.61	NA
	12/14/2004	17.73	NP	-	17.82	NA
	3/7/2005	17.51	NP	-	18.04	NA
	9/19/2005	17.84	NP	-	17.71	NA
	12/12/2005	17.20	NP	-	18.35	NA
	1/30/2006	15.61	NP	-	19.94	NA
	3/13/2006	16.07	NP	-	19.48	NA
	6/26/2006	16.91	NP		18.64	NA
	9/25/2006	17.52	NP	-	18.03	NA
	12/11/2006	16.65	NP	-	18.90	NA
	3/19/2007	16.17	NP	-	19.38	NA
(35.58)	6/18/2007	17.02	NP	-	18.56	NA
	9/17/2007	17.67	NP	-	17.91	NA
	12/17/2007	16.86	NP	-	18.72	NA
	1/22/2008	16.11	NP	-	19.47	NA
	3/24/2008	16.25	NP	-	19.33	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-19	2/14/2000	15.99	NP	-	18.18	NA
(34.17)	5/22/2000	16.34	NP	-	17.83	NA
	8/22/2000	17.04	NP	-	17.13	NA
	11/27/2000	17.35	NP	-	16.82	NA
	2/20/2001	17.17	NP	-	17.00	NA
	5/15/2001	17.14	NP	-	17.03	NA
	9/19/2001	17.67	NP	-	16.50	NA
	12/20/2001	16.32	NP	-	17.85	NA
	3/15/2002	15.88	NP	-	18.29	NA
	9/23/2002	17.37	NP	-	16.80	NA
	12/19/2002	18.47	NP	-	15.70	NA
	3/19/2003	16.13	NP	-	18.04	NA
	6/24/2003	16.50	NP	-	17.67	NA
	9/24/2003	17.35	NP	-	16.82	NA
	12/26/2003	16.71	NP	-	17.46	NA
	3/30/2004	16.08	NP	-	18.09	NA
	6/24/2004	16.87	NP	-	17.30	NA
	9/27/2004	17.44	NP	-	16.73	NA
	12/14/2004	17.28	NP	-	16.89	NA
	3/7/2005	17.02	NP	-	17.15	NA
	6/22/2005	16.72	NP	-	17.45	NA
	9/19/2005	17.34	NP	-	16.83	NA
	12/12/2005	16.69	NP	-	17.48	NA
	1/30/2006	15.06	NP	-	19.11	NA
	3/13/2006	15.55	NP	-	18.62	NA
	6/26/2006	16.36	NP	-	17.81	NA
	9/25/2006	16.76	Trace	-	17.41	NA
	12/11/2006	15.94	NP	-	18.23	NA
	3/19/2007	15.50	NP	-	18.67	NA
	6/18/2007	16.31	NP	-	17.86	NA
	9/17/2007	16.93	NP	-	17.24	NA
(34.66)	12/17/2007	16.08	NP	-	18.58	NA
	1/22/2008	15.44	NP	-	19.22	NA
	3/24/2008	15.56	NP	-	19.10	NA
B-20	2/14/2000	16.62	NP	-	16.70	NA
(33.32)	5/22/2000	16.93	NP	-	16.39	NA
	8/22/2000	17.78	NP	-	15.54	NA
	11/27/2000	17.99	sheen	-	15.33	NA
	2/20/2001	17.79	sheen	-	15.53	NA
	5/15/2001	17.89	NP	-	15.43	NA
	9/19/2001	18.40	NP	-	14.92	NA
	12/20/2001	16.61	NP	-	16.71	NA
	3/15/2002	16.45	NP	-	16.87	NA
	9/23/2002	18.27	NP	-	15.05	NA
	12/19/2002	18.22	NP	-	15.10	NA
	3/19/2003	15.96	NP	-	17.36	NA
	6/24/2003	17.06	NP	-	16.26	NA
	9/24/2003	18.30	NP	-	15.02	NA
	12/26/2003	17.31	NP	-	16.01	NA
	3/30/2004	16.47	NP	-	16.85	NA
	6/24/2004	17.32	NP	-	16.00	NA
	9/27/2004	18.29	NP	-	15.03	NA
	12/14/2004	17.77	NP	-	15.55	NA
	3/7/2005	17.82	NP	-	15.50	NA
	6/23/2005	17.41	NP	-	15.91	NA
	9/19/2005	18.20	NP	-	15.12	NA
	12/12/2005	17.34	NP	-	15.98	NA
	1/30/2006	15.70	NP	-	17.62	NA
	3/13/2006	16.09	NP	-	17.23	NA
	6/26/2006	16.96	NP	-	16.36	NA
	9/25/2006	16.38	NP	-	16.94	NA
	12/11/2006	16.02	NP	-	17.30	NA
	3/19/2007	15.87	NP	-	17.45	NA
(33.33)	6/18/2007	16.29	NP	-	17.04	NA
	9/17/2007	16.59	Trace	-	16.74	NA
	12/17/2007	16.07	NP	-	17.26	NA
	1/22/2008	15.63	NP	-	17.70	NA
	3/24/2008	15.48	NP	-	17.85	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-21	2/14/2000	16.22	NP	-	18.57	NA
(34.79)	5/22/2000	16.57	NP	-	18.22	NA
	8/22/2000	17.15	NP	-	17.64	NA
	11/27/2000	17.45	NP	-	17.34	NA
	2/20/2001	19.29	NP	-	15.50	NA
	5/15/2001	17.27	NP	-	17.52	NA
	9/19/2001	17.66	NP	-	17.13	NA
	12/20/2001	16.48	NP	-	18.31	NA
	3/15/2002	16.18	NP	-	18.61	NA
	9/23/2002	17.45	NP	-	17.34	NA
	12/19/2002	17.56	NP	-	17.23	NA
	3/19/2003	16.35	NP	-	18.44	NA
	6/24/2003	16.70	NP	-	18.09	NA
	9/24/2003	17.42	NP	-	17.37	NA
	12/26/2003	16.91	NP	-	17.88	NA
	3/30/2004	16.36	NP	-	18.43	NA
	6/24/2004	17.02	NP	-	17.77	NA
	9/27/2004	17.49	NP	-	17.30	NA
	12/14/2004	17.41	NP	-	17.38	NA
	3/7/2005	17.04	NP	-	17.75	NA
	6/23/2005	16.87	NP	-	17.92	NA
	9/19/2005	17.45	NP	-	17.34	NA
	12/12/2005	16.84	NP	-	17.95	NA
	1/30/2006	15.30	NP	-	19.49	NA
	3/13/2006	15.93	NP	-	18.86	NA
	6/26/2006	16.62	NP	-	18.17	NA
	9/25/2006	16.98	NP	-	17.81	NA
	12/11/2006	16.23	NP	-	18.56	NA
	3/19/2007	15.88	NP	-	18.91	NA
(34.82)	6/18/2007	16.60	NP	-	18.22	NA
	9/17/2007	17.14	NP	-	17.68	NA
	12/17/2007	16.40	NP	-	18.42	NA
	1/22/2008	15.78	NP	-	19.04	NA
	3/24/2008	15.87	NP	-	18.95	NA
B-24	2/14/2000	15.50	15.49	0.01	19.21	0.0
(34.70)	5/22/2000	15.83	NP	-	18.87	NA
	8/22/2000	16.38	NP	-	18.32	NA
	11/27/2000	16.81	NP	-	17.89	NA
	2/20/2001	16.59	NP	-	18.11	NA
	5/15/2001	16.56	NP	-	18.14	NA
	9/19/2001	16.94	NP	-	17.76	NA
	12/22/2001	16.23	16.07	0.16	18.60	0.0
	3/15/2002	15.54	Sheen	-	19.16	0.0
	9/23/2002	16.86	16.73	0.13	17.94	0.0
	12/19/2002	16.98	NP	-	17.72	NA
	3/19/2003	15.84	15.71	0.13	18.96	0.0
	6/24/2003	15.90	Sheen	-	18.80	0.0
	9/24/2003	16.75	16.71	0.04	17.98	0.0
	12/26/2003	16.32	16.29	0.03	18.40	0.0
	3/30/2004	15.51	NP	-	19.19	NA
	6/24/2004	16.58	16.21	0.37	18.42	NA
	9/27/2004	16.76	16.75	0.01	17.95	0.0
	12/14/2004	16.64	Sheen	-	18.06	0.0
	3/7/2005	16.44	16.43	0.01	18.27	0.004
	6/23/2005	NM	NM	NM	NM	NM
	9/19/2005	16.63	16.61	0.02	18.09	0.004
	12/12/2005	Inaccessible				
	3/13/2006	15.06	15.04	0.02	19.66	0.0
	6/26/2006	15.87	15.84	0.03	18.85	0.0
	9/25/2006	16.60	NP	-	18.10	0.0
	12/11/2006	15.84	Trace	-	18.86	0.0
	3/19/2007	15.21	NP	-	19.49	0.0
	6/18/2007	6.14	Trace	-	28.56	0.0
	9/17/2007	-	-	-	-	0.0
	12/17/2007	16.16	NP	-	18.54	0.0
	1/22/2008	14.25	14.22	0.03	20.47	0.0
	3/24/2008	15.29	15.26	0.03	19.43	0.0

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-26	2/14/2000	15.49	NP	-	19.81	NA
(35.30)	5/22/2000	15.96	NP	-	19.34	NA
	8/22/2000	16.72	NP	-	18.58	NA
	11/27/2000	17.11	NP	-	18.19	NA
	2/20/2001	16.86	NP	-	18.44	NA
	5/15/2001	16.86	NP	-	18.44	NA
	9/19/2001	17.37	NP	-	17.93	NA
	12/20/2001	15.93	NP	-	19.37	NA
	3/15/2002	15.41	NP	-	19.89	NA
	9/23/2002	17.06	NP	-	18.24	NA
	12/19/2002	17.10	NP	-	18.20	NA
	3/19/2003	15.69	NP	-	19.61	NA
	6/24/2003	16.13	NP	-	19.17	NA
	9/24/2003	17.06	NP	-	18.24	NA
	12/26/2003	16.39	NP	-	18.91	NA
	3/30/2004	16.68	NP	-	18.62	NA
	6/24/2004	16.54	NP	-	18.76	NA
	9/27/2004	17.18	NP	-	18.12	NA
	12/14/2004	16.96	NP	-	18.34	NA
	3/7/2005	16.69	NP	-	18.61	NA
	6/22/2005	16.35	NP	-	18.95	NA
	9/19/2005	17.08	NP	-	18.22	NA
	12/12/2005	16.33	NP	-	18.97	NA
	1/30/2006	14.46	NP	-	20.84	NA
	3/13/2006	15.15	NP	-	20.15	NA
	6/26/2006	16.09	NP	-	19.21	NA
	9/25/2006	16.92	Trace	-	18.38	NA
	12/11/2006	15.83	NP	-	19.47	NA
	3/19/2007	15.32	NP	-	19.98	NA
(35.33)	6/18/2007	16.32	NP	-	19.01	NA
	9/17/2007	17.07	NP	-	18.26	NA
	12/17/2007	16.11	NP	-	19.22	NA
	1/22/2008	15.24	NP	-	20.09	NA
	3/24/2008	15.42	NP	-	19.91	NA
B-28	2/14/2000	15.45	NP	-	19.81	NA
(35.26)	5/22/2000	14.34	NP	-	20.92	NA
	8/22/2000	16.11	NP	-	19.15	NA
	11/27/2000	16.36	NP	-	18.90	NA
	2/20/2001	16.14	NP	-	19.12	NA
	5/15/2001	16.07	NP	-	19.19	NA
	9/19/2001	16.25	NP	-	19.01	NA
	12/22/2001	15.97	NP	-	19.29	NA
	3/15/2002	15.36	NP	-	19.90	NA
	9/23/2002	16.36	NP	-	18.90	NA
	12/19/2002	16.35	NP	-	18.91	NA
	3/19/2003	15.69	NP	-	19.57	NA
	6/24/2003	15.93	NP	-	19.33	NA
	9/24/2003	16.31	NP	-	18.95	NA
	12/26/2003	16.39	NP	-	18.87	NA
	3/30/2004	15.56	NP	-	19.70	NA
	6/24/2004	16.13	NP	-	19.13	NA
	9/27/2004	16.21	NP	-	19.05	NA
	12/14/2004	16.07	NP	-	19.19	NA
	3/7/2005	16.06	NP	-	19.20	NA
	9/19/2005	16.18	NP	-	19.08	NA
	12/12/2005	15.96	NP	-	19.30	NA
	3/13/2006	14.71	NP	-	20.55	NA
	6/26/2006	14.60	NP	-	20.66	NA
	9/25/2006	16.06	Trace	-	19.20	NA
	12/11/2006	-	-	-	-	-
	3/19/2007	-	-	-	-	-
(35.28)	6/18/2007	-	-	-	-	-
	9/17/2007	16.37	NP	-	18.91	-
	12/17/2007	15.93	NP	-	19.35	-
	1/22/2008	15.15	NP	-	20.13	-
	3/24/2008	15.30	NP	-	19.98	-

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-29	2/14/2000	15.12	NP	-	22.58	NA
(37.70)	5/22/2000	15.43	NP	-	22.27	NA
	8/22/2000	16.24	NP	-	21.46	NA
	11/27/2000	16.63	NP	-	21.07	NA
	2/20/2001	16.27	NP	-	21.43	NA
	5/15/2001	16.22	NP	-	21.48	NA
	9/19/2001	16.80	NP	-	20.90	NA
	12/22/2001	15.68	NP	-	22.02	NA
	3/15/2002	14.98	NP	-	22.72	NA
	9/23/2002	16.73	NP	-	20.97	NA
	12/19/2002	16.82	NP	-	20.88	NA
	3/19/2003	15.28	NP	-	22.42	NA
	6/24/2003	15.60	NP	-	22.10	NA
	9/24/2003	16.59	NP	-	21.11	NA
	12/26/2003	15.11	NP	-	22.59	NA
	3/30/2004	15.24	NP	-	22.46	NA
	6/24/2004	16.28	NP	-	21.42	NA
	9/27/2004	16.92	NP	-	20.78	NA
	12/14/2004	16.58	NP	-	21.12	NA
	3/7/2005	16.33	NP	-	21.37	NA
	9/19/2005	16.84	NP	-	20.86	NA
	12/12/2005	16.45	NP	-	21.25	NA
	3/13/2006	15.00	NP	-	22.70	NA
	6/26/2006	15.77	NP	-	21.93	NA
	9/25/2006	16.54	NP	-	21.16	NA
	12/11/2006	15.74	Trace	-	21.96	NA
	3/19/2007	14.95	NP	-	22.75	NA
(36.00)	6/18/2007	15.97	NP	-	20.03	NA
	9/17/2007	16.82	NP	-	19.18	NA
	12/17/2007	15.89	NP	-	20.11	NA
	1/22/2008	14.77	NP	-	21.23	NA
	3/24/2008	14.96	NP	-	21.04	NA
B-30	2/14/2000	14.76	NP	-	20.63	NA
(35.39)	5/22/2000	15.85	NP	-	19.54	NA
	8/22/2000	16.08	NP	-	19.31	NA
	11/27/2000	16.37	NP	-	19.02	NA
	2/20/2001	15.92	NP	-	19.47	NA
	5/15/2001	15.95	NP	-	19.44	NA
	9/19/2001	16.52	NP	-	18.87	NA
	12/22/2001	14.96	NP	-	20.43	NA
	3/15/2002	14.96	NP	-	20.43	NA
	9/23/2002	16.19	NP	-	19.20	NA
	12/19/2002	16.31	NP	-	19.08	NA
	3/19/2003	14.67	NP	-	20.72	NA
	6/24/2003	15.05	NP	-	20.34	NA
	9/24/2003	16.13	NP	-	19.26	NA
	12/26/2003	15.56	NP	-	19.83	NA
	3/30/2004	14.70	NP	-	20.69	NA
	6/24/2004	15.60	NP	-	19.79	NA
	9/27/2004	16.31	NP	-	19.08	NA
	12/14/2004	16.14	16.11	0.03	18.58	0.005
	3/7/2005	15.77	Sheen	Sheen	19.62	NA
	6/22/2005	15.39	NP	-	20.00	NA
	9/19/2005	16.20	NP	-	19.19	NA
	12/12/2005	15.43	15.43	Sheen	19.96	0.0
	3/13/2006	14.12	14.12	Sheen	21.27	0.0
	6/26/2006	15.08	NP	-	20.31	0.0
	9/25/2006	16.07	NP	-	19.32	0.0
	12/11/2006	14.96	NP	-	20.43	0.0
	3/19/2007	14.30	NP	-	21.09	0.0
	6/18/2007	15.34	NP	-	20.05	0.0
	9/17/2007	16.68	NP	-	18.71	0.0
	12/17/2007	15.69	NP	-	19.70	1.0
	1/22/2008	15.60	15.58	0.02	19.81	0.0
	3/24/2008	14.84	14.83	0.01	20.56	0.0

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-32	2/14/2000	16.37	NP	-	17.86	NA
(34.23)	5/22/2000	26.84	NP	-	7.39	NA
	8/22/2000	17.65	NP	-	16.58	NA
	11/27/2000	17.93	NP	-	16.30	NA
	2/20/2001	17.71	NP	-	16.52	NA
	5/15/2001	17.74	NP	-	16.49	NA
	9/19/2001	18.17	NP	-	16.06	NA
	12/20/2001	16.74	NP	-	17.49	NA
	3/15/2002	16.55	NP	-	17.68	NA
	9/23/2002	18.32	18.32	Sheen	15.91	NA
	12/19/2002	18.15	NP	-	16.08	NA
	3/19/2003	16.83	NP	-	17.40	NA
	6/24/2003	17.09	NP	-	17.14	NA
	9/24/2003	17.99	NP	-	16.24	NA
	12/26/2003	17.20	NP	-	17.03	NA
	3/30/2004	16.78	NP	-	17.45	NA
	6/24/2004	17.41	NP	-	16.82	NA
	9/27/2004	18.01	NP	-	16.22	NA
	12/14/2004	17.89	NP	-	16.34	NA
	3/7/2005	17.65	NP	-	16.58	NA
	6/23/2005	17.39	NP	-	16.84	NA
	9/19/2005	18.00	NP	-	16.23	NA
	12/12/2005	17.13	NP	-	17.10	NA
	1/30/2006	15.81	NP	-	18.42	NA
	3/13/2006	15.98	NP	-	18.25	NA
	6/26/2006	15.81	NP	-	18.42	NA
	9/25/2006	16.71	NP	-	17.52	NA
	12/11/2006	15.66	NP	-	18.57	NA
	3/19/2007	15.82	NP	-	18.41	NA
(34.20)	6/18/2007	16.50	NP	-	17.70	NA
	9/17/2007	16.50	NP	-	17.70	NA
				Abandoned		
B-33	2/14/2000	15.54	15.49	0.05	20.40	0.0
(35.90)	5/22/2000	16.41	NP	-	19.49	NA
	8/22/2000	17.15	NP	-	18.75	NA
	11/27/2000	17.39	NP	-	18.51	NA
	2/20/2001	17.25	NP	-	18.65	NA
	5/15/2001	17.24	NP	-	18.66	NA
	9/19/2001	17.72	NP	-	18.18	NA
	12/20/2001	16.29	NP	-	19.61	NA
	3/15/2002	15.93	NP	-	19.97	NA
	9/23/2002	17.51	NP	-	18.39	NA
	12/19/2002	17.52	NP	-	18.38	NA
	3/19/2003	16.21	NP	-	19.69	NA
	6/24/2003	16.57	NP	-	19.33	NA
	9/24/2003	17.45	NP	-	18.45	NA
	12/26/2003	16.74	NP	-	19.16	NA
	3/30/2004	16.24	NP	-	19.66	NA
	6/24/2004	16.87	NP	-	19.03	NA
	9/27/2004	17.56	NP	-	18.34	NA
	12/14/2004	17.22	NP	-	18.68	NA
	3/7/2005	17.10	NP	-	18.80	NA
	6/22/2005	16.88	NP	-	19.02	NA
	9/19/2005	17.40	NP	-	18.50	NA
	12/12/2005	16.70	NP	-	19.20	NA
	1/30/2006	15.01	NP	-	20.89	NA
	3/13/2006	15.80	NP	-	20.10	NA
	6/26/2006	16.44	NP	-	19.46	NA
	12/11/2006	15.76	NP	-	20.14	NA
	3/19/2007	15.34	NP	-	20.56	NA
(34.34)	6/18/2007	16.21	NP	-	18.13	NA
	9/17/2007	16.82	NP	-	17.52	NA
	12/17/2007	15.95	NP	-	18.39	NA
	1/22/2008	15.35	NP	-	18.99	NA
	3/24/2008	15.31	NP	-	19.03	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-1	2/14/2000	2.38	NP	-	19.70	NA
(22.08)	5/22/2000	3.26	NP	-	18.82	NA
	8/22/2000	4.32	NP	-	17.76	NA
	11/27/2000	4.38	NP	-	17.70	NA
	2/20/2001	6.50	NP	-	15.58	NA
	5/15/2001	4.25	NP	-	17.83	NA
	9/19/2001	4.79	NP	-	17.29	NA
	12/22/2001	3.05	NP	-	19.03	NA
	3/15/2002	2.77	NP	-	19.31	NA
	9/23/2002	4.34	NP	-	17.74	NA
	12/19/2002	3.84	NP	-	18.24	NA
	3/19/2003	2.85	NP	-	19.23	NA
	6/24/2003	3.38	NP	-	18.70	NA
	9/24/2003	4.33	NP	-	17.75	NA
	12/26/2003	3.32	NP	-	18.76	NA
	3/30/2004	3.14	NP	-	18.94	NA
	6/24/2004	3.68	NP	-	18.40	NA
	9/27/2004	4.39	NP	-	17.69	NA
	12/14/2004	3.74	NP	-	18.34	NA
	3/7/2005	3.93	NP	-	18.15	NA
	6/23/2005	3.75	NP	-	18.33	NA
	9/19/2005	4.44	NP	-	17.64	NA
	12/12/2005	3.45	NP	-	18.63	NA
	1/30/2006	1.50	NP	-	20.58	NA
	3/13/2006	2.32	NP	-	19.76	NA
	6/26/2006	3.28	NP	-	18.80	NA
	9/25/2006	4.25	NP	-	17.83	NA
	12/11/2006	-	-	-	-	-
	3/19/2007	2.71	NP	-	19.37	NA
(21.69)	6/18/2007	3.50	NP	-	18.19	NA
	9/17/2007	4.21	NP	-	17.48	NA
	12/17/2007	3.13	NP	-	18.56	NA
	3/24/2008	2.66	NP	-	19.13	NA
CR-3	2/14/2000	12.29	12.28	0.01	22.04	0.0
(34.32)	5/22/2000	16.57	NP	-	17.75	NA
	8/22/2000	15.34	NP	-	18.98	NA
	11/27/2000	13.86	NP	-	20.46	NA
	2/20/2001	15.46	NP	-	18.86	NA
	5/15/2001	15.37	NP	-	18.95	NA
	9/19/2001	16.03	NP	-	18.29	NA
	12/22/2001	14.50	NP	-	19.82	NA
	3/15/2002	13.93	NP	-	20.39	NA
	9/23/2002	15.70	NP	-	18.62	NA
	12/19/2002	15.40	NP	-	18.92	NA
	3/19/2003	14.27	NP	-	20.05	NA
	6/24/2003	14.70	NP	-	19.62	NA
	9/24/2003	15.67	NP	-	18.65	NA
	12/26/2003	14.71	NP	-	19.61	NA
	3/30/2004	14.28	NP	-	20.04	NA
	6/24/2004	15.17	NP	-	19.15	NA
	9/27/2004	15.85	NP	-	18.47	NA
	12/14/2004	14.97	NP	-	19.35	NA
	3/7/2005	15.32	NP	-	19.00	NA
	6/22/2005	15.01	NP	-	19.31	NA
	9/19/2005	15.70	NP	-	18.62	NA
	12/12/2005	14.97	NP	-	19.35	NA
	1/30/2006	10.34	NP	-	23.98	NA
	3/13/2006	13.73	NP	-	20.59	NA
	6/26/2006	14.68	NP	-	19.64	NA
	9/25/2006	15.58	NP	-	18.74	NA
	12/11/2006	14.53	NP	-	19.79	NA
	3/19/2007	13.93	NP	-	20.39	NA
(34.31)	6/18/2007	14.94	NP	-	19.37	NA
	9/17/2007	15.75	NP	-	18.56	NA
	12/17/2007	14.76	NP	-	19.55	NA
	1/22/2008	13.81	NP	-	20.50	NA
	3/24/2008	14.02	NP	-	20.29	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-4	2/14/2000	5.08	NP	-	32.06	NA
(37.14)	5/22/2000	5.63	NP	-	31.51	NA
	8/22/2000	7.25	NP	-	29.89	NA
	11/27/2000	8.31	NP	-	28.83	NA
	2/20/2001	6.98	NP	-	30.16	NA
	5/15/2001	6.34	NP	-	30.80	NA
	9/19/2001	8.55	NP	-	28.58	NA
	12/20/2001	5.38	NP	-	31.76	NA
	3/15/2002	4.88	NP	-	32.26	NA
	6/4/2002	6.17	NP	-	30.97	NA
	9/23/2002	7.69	NP	-	29.45	NA
	12/19/2002	7.92	NP	-	29.22	NA
	3/19/2003	4.97	NP	-	32.17	NA
	6/24/2003	5.98	NP	-	31.16	NA
	9/24/2003	7.77	NP	-	29.37	NA
	12/26/2003	4.73	NP	-	32.41	NA
	3/30/2004	4.58	NP	-	32.56	NA
	6/24/2004	6.68	NP	-	30.46	NA
	9/27/2004	7.32	NP	-	29.82	NA
	12/14/2004	6.41	NP	-	30.73	NA
	3/7/2005	6.82	NP	-	30.32	NA
	6/22/2005	6.43	NP	-	30.71	NA
	9/19/2005	7.35	NP	-	29.79	NA
	12/12/2005	2.65	NP	-	34.49	NA
	3/13/2006	NM	NM	NM	NM	NA
	6/26/2006	8.20	NM	NM	NM	NA
	9/25/2006	8.63	NP	-	28.51	NA
	12/11/2006	-	-	-	-	NA
	3/19/2007	5.25	NP	-	31.89	NA
	6/18/2007	6.67	NP	-	30.47	NA
	9/17/2007	8.78	NP	-	28.36	NA
	12/17/2007	9.69	NP	-	27.45	NA
	3/24/2008	Well Compromised				
CR-6	2/14/2000	11.75	NP	-	23.86	NA
(35.61)	5/22/2000	12.20	NP	-	23.41	NA
	8/22/2000	13.11	NP	-	22.50	NA
	11/27/2000	NM	NM	-	-	NA
	2/20/2001	13.12	13.11	0.01	22.50	0.0 **
	5/15/2001	12.90	NP	-	22.71	NA **
	9/19/2001	13.95	13.91	0.04	21.69	0.0 **
	12/20/2001	13.02	NP	-	22.59	NA
	3/15/2002	11.54	NP	-	24.07	NA
	6/4/2002	12.70	12.69	0.01	22.92	NA
	9/23/2002	14.56	NP	-	21.05	NA
	12/19/2002	13.26	13.23	0.03	22.37	0.04
	3/19/2003	12.01	11.99	0.02	23.62	0.0
	6/24/2003	12.75	12.73	0.02	22.88	0.0
	9/24/2003	13.43	13.40	0.03	22.20	0.0
	12/26/2003	12.73	12.69	0.04	22.91	0.0
	3/30/2004	12.18	sheen	-	23.43	0.0
	6/24/2004	13.21	13.17	0.04	22.43	0.007
	9/27/2004	13.24	13.19	0.05	22.41	0.009
	12/14/2004	13.01	12.97	0.04	22.63	0.007
	3/7/2005	13.07	13.04	0.03	22.56	0.005
	6/21/2005	13.16	13.13	0.03	22.47	0.005
	9/19/2005	13.63	13.60	0.03	22.00	0.005
	12/12/2005	12.47	12.47	Sheen	23.14	0.0
	3/13/2006	11.61	NP	-	24.00	NA
	6/26/2006	12.48	12.48	Sheen	23.13	NA
	9/25/2006	13.68	Trace	-	21.93	NA
	12/11/2006	12.39	12.37	0.02	23.24	NA
	3/19/2007	11.67	11.61	0.06	23.99	NA
	6/18/2007	12.88	12.84	0.04	22.76	NA
	9/17/2007	13.86	Trace	-	21.75	NA
	12/17/2007	12.43	NP	-	23.18	NA
	3/24/2008	11.70	NP	-	23.91	NA

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-7	2/14/2000	9.46	9.45	0.01	26.12	0.0
(35.57)	5/22/2000	10.09	NP	-	25.48	NA
	8/22/2000	16.34	NP	-	19.23	NA
	11/27/2000	NM	NM	-	NM	-
	2/20/2001	11.30	sheen	-	24.27	0.0
	5/15/2001	11.21	NP	-	24.36	NA
	9/19/2001	12.46	NP	-	23.11	NA
	12/20/2001	9.92	NP	-	25.65	NA
	3/15/2002	9.60	NP	-	25.97	NA
	6/4/2002	11.01	11.00	0.01	24.57	NA
	9/23/2002	12.23	NP	-	23.34	NA
	12/19/2002	11.45	NP	-	24.12	NA
	3/19/2003	10.53	NP	-	25.04	NA
	6/24/2003	11.23	NP	-	24.34	NA
	9/24/2003	12.60	12.58	0.02	22.99	NA
	12/26/2003	10.90	NP	-	24.67	NA
	3/30/2004	10.77	NP	-	24.80	NA
	6/24/2004	11.78	11.75	0.03	23.81	NA
	9/27/2004	11.58	NP	-	23.99	NA
	12/14/2004	11.14	NP	-	24.43	NA
	3/7/2005	11.57	11.56	0.01	24.01	0.002
	6/21/2005	11.27	11.25	0.02	24.32	0.003
	9/19/2005	12.39	12.38	0.01	23.19	0.002
	12/12/2005	10.90	10.90	Sheen	24.67	0.0
	3/13/2006	9.94	NP	-	25.63	NA
	6/26/2006	11.14	11.14	Sheen	24.43	NA
	9/25/2006	12.42	12.40	0.02	23.17	NA
	12/11/2006	10.74	Trace	-	24.63	NA
	3/19/2007	-	-	-	-	-
	6/18/2007	11.40	Trace	-	24.17	-
	9/17/2007	12.59	Trace	-	22.98	-
	12/17/2007	Inaccessible				
	3/24/2008	10.00	10.00	Trace	25.57	-
CR-8	2/14/2000	5.70	NP	-	27.44	NA
(33.14)	5/22/2000	6.23	NP	-	26.91	NA
	8/22/2000	7.44	NP	-	25.70	NA
	11/27/2000	7.61	NP	-	25.53	NA
	2/20/2001	7.03	NP	-	26.11	NA
	5/15/2001	6.98	NP	-	26.16	NA
	9/19/2001	8.29	NP	-	24.85	NA
	12/20/2001	6.18	NP	-	26.96	NA
	3/15/2002	5.77	NP	-	27.37	NA
	6/4/2002	6.82	NP	-	26.32	NA
	9/23/2002	8.04	NP	-	25.10	NA
	12/19/2002	7.36	NP	-	25.78	NA
	3/19/2003	6.12	NP	-	27.02	NA
	6/24/2003	6.84	NP	-	26.30	NA
	9/24/2003	8.24	NP	-	24.90	NA
	12/26/2003	6.99	NP	-	26.15	NA
	3/30/2004	6.31	NP	-	26.83	NA
	6/24/2004	7.19	NP	-	25.95	NA
	9/27/2004	7.42	NP	-	25.72	NA
	12/14/2004	6.80	NP	-	26.34	NA
	3/7/2005	6.86	NP	-	26.28	NA
	6/22/2005	6.71	NP	-	26.43	NA
	9/19/2005	8.03	NP	-	25.11	NA
	12/12/2005	6.96	NP	-	26.18	NA
	3/13/2006	5.33	NP	-	27.81	NA
	6/26/2006	6.78	NP	-	26.36	NA
	9/25/2006	8.06	NP	-	25.08	NA
	12/11/2006	6.25	NP	-	26.89	NA
	3/19/2007	5.90	NP	-	27.24	NA
	6/18/2007	7.15	NP	-	25.99	NA
	9/17/2007	8.23	NP	-	24.91	NA
	12/17/2007	7.32	NP	-	25.82	NA
	3/24/2008	6.63	6.63	Trace	26.61	NA
CR-8A	6/26/2006	6.52	NP	-	-	NA
(Sump)	9/25/2006	7.12	NP	-	-	NA
	12/11/2006	4.53	NP	-	-	NA
	3/19/2007	4.62	NP	-	-	NA
	6/18/2007	6.07	NP	-	-	NA
	9/17/2007	7.38	NP	-	-	NA
	12/17/2007	5.37	NP	-	-	NA
	3/24/2008	4.64	NP	-	-	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-9	2/14/2000	3.02	NP	-	32.70	NA
(35.72)	5/22/2000	3.78	NP	-	31.94	NA
	8/22/2000	6.51	NP	-	29.21	NA
	11/27/2000	5.20	NP	-	30.52	NA
	2/20/2001	4.71	NP	-	31.01	NA
	5/15/2001	4.95	NP	-	30.77	NA
	9/19/2001	7.26	NP	-	28.46	NA
	12/20/2001	3.47	NP	-	32.25	NA
	3/15/2002	3.25	NP	-	32.47	NA
	9/23/2002	7.11	NP	-	28.61	NA
	12/19/2002	4.35	NP	-	31.37	NA
	3/19/2003	3.46	NP	-	32.26	NA
	6/24/2003	5.95	NP	-	29.77	NA
	9/24/2003	6.82	NP	-	28.90	NA
	12/26/2003	3.53	NP	-	32.19	NA
	3/30/2004	3.69	NP	-	32.03	NA
	6/24/2004	6.06	NP	-	29.66	NA
	9/27/2004	6.32	NP	-	29.40	NA
	2/14/2004	3.81	NP	-	31.91	NA
	3/7/2005	4.66	NP	-	31.06	NA
	6/22/2005	6.71	NP	-	29.01	NA
	9/19/2005	6.94	NP	-	28.78	NA
	12/12/2005	4.01	NP	-	31.71	NA
	3/13/2006	3.12	NP	-	32.60	NA
	6/26/2006	5.33	NP	-	30.39	NA
	9/25/2006	7.00	NP	-	28.72	NA
	12/11/2006	4.13	NP	-	31.59	NA
	3/19/2007	3.40	NP	-	32.32	NA
	6/18/2007	5.88	NP	-	29.84	NA
	9/17/2007	-	-	-	-	NA
	12/17/2007	Inaccessible				
	3/24/2008	4.17	NP	-	31.55	NA
CR-10	2/14/2000	4.12	4.08	0.04	31.48	0.0
(35.57)	5/22/2000	4.95	NP	-	30.62	NA
	8/22/2000	7.00	6.74	0.26	28.78	0.9
	11/27/2000	NM	NM	-	-	1.1
	2/20/2001	6.27	6.03	0.24	29.49	0.5
	5/15/2001	Covered With a Gravel Pile				0.5
	9/19/2001	10.68	7.92	2.76	27.10	NR ***
	12/22/2001	4.18	4.12	0.06	31.44	NR ***
	3/15/2002	4.03	3.95	0.08	31.60	0.1
	6/4/2002	5.72	5.55	0.17	29.99	0.1
	9/23/2002	9.13	7.04	2.09	28.11	3.0
	12/19/2002	7.44	6.35	1.09	29.00	0.53
	3/19/2003	4.25	4.21	0.04	31.35	0.26
	6/24/2003	5.69	5.58	0.11	29.97	0.05
	9/24/2003	8.15	7.41	0.74	28.01	0.53
	12/26/2003	6.45	4.75	1.70	30.48	6.0
	3/30/2004	5.23	NP	-	30.34	Skimmer
	6/24/2004	6.81	6.79	0.02	28.78	Skimmer
	9/27/2004	6.78	NP	-	28.79	Skimmer
	12/14/2004	6.33	6.30	0.03	29.26	Skimmer
	3/7/2005	6.63	6.62	0.01	28.95	Skimmer
	6/21/2005	5.50	5.46	0.04	30.10	0.02
	9/19/2005	8.33	7.94	0.39	27.55	0.28
	12/12/2005	5.61	5.60	Sheen	29.96	0.02
	3/13/2006	4.78	4.78	Sheen	30.79	0.04
	6/26/2006	6.90	6.90	Sheen	28.67	0.02
	9/25/2006	8.59	7.74	0.85	27.66	0.44
	12/11/2006	4.93	Trace	-	30.64	0.80
	3/19/2007	4.60	4.55	0.05	31.01	0.00
	6/18/2007	6.30	6.26	0.04	29.30	0.03
	9/17/2007	8.55	7.80	0.75	27.62	0.05
	12/17/2007	5.02	-	-	30.55	0.93
	3/24/2008	4.64	4.60	0.04	31.03	0.08

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-11	2/14/2000	2.06	NP	-	32.37	NA
(34.43)	5/22/2000	2.04	NP	-	32.39	NA
	8/22/2000	4.13	NP	-	30.30	NA
	11/27/2000	4.47	sheen	-	29.96	0.1
	2/20/2001	3.27	NP	-	31.16	NA
	5/15/2001	3.02	NP	-	31.41	NA
	9/19/2001	5.26	NP	-	29.17	NA
	12/20/2001	2.34	NP	-	32.09	NA
	3/15/2002	2.02	NP	-	32.41	NA
	9/23/2002	5.12	NP	-	29.31	NA
	12/19/2002	3.86	3.84	0.02	30.59	NA
	3/19/2003	2.06	NP	-	32.37	NA
	6/24/2003	3.25	NP	-	31.18	NA
	9/24/2003	4.80	NP	-	29.63	NA
	12/26/2003	well obstructed				
	3/30/2004	2.53	NP	-	31.90	NA
	6/24/2004	3.85	3.84	0.01	30.59	NA
	9/27/2004	4.60	4.59	0.01	29.84	NA
	12/14/2004	3.24	3.22	0.02	31.21	NA
	3/7/2005	3.27	NP	-	31.16	NA
	6/20/2005	3.20	NP	-	31.23	NA
	9/19/2005	4.47	4.47	0.00	29.96	0.0
	12/12/2005	3.20	3.20	Sheen	31.23	0.0
	3/13/2006	1.98	NP	Sheen	32.45	NA
	6/26/2006	2.05	NP	-	32.38	NA
	9/25/2006	2.56	NP	-	31.87	NA
	12/11/2006	2.58	2.56	0.02	31.87	NA
	3/19/2007	2.34	NP	-	32.09	NA
	6/18/2007	2.46	NP	-	31.97	NA
	9/17/2007	3.69	3.64	0.05	30.78	NA
	12/17/2007	1.20	NP	-	33.23	NA
	3/24/2008	0.21	NP	-	34.22	NA

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-12	6/9/1999	4.85	NP	-	30.74	NA
(35.59)	7/8/1999	5.08	NP	-	30.51	NA
	8/16/1999	5.63	NP	-	29.96	NA
	9/20/1999	8.90	NP	-	26.69	NA
	2/9/2000	2.66	NP	-	32.93	NA
	5/9/2000	4.44	NP	-	31.15	NA
	5/15/2000	4.12	NP	-	31.47	NA
	7/11/2000	5.21	NP	-	30.38	NA
	8/14/2000	5.76	NP	-	29.83	NA
	12/12/2000	5.61	NP	-	29.98	NA
	4/3/2001	5.49	NP	-	30.10	NA
	6/8/2001	Covered With a Gravel Pile				
	7/16/2001	Covered With a Gravel Pile				
	8/1/2001	6.14	NP	-	29.45	NA
	9/19/2001	Covered With a Gravel Pile				
	12/22/2001	3.82	NP	-	31.77	NA
	3/15/2002	3.89	NP	-	31.70	NA
	6/4/2002	5.13	NP	-	30.46	NA
	9/23/2002	6.69	NP	-	28.90	NA
	12/19/2002	5.53	NP	-	30.06	NA
	3/19/2003	3.99	NP	-	31.60	NA
	6/24/2003	5.15	NP	-	30.44	NA
	9/24/2003	6.67	NP	-	28.92	NA
	12/26/2003	4.48	NP	-	31.11	NA
	3/30/2004	4.76	NP	-	30.83	NA
	6/24/2004	5.94	NP	-	29.65	NA
	9/27/2004	6.28	NP	-	29.31	NA
	12/14/2004	5.27	NP	-	30.32	NA
	3/7/2005	5.84	NP	-	29.75	NA
	6/21/2005	5.39	NP	-	30.20	NA
	9/19/2005	6.55	NP	-	29.04	NA
	12/12/2005	5.14	NP	-	30.45	NA
	3/13/2006	4.55	NP	-	31.04	NA
	6/26/2006	5.31	NP	-	30.28	NA
	9/25/2006	6.69	NP	-	28.90	NA
	12/11/2006	4.91	NP	-	30.68	NA
	3/19/2007	4.45	NP	-	31.14	NA
	6/18/2007	5.86	NP	-	29.73	NA
	9/17/2007	6.86	NP	-	28.73	NA
	12/17/2007	4.73	NP	-	30.86	NA
	3/24/2008	4.47	4.46	0.01	26.66	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-13	6/9/1999	5.08	NP	-	30.38	NA
(35.46)	7/8/1999	5.27	NP	-	30.19	NA
	8/16/1999	5.77	NP	-	29.69	NA
	9/20/1999	9.05	NP	-	26.41	NA
	2/9/2000	3.86	NP	-	31.60	NA
	5/9/2000	4.63	NP	-	30.83	NA
	5/15/2000	4.37	NP	-	31.09	NA
	7/11/2000	5.28	NP	-	30.18	NA
	8/14/2000	5.81	NP	-	29.65	NA
	12/12/2000	5.64	NP	-	29.82	NA
	4/3/2001	5.80	NP	-	29.66	NA
	6/8/2001	5.75	NP	-	29.71	NA
	7/16/2001	6.29	NP	-	29.17	NA
	8/1/2001	6.52	NP	-	28.94	NA
	9/19/2001	Covered With a Gravel Pile				
	12/22/2001	4.34	NP	-	31.12	NA
	3/15/2002	4.38	NP	-	31.08	NA
	6/4/2002	5.66	NP	-	29.80	NA
	9/23/2002	6.83	NP	-	28.63	NA
	12/19/2002	6.09	NP	-	29.37	NA
	3/19/2003	4.71	NP	-	30.75	NA
	6/24/2003	5.66	NP	-	29.80	NA
	9/24/2003	6.90	NP	-	28.56	NA
	12/26/2003	4.93	NP	-	30.53	NA
	3/30/2004	5.29	NP	-	30.17	NA
	6/24/2004	6.24	NP	-	29.22	NA
	9/27/2004	6.49	NP	-	28.97	NA
	12/14/2004	5.81	NP	-	29.65	NA
	3/7/2005	6.16	NP	-	29.30	NA
	6/21/2005	5.70	NP	-	29.76	NA
	9/19/2005	6.81	NP	-	28.65	NA
	12/12/2005	5.38	NP	-	30.08	NA
	3/13/2006	NM	NM	NM	NM	NM
	6/26/2006	NM	NM	NM	NM	NM
	9/25/2006	Well not found				
	12/11/2006	-	-	-	-	-
	3/19/2007	-	-	-	-	-
	6/18/2007	-	-	-	-	-
	9/17/2007	-	-	-	-	-
	12/17/2007	NM	NM	NM	NM	NM
	3/24/2008	Abandoned				

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered (gallons)
CR-14	6/9/1999	5.03	NP	-	30.40	NA
(35.43)	7/8/1999	5.27	NP	-	30.16	NA
	8/16/1999	5.85	NP	-	29.58	NA
	9/20/1999	6.14	NP	-	29.29	NA
	2/9/2000	3.98	NP	-	31.45	NA
	5/9/2000	4.66	NP	-	30.77	NA
	5/15/2000	4.33	NP	-	31.10	NA
	7/11/2000	5.41	NP	-	30.02	NA
	8/14/2000	6.01	NP	-	29.42	NA
	12/12/2000	5.87	NP	-	29.56	NA
	4/3/2001	5.70	NP	-	29.73	NA
	6/8/2001	5.81	NP	-	29.62	NA
	7/16/2001	6.20	NP	-	29.23	NA
	8/1/2001	6.32	NP	-	29.11	NA
	9/19/2001	6.99	NP	-	28.44	NA
	12/20/2001	4.22	NP	-	31.21	NA
	3/15/2002	4.09	NP	-	31.34	NA
	6/4/2002	5.41	NP	-	30.02	NA
	9/23/2002	6.86	NP	-	28.57	NA
	12/19/2002	5.59	NP	-	29.84	NA
	3/19/2003	4.54	NP	-	30.89	NA
	6/24/2003	5.51	NP	-	29.92	NA
	9/24/2003	7.01	NP	-	28.42	NA
	12/26/2003	4.72	NP	-	30.71	NA
	3/30/2004	5.38	NP	-	30.05	NA
	6/24/2004	6.36	NP	-	29.07	NA
	9/27/2004	6.53	NP	-	28.90	NA
	12/14/2004	5.57	NP	-	29.86	NA
	3/7/2005	6.26	NP	-	29.17	NA
	6/21/2005	5.56	NP	-	29.87	NA
	9/19/2005	6.93	NP	-	28.50	NA
	12/12/2005	5.39	NP	-	30.04	NA
	3/13/2006	4.89	NP	-	30.54	NA
	6/26/2006	5.87	NP	-	29.56	NA
	9/25/2006	7.25	NP	-	28.18	NA
	12/11/2006	5.52	NP	-	29.91	NA
	3/19/2007	5.19	NP	-	30.24	NA
	6/18/2007	6.13	NP	-	29.30	NA
	9/17/2007	7.33	NP	-	28.10	NA
	12/17/2007	5.47	NP	-	29.96	NA
	3/24/2008	4.71	NP	-	30.72	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-15	6/9/1999	9.06	NP	-	26.36	NA
(35.42)	7/8/1999	9.44	9.41	0.03	26.00	NR ***
	8/16/1999	10.35	10.08	0.27	25.29	NR ***
	9/20/1999	11.07	10.63	0.44	24.70	NR ***
	2/9/2000	8.32	8.01	0.31	27.35	NR ***
	5/9/2000	8.91	8.66	0.25	26.71	NR ***
	5/15/2000	8.74	8.53	0.21	26.85	NR ***
	5/16/2000	8.60	8.45	0.15	26.94	NR ***
	6/7/2000	9.33	8.99	0.34	26.36	NR ***
	7/11/2000	10.02	9.70	0.32	25.66	NR ***
	8/14/2000	10.76	10.39	0.37	24.98	NR ***
	12/12/2000	10.60	10.56	0.04	24.85	NR ***
	4/3/2001	10.17	10.05	0.12	25.35	NR ***
	6/8/2001	10.56	10.37	0.19	25.01	NR ***
	7/16/2001	10.97	10.77	0.20	24.61	NR ***
	9/19/2001	12.17	11.76	0.41	23.58	NR ***
	12/22/2001	8.66	8.50	0.16	26.89	NR ***
	3/15/2002	8.86	8.42	0.44	26.91	0.3
	6/4/2002	10.52	10.25	0.27	25.12	0.5
	9/23/2002	11.40	11.31	0.09	24.09	0.13
	12/19/2002	9.39	9.37	0.02	26.05	0.03
	3/19/2003	9.11	9.04	0.07	26.37	0.13
	6/24/2003	10.63	10.52	0.11	24.88	0.01
	9/24/2003	12.53	12.32	0.21	23.06	0.01
	12/26/2003	10.34	9.78	0.56	25.53	NA
	3/30/2004	10.34	9.92	0.42	25.42	NA
	6/24/2004	11.26	11.11	0.15	24.28	NA
	9/27/2004	11.85	11.76	0.09	23.64	NA
	12/14/2004	9.96	9.95	0.01	25.47	0.002
	3/7/2005	11.02	10.90	0.12	24.50	0.02
	6/21/2005	10.62	10.49	0.13	24.90	0.02
	9/19/2005	12.10	11.89	0.21	23.49	0.16
	12/12/2005	10.04	10.01	0.03	25.40	0.03
	3/13/2006	9.06	8.93	0.13	26.46	0.05
	6/28/2006	10.79	10.51	0.28	24.85	NA
	9/25/2006	12.18	11.90	0.28	23.46	0.00
	12/11/2006	9.96	9.93	0.03	25.48	0.12
	3/19/2007	6.21	6.08	0.13	29.31	0.20
	6/18/2007	10.81	10.70	0.11	24.70	0.09
	9/17/2007	12.09	12.00	0.09	23.40	0.04
	12/17/2007	9.83	9.83	0.00	25.59	0.03
	3/24/2008	9.22	8.99	0.23	26.38	0.29

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-16	6/9/1999	11.05	NP	-	23.72	NA
(34.77)	7/8/1999	11.61	NP	-	23.16	NA
	8/16/1999	11.82	NP	-	22.95	NA
	9/20/1999	12.00	NP	-	22.77	NA
	2/9/2000	10.39	NP	-	24.38	NA
	5/9/2000	11.10	NP	-	23.67	NA
	5/15/2000	11.12	NP	-	23.65	NA
	7/11/2000	11.86	NP	-	22.91	NA
	8/14/2000	11.96	NP	-	22.81	NA
	12/12/2000	11.95	NP	-	22.82	NA
	4/3/2001	11.93	NP	-	22.84	NA
	6/8/2001	NM	NM	-	NM	-
	7/16/2001	12.06	NP	-	22.71	NA
	9/19/2001	12.60	NP	-	22.17	NA
	12/22/2001	10.40	NP	-	24.37	NA
	3/15/2002	10.64	NP	-	24.13	NA
	6/4/2002	11.89	NP	-	22.88	NA
	9/23/2002	12.16	NP	-	22.61	NA
	12/19/2002	10.89	10.87	0.02	23.90	0.01
	3/19/2003	10.54	NP	-	24.23	NA
	6/24/2003	11.81	NP	-	22.96	NA
	9/24/2003	12.42	NP	-	22.35	NA
	12/26/2003	11.29	NP	-	23.48	NA
	3/30/2004	10.83	NP	-	23.94	NA
	6/24/2004	12.04	12.02	0.02	22.75	NA
	9/27/2004	12.03	NP	-	22.74	NA
	12/14/2004	11.08	NP	-	23.69	NA
	3/7/2005	11.88	NP	-	22.89	NA
	6/21/2005	11.59	NP	-	23.18	NA
	9/19/2005	12.35	12.35	0.00	22.42	NA
	12/12/2005	11.00	10.92	0.08	23.83	0.0
	3/13/2006	10.55	NP	-	24.22	NA
	6/26/2006	11.38	NP	-	23.39	NA
	9/25/2006	12.37	NP	-	22.40	NA
	12/11/2006	11.10	11.08	0.02	23.69	NA
	3/19/2007	10.34	NP	-	24.43	NA
	6/18/2007	11.85	NP	-	22.92	NA
	9/17/2007	12.49	NP	-	22.28	NA
	12/17/2007	10.94	NP	-	23.83	NA
	3/24/2008	10.56	10.56	Trace	24.21	NA

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-17	6/9/1999	8.90	NP	-	27.56	NA
(34.46)	7/8/1999	7.15	NP	-	27.31	NA
	8/16/1999	7.81	NP	-	26.65	NA
	9/20/1999	8.35	NP	-	26.11	NA
	2/9/2000	6.41	NP	-	28.05	NA
	5/9/2000	6.80	NP	-	27.66	NA
	5/15/2000	6.68	NP	-	27.78	NA
	7/11/2000	7.50	NP	-	26.96	NA
	8/14/2000	8.21	NP	-	26.25	NA
	12/12/2000	8.26	NP	-	26.20	NA
	4/3/2001	7.90	NP	-	26.56	NA
	6/8/2001	NM	NM	-	NM	-
	7/16/2001	8.59	NP	-	25.87	NA
	9/19/2001	9.70	NP	-	24.76	NA
	12/22/2001	6.57	NP	-	27.89	NA
	3/15/2002	6.47	NP	-	27.99	NA
	6/4/2002	7.82	NP	-	26.64	NA
	9/23/2002	8.81	NP	-	25.65	NA
	12/19/2002	7.92	NP	-	26.54	NA
	3/19/2003	6.70	NP	-	27.76	NA
	6/24/2003	7.96	NP	-	26.50	NA
	9/24/2003	9.63	NP	-	24.83	NA
	12/26/2003	7.61	7.10	0.41	27.28	NA
	3/30/2004	7.32	NP	-	27.14	NA
	6/24/2004	8.65	NP	-	25.81	NA
	9/27/2004	8.32	NP	-	26.14	NA
	12/14/2004	7.44	NP	-	27.02	NA
	3/7/2005	8.28	NP	-	26.18	NA
	6/21/2005	7.80	NP	-	26.66	NA
	9/19/2005	9.50	NP	-	24.96	NA
	12/12/2005	7.22	NP	-	27.24	NA
	3/13/2006	6.64	NP	-	27.82	NA
	6/26/2006	7.71	NP	-	26.75	NA
	9/25/2006	9.57	NP	-	24.89	NA
	12/11/2006	7.11	NP	-	27.35	NA
	3/19/2007	6.91	NP	-	27.55	NA
	6/18/2007	8.17	NP	-	26.29	NA
	9/17/2007	9.98	NP	-	24.48	NA
	12/17/2007	7.13	NP	-	27.33	NA
	3/24/2008	6.62	NP	-	27.94	NA
CR-18	6/9/1999	3.77	NP	-	31.07	NA
(34.84)	7/8/1999	4.14	NP	-	30.70	NA
	8/16/1999	5.19	NP	-	29.65	NA
	9/20/1999	NM	NM	-	NM	-
	2/9/2000	NM	NM	-	NM	-
	5/9/2000	NM	NM	-	NM	-
	5/15/2000	NM	NM	-	NM	-
	7/11/2000	NM	NM	-	NM	-
	8/14/2000	NM	NM	-	NM	-
	12/12/2000	NM	NM	-	NM	-
	4/3/2001	NM	NM	-	NM	-
	6/8/2001	NM	NM	-	NM	-
	7/16/2001	NM	NM	-	NM	-
	9/19/2001	NM	NM	-	NM	-
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	NM	NM	-	NM	-
	12/17/2007	Abandoned				

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-19	6/9/1999	5.10	NP	-	30.39	NA
(35.49)	7/8/1999	6.24	5.27	0.97	30.03	NR ***
	8/16/1999	7.65	5.87	1.78	29.26	NR ***
	9/20/1999	8.86	6.38	2.48	28.61	NR ***
	2/9/2000	5.94	3.35	2.59	31.62	NR ***
	5/9/2000	6.19	4.38	1.81	30.75	NR ***
	5/15/2000	4.27	4.22	0.05	31.26	NR ***
	5/16/2000	4.32	4.26	0.06	31.22	NR ***
	6/7/2000	5.57	4.78	0.79	30.55	NR ***
	7/11/2000	6.17	5.35	0.82	29.98	NR ***
	8/14/2000	7.50	5.94	1.56	29.24	NR ***
	12/12/2000	8.69	5.90	2.79	29.03	NR ***
	4/3/2001	8.03	5.61	2.42	29.40	NR ***
	6/8/2001	7.77	5.75	2.02	29.34	NR ***
	7/16/2001	7.99	6.32	1.67	28.84	NR ***
	9/19/2001	8.86	7.14	1.72	28.01	NR ***
	12/22/2001	4.62	4.24	0.38	31.17	NR ***
	3/15/2002	4.47	4.13	0.34	31.29	0.25
	6/4/2002	6.92	5.39	1.53	29.79	1.50
	9/23/2002	8.48	6.91	1.57	28.27	0.53
	12/19/2002	7.09	6.17	0.92	29.14	0.26
	3/19/2003	4.83	4.40	0.43	31.00	0.26
	6/24/2003	6.51	5.50	1.01	29.79	0.75
	9/24/2003	7.68	6.99	0.69	28.36	0.26
	12/26/2003	7.41	5.21	2.20	29.84	2.50
	3/30/2004	7.12	5.49	1.63	29.67	2.50
	6/24/2004	7.40	6.62	0.78	28.71	2.50
	9/27/2004	8.28	7.65	0.63	27.71	2.50
	12/14/2004	6.63	6.37	0.26	29.07	0.04
	3/7/2005	6.94	6.92	0.02	28.57	0.003
	6/21/2005	6.43	5.83	0.60	29.54	0.1
	9/19/2005	8.80	7.32	1.48	27.87	0.3
	12/12/2005	5.19	5.19	Sheen	30.30	0.01
	3/13/2006	4.45	NP	Sheen	31.04	0.10
	6/26/2006	6.00	5.93	0.07	29.55	0.04
	9/25/2006	8.13	7.39	0.74	27.95	0.36
	12/11/2006	4.78	Trace	-	30.71	0.50
	3/19/2007	4.63	NP	-	30.86	0.30
	6/18/2007	6.51	6.29	0.22	29.16	0.38
	9/17/2007	7.89	7.54	0.35	27.88	0.03
	12/17/2007	5.94	NP	0.00	29.55	0.00
	3/24/2008	4.89	4.83	0.06	30.65	0.70

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-20	7/8/1999	7.69	NP	-	27.45	NA
(35.14)	8/18/1999	8.50	NP	-	26.64	NA
	9/20/1999	9.14	NP	-	26.00	NA
	2/9/2000	6.67	NP	-	28.47	NA
	5/9/2000	7.25	NP	-	27.89	NA
	5/15/2000	6.98	NP	-	28.16	NA
	7/11/2000	8.15	NP	-	26.99	NA
	8/14/2000	8.95	NP	-	26.19	NA
	12/12/2000	9.12	NP	-	26.02	NA
	4/3/2001	8.75	NP	-	26.39	NA
	6/8/2001	9.04	NP	-	26.10	NA
	7/16/2001	9.51	NP	-	25.63	NA
	9/19/2001	10.91	NP	-	24.23	NA
	12/20/2001	6.96	NP	-	28.18	NA
	3/15/2002	6.91	NP	-	28.23	NA
	6/4/2002	8.74	NP	-	26.40	NA
	9/23/2002	10.29	NP	-	24.85	NA
	12/19/2002	8.88	NP	-	26.26	NA
	3/19/2003	7.35	NP	-	27.79	NA
	6/24/2003	9.05	NP	-	26.09	NA
	9/24/2003	11.30	NP	-	23.84	NA
	12/26/2003	8.08	8.06	0.02	27.08	NA
	3/30/2004	8.35	NP	-	26.79	NA
	6/24/2004	9.89	NP	-	25.25	NA
	9/27/2004	9.59	NP	-	25.55	NA
	12/14/2004	8.25	NP	-	26.89	NA
	3/7/2005	9.60	NP	-	25.54	NA
	6/21/2005	8.79	NP	-	26.35	NA
	9/19/2005	10.92	NP	-	24.22	NA
	12/12/2005	8.26	NP	-	26.88	NA
	3/13/2006	7.09	NP	-	28.05	NA
	6/26/2006	8.72	NP	-	26.42	NA
	9/25/2006	11.00	NP	-	24.14	NA
	12/11/2006	8.23	NP	-	26.91	NA
	3/19/2007	7.22	NP	-	27.92	NA
	6/18/2007	9.13	NP	-	26.01	NA
	9/17/2007	11.02	NP	-	24.12	NA
	12/17/2007	7.98	NP	-	27.16	NA
	3/24/2008	6.47	NP	-	28.67	NA

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Wilbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-21A	12/12/2000	5.54	NP	-	28.57	NA
(34.11)	4/5/2001	5.21	5.11	0.10	28.98	NR ***
	6/8/2001	5.61	5.11	0.50	28.90	NR ***
	7/16/2001	6.37	5.25	1.12	28.64	NR ***
	9/19/2001	Covered With Construction Equipment				
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	NM	NM	>1.0E	NM	NM
	6/4/2002	NM	4.85E	>1.5E	NM	NM
	9/23/2002	8.10E	6.10E	2.0E	NM	0.04
	12/19/2002	5.19	4.95	0.24	29.11	0.02
	3/19/2003	3.6E	3.4E	0.2E	NM	0.01
	6/24/2003	5.6E	5.33	0.25E	NM	0.01
	9/24/2003	7.1E	6.80	0.3E	NM	0.01
	12/26/2003	3.75	3.63E	0.12E	NM	0.01
	3/30/2004	5.35	4.99	0.36	29.05	0.25
	6/24/2004	6.52	6.17	0.35	27.87	NA
	9/27/2004	7.09	6.59	0.50	27.42	NA
	12/14/2004	5.69	5.48	0.21	28.59	0.005
	3/7/2005	5.80	5.66	0.14	28.42	0.003
	6/22/2005	5.78	5.53	0.25	28.53	0.006
	9/19/2005	7.41	6.89	0.52	27.12	0.012
	12/12/2005	5.29	5.08	0.21	28.99	0.02
	3/13/2006	4.35	4.18	0.17	29.90	0.01
	6/26/2006	5.35	5.23	0.12	28.86	0.01
	9/25/2006	6.72	NP	-	27.39	0.01
	12/11/2006	4.92	4.68	0.24	29.38	NA
	3/19/2007	5.00	4.50	0.50	29.51	NA
	6/18/2007	-	-	-	-	-
	9/17/2007	7.36	7.30	0.06	26.80	-
	12/17/2007	Inaccessible				0.03
	3/24/2008	4.10	4.05	0.05	30.05	0.09
CR-21B	12/12/2000	6.53	NP	-	27.83	NA
(34.36)	4/3/2001	5.62	NP	-	28.74	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	6.88	NP	-	27.48	NA
	9/19/2001	7.41	NP	-	26.95	NA
	12/20/2001	4.68	NP	-	29.68	NA
	3/15/2002	4.48	NP	-	29.88	NA
	6/4/2002	5.59	NP	-	28.77	NA
	9/23/2002	7.77	NP	-	26.59	NA
	12/19/2002	5.79	NP	-	28.57	NA
	3/19/2003	4.92	NP	-	29.44	NA
	6/24/2003	6.21	NP	-	28.15	NA
	9/24/2003	7.77	NP	-	26.59	NA
	12/26/2003	4.41	NP	-	29.95	NA
	3/30/2004	5.30	NP	-	29.06	NA
	6/24/2004	6.67	NP	-	27.69	NA
	9/27/2004	6.99	NP	-	27.37	NA
	12/14/2004	6.52	NP	-	27.84	NA
	3/7/2005	6.27	NP	-	28.09	NA
	6/22/2005	6.09	NP	-	28.27	NA
	9/19/2005	7.75	NP	-	26.61	NA
	12/12/2005	5.65	NP	-	28.71	NA
	3/13/2006	4.45	NP	-	29.91	NA
	6/26/2006	5.89	NP	-	28.47	NA
	9/25/2006	7.68	NP	-	26.68	NA
	12/11/2006	5.33	NP	-	29.03	NA
	3/19/2007	4.47	NP	-	29.89	NA
	6/18/2007	-	-	-	-	NA
	9/17/2007	-	-	-	-	NA
	12/17/2007	5.13	-	-	29.23	NA
	3/24/2008	Inaccessible				NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-22A	12/12/2000	11.92	NP	-	22.88	NA
(34.80)	4/3/2001	11.51	NP	-	23.29	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	11.89	NP	-	22.91	NA
	9/19/2001	12.52	NP	-	22.28	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	10.36	NP	-	24.44	NA
	6/4/2002	11.32	NP	-	23.48	NA
	9/23/2002	12.12	NP	-	22.68	NA
	12/19/2002	11.93	NP	-	22.87	NA
	3/19/2003	10.99	NP	-	23.81	NA
	6/24/2003	11.83	NP	-	22.97	NA
	9/24/2003	12.96	NP	-	21.84	NA
	12/26/2003	11.65	NP	-	23.15	NA
	3/30/2004	11.79	NP	-	23.01	NA
	6/24/2004	12.28	NP	-	22.52	NA
	9/27/2004	12.33	NP	-	22.47	NA
	12/14/2004	11.98	NP	-	22.82	NA
	3/7/2005	12.02	NP	-	22.78	NA
	6/21/2005	11.85	NP	-	22.95	NA
	9/19/2005	12.73	NP	-	22.07	NA
	12/12/2005	11.59	NP	-	23.21	NA
	3/13/2006	10.98	NP	-	23.82	NA
	6/26/2006	11.42	NP	-	23.38	NA
	9/25/2006	12.82	Trace	-	21.98	NA
	12/11/2006	11.42	NP	-	23.38	NA
	3/19/2007	10.84	NP	-	23.96	NA
	6/18/2007	11.93	NP	-	22.87	NA
	9/17/2007	12.67	NP	-	22.13	NA
	12/17/2007	11.19	NP	-	23.61	NA
	3/24/2008	10.66	NP	-	24.14	NA
CR-22B	12/12/2000	11.27	NP	-	23.92	NA
(35.19)	4/3/2001	10.70	NP	-	24.49	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	11.31	NP	-	23.88	NA
	9/19/2001	12.02	NP	-	23.17	NA
	12/20/2001	9.63	NP	-	25.56	NA
	3/15/2002	9.52	NP	-	25.67	NA
	6/4/2002	10.59	NP	-	24.60	NA
	9/23/2002	11.57	NP	-	23.62	NA
	12/19/2002	11.39	NP	-	23.80	NA
	3/19/2003	10.02	NP	-	25.17	NA
	6/24/2003	10.52	NP	-	24.67	NA
	9/24/2003	12.24	NP	-	22.95	NA
	12/26/2003	10.64	NP	-	24.55	NA
	3/30/2004	10.33	NP	-	24.86	NA
	6/24/2004	11.26	NP	-	23.93	NA
	9/27/2004	11.25	NP	-	23.94	NA
	12/14/2004	10.87	NP	-	24.32	NA
	3/7/2005	11.13	NP	-	24.06	NA
	6/21/2005	10.90	NP	-	24.29	NA
	9/19/2005	11.84	NP	-	23.35	NA
	12/12/2005	10.59	NP	-	24.60	NA
	3/13/2006	9.65	NP	-	25.54	NA
	6/26/2006	10.71	NP	-	24.48	NA
	9/25/2006	12.02	NP	-	23.17	NA
	12/11/2006	10.39	NP	-	24.80	NA
	3/19/2007	9.64	NP	-	25.55	NA
	6/18/2007	11.00	NP	-	24.19	NA
	9/17/2007	12.10	NP	-	23.09	NA
	12/17/2007	10.24	NP	-	24.95	NA
	3/24/2008	9.64	NP	-	25.55	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-23A	12/12/2000	13.56	NP	-	22.79	NA
(36.35)	4/3/2001	13.20	NP	-	23.15	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	13.52	NP	-	22.83	NA
	9/19/2001	14.19	NP	-	22.16	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	11.84	NP	-	24.51	NA
	6/4/2002	12.83	NP	-	23.52	NA
	9/23/2002	13.66	NP	-	22.69	NA
	12/19/2002	13.66	NP	-	22.69	NA
	3/19/2003	11.97	NP	-	24.38	NA
	6/24/2003	12.64	NP	-	23.71	NA
	9/24/2003	13.95	NP	-	22.40	NA
	12/26/2003	12.70	NP	-	23.65	NA
	3/30/2004	12.47	NP	-	23.88	NA
	6/24/2004	13.46	NP	-	22.89	NA
	9/27/2004	13.45	NP	-	22.90	NA
	12/14/2004	13.14	NP	-	23.21	NA
	3/7/2005	13.35	NP	-	23.00	NA
	6/21/2005	12.92	NP	-	23.43	NA
	9/19/2005	13.95	NP	-	22.40	NA
	12/12/2005	12.74	NP	-	23.61	NA
	3/13/2006	11.96	NP	-	24.39	NA
	6/26/2006	12.96	NP	-	23.39	NA
	9/25/2006	13.95	NP	-	22.40	NA
	12/11/2006	12.62	NP	-	23.73	NA
	3/19/2007	11.93	NP	-	24.42	NA
	6/18/2007	13.16	NP	-	23.19	NA
	9/17/2007	14.38	NP	-	21.97	NA
	12/17/2007	12.20	NP	-	24.15	NA
	3/24/2008	12.01	NP	-	24.34	NA
CR-23B	12/12/2000	12.57	NP	-	23.70	NA
(36.27)	4/3/2001	12.18	NP	-	24.09	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	12.71	NP	-	23.56	NA
	9/19/2001	13.79	NP	-	22.48	NA
	12/20/2001	11.04	NP	-	25.23	NA
	3/15/2002	10.94	NP	-	25.33	NA
	6/4/2002	12.96	NP	-	23.31	NA
	9/23/2002	12.79	NP	-	23.48	NA
	12/19/2002	12.79	NP	-	23.48	NA
	3/19/2003	12.55	NP	-	23.72	NA
	6/24/2003	12.65	NP	-	23.62	NA
	9/24/2003	13.57	NP	-	22.70	NA
	12/26/2003	11.85	NP	-	24.42	NA
	3/30/2004	11.46	NP	-	24.81	NA
	6/24/2004	12.73	NP	-	23.54	NA
	9/27/2004	12.62	NP	-	23.65	NA
	12/14/2004	12.36	NP	-	23.91	NA
	3/7/2005	12.61	NP	-	23.66	NA
	6/21/2005	12.33	NP	-	23.94	NA
	9/19/2005	13.29	NP	-	22.98	NA
	12/12/2005	12.00	NP	-	24.27	NA
	3/13/2006	10.98	NP	-	25.29	NA
	6/26/2006	12.11	NP	-	24.16	NA
	9/25/2006	13.23	NP	-	23.04	NA
	12/11/2006	11.81	NP	-	24.46	NA
	3/19/2007	11.25	NP	-	25.02	NA
	6/18/2007	12.40	NP	-	23.87	NA
	9/17/2007	13.99	NP	-	22.28	NA
	12/17/2007	11.70	NP	-	24.57	NA
	3/24/2008	11.09	NP	-	25.18	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-24A	12/12/2000	15.15	NP	-	21.06	NA
(36.21)	4/3/2001	14.46	NP	-	21.75	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	14.64	NP	-	21.57	NA
	9/19/2001	15.11	NP	-	21.10	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	13.29	NP	-	22.92	NA
	6/4/2002	14.07	NP	-	22.14	NA
	9/23/2002	14.82	NP	-	21.39	NA
	12/19/2002	14.72	NP	-	21.49	NA
	3/19/2003	13.53	NP	-	22.68	NA
	6/24/2003	14.04	NP	-	22.17	NA
	9/24/2003	14.88	NP	-	21.33	NA
	12/26/2003	14.17	NP	-	22.04	NA
	3/30/2004	12.61	NP	-	23.60	NA
	6/24/2004	14.45	NP	-	21.76	NA
	9/27/2004	14.65	NP	-	21.56	NA
	12/14/2004	14.45	NP	-	21.76	NA
	3/7/2005	14.24	NP	-	21.97	NA
	6/21/2005	14.13	NP	-	22.08	NA
	9/19/2005	14.77	NP	-	21.44	NA
	12/12/2005	13.09	NP	-	23.12	NA
	3/13/2006	12.95	NP	-	23.26	NA
	6/26/2006	13.75	NP	-	22.46	NA
	9/25/2006	14.65	NP	-	21.56	NA
	12/11/2006	13.05	NP	-	23.16	NA
	3/19/2007	12.69	NP	-	23.52	NA
	6/18/2007	14.14	NP	-	22.07	NA
	9/17/2007	14.98	NP	-	21.23	NA
	12/17/2007	13.67	NP	-	22.54	NA
	3/24/2008	13.11	NP	-	23.10	NA
CR-24B	12/12/2000	13.78	NP	-	22.54	NA
(36.32)	4/3/2001	13.40	NP	-	22.92	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	13.77	NP	-	22.55	NA
	9/19/2001	14.44	NP	-	21.88	NA
	12/20/2001	12.41	NP	-	23.91	NA
	3/15/2002	12.06	NP	-	24.26	NA
	6/4/2002	12.94	NP	-	23.38	NA
	9/23/2002	13.42	NP	-	22.90	NA
	12/19/2002	13.78	NP	-	22.54	NA
	3/19/2003	12.52	NP	-	23.80	NA
	6/24/2003	13.06	NP	-	23.26	NA
	9/24/2003	14.32	NP	-	22.00	NA
	12/26/2003	12.97	NP	-	23.35	NA
	3/30/2004	13.52	NP	-	22.80	NA
	6/24/2004	13.58	NP	-	22.74	NA
	9/27/2004	13.61	NP	-	22.71	NA
	12/14/2004	13.41	NP	-	22.91	NA
	3/7/2005	13.66	NP	-	22.66	NA
	6/21/2005	13.20	NP	-	23.12	NA
	9/19/2005	14.03	NP	-	22.29	NA
	12/12/2005	12.95	NP	-	23.37	NA
	3/13/2006	12.03	NP	-	24.29	NA
	6/26/2006	12.87	NP	-	23.45	NA
	9/25/2006	14.03	Trace	-	22.29	NA
	12/11/2006	13.72	NP	-	22.60	NA
	3/19/2007	12.09	NP	-	24.23	NA
	6/18/2007	13.22	NP	-	23.10	NA
	9/17/2007	14.23	NP	-	22.09	NA
	12/17/2007	12.65	NP	-	23.67	NA
	3/24/2008	12.03	NP	-	24.29	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-25	12/12/2000	8.23	NP	-	26.04	NA
(34.27)	4/3/2001	7.69	7.25	0.44	26.93	NR ***
	6/8/2001	7.49	7.15	0.34	27.05	NR ***
	7/16/2001	8.67	7.73	0.94	26.35	NR ***
	9/19/2001	9.02	8.75	0.27	25.47	NR ***
	12/20/2001	6.96	6.81	0.15	27.43	NR ***
	3/15/2002	6.66	6.51	0.15	27.73	0.1
	6/4/2002	7.83	7.62	0.21	26.61	0.25
	9/23/2002	9.02	8.79	0.23	25.43	0.13
	12/19/2002	8.48	8.34	0.14	25.90	0.05
	3/19/2003	6.91	6.74	0.17	27.50	0.2
	6/24/2003	7.79	7.58	0.21	26.65	NR
	9/24/2003	9.06	8.91	0.15	25.33	NR
	12/26/2003	7.51	7.35	0.16	26.89	NR
	3/30/2004	8.00	7.79	0.21	26.44	0.0
	6/24/2004	8.65	8.19	0.46	25.99	0.0
	9/27/2004	8.65	8.42	0.23	25.80	0.0
	12/14/2004	7.62	7.49	0.13	26.75	0.02
	3/7/2005	8.14	7.95	0.19	26.28	0.03
	6/22/2005	8.07	7.79	0.28	26.42	0.05
	9/19/2005	10.34	9.14	1.20	24.89	0.2
	12/12/2005	7.87	7.58	0.29	26.63	0.17
	3/13/2006	6.54	6.40	0.14	27.84	0.05
	6/26/2006	7.83	7.82	0.01	26.45	0.05
	9/25/2006	9.22	9.19	0.03	25.07	0.05
	12/11/2006	7.65	NP	-	26.62	NA
	3/19/2007	7.75	6.70	1.05	27.36	0.90
	6/18/2007	8.13	7.99	0.14	26.25	1.28
	9/17/2007	9.08	9.02	0.06	25.24	0.05
	12/17/2007	7.15	-	0.00	27.12	0.07
	3/24/2008	6.49	6.40	0.09	27.85	0.10
CR-26	9/24/2003	-	-	-	-	-
(33.19)	12/26/2003	-	-	-	-	-
	3/26/2004	-	-	-	-	-
	6/24/2004	20.42	NP	-	12.77	NA
	9/27/2004	21.88	NP	-	11.31	NA
	12/14/2004	22.96	NP	-	-	NA
	3/7/2005	20.81	NP	-	-	NA
	6/22/2005	20.03	NP	-	-	NA
	9/19/2005	22.80	NP	-	-	NA
	12/12/2005	20.92	NP	-	12.27	NA
	1/30/2006	16.21	NP	-	16.98	NA
	3/13/2006	19.80	NP	-	13.39	NA
	6/26/2006	17.53	NP	-	15.66	NA
	9/25/2006	27.34	NP	-	5.85	NA
	12/11/2006	20.37	NP	-	12.82	NA
	3/19/2007	18.99	NP	-	14.20	NA
(33.21)	6/18/2007	20.00	NP	-	13.21	NA
	9/17/2007	24.46	NP	-	8.75	NA
	12/17/2007	26.09	NP	-	7.12	NA
	1/22/2008	22.90	NP	-	10.31	NA
	3/24/2008	20.31	NP	-	12.90	NA
CR-27C	1/30/2006	16.70	NP	-	16.58	NA
(33.28)	3/13/2006	19.46	NP	-	13.82	NA
	9/25/2006	21.94	NP	-	11.34	NA
	12/11/2006	20.48	NP	-	12.80	NA
	3/19/2007	19.26	NP	-	14.02	NA
(33.31)	6/18/2007	19.95	NP	-	13.36	NA
	9/17/2007	22.15	NP	-	11.16	NA
	12/17/2007	20.68	NP	-	12.63	NA
	1/22/2008	20.03	NP	-	13.28	NA
	3/24/2008	19.81	NP	-	13.50	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-28A	9/17/2007	NM	NM	NM	NM	NM
(34.90)	12/17/2007	16.07	NP	-	18.83	
	1/22/2008	15.22	NP	-	19.68	
	3/24/2008	15.38	NP	-	19.52	
CR-28B	1/30/2006	13.52	NP		21.35	NA
(34.87)	3/13/2006	14.54	NP	-	20.33	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	15.39	NP	-	19.48	NA
	3/19/2007	14.81	NP	-	20.06	NA
(34.87)	6/18/2007	15.26	NP	-	19.61	NA
	9/17/2007	16.72	NP	-	18.15	NA
	12/17/2007	15.37	NP	-	19.50	NA
	1/22/2008	14.78	NP	-	20.09	NA
	3/24/2008	14.76	NP	-	20.11	NA
CR-28C	1/30/2006	13.11	NP		21.65	NA
(34.76)	3/13/2006	14.02	NP	-	20.74	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	14.80	NP	-	19.96	NA
	3/19/2007	14.10	NP	-	20.66	NA
(34.75)	6/18/2007	14.54	NP	-	20.21	NA
	9/17/2007	16.39	NP	-	18.36	NA
	12/17/2007	14.63	NP	-	20.12	NA
	1/22/2008	13.96	NP	-	20.79	NA
	3/24/2008	13.98	NP	-	20.77	NA
CR-29A	1/30/2006	13.03	NP	-	21.13	NA
(34.16)	3/13/2006	13.68	NP	-	20.48	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	14.50	NP	-	19.66	NA
	3/19/2007	13.91	NP	-	20.25	NA
(34.19)	6/18/2007	14.93	NP	-	19.26	NA
	9/17/2007	15.73	NP	-	18.46	NA
	12/17/2007	14.70	NP	-	19.49	NA
	1/22/2008	13.79	NP	-	20.40	NA
	3/24/2008	14.00	NP	-	20.19	NA
CR-29B	1/30/2006	14.46	NP	-	19.85	NA
(34.31)	3/13/2006	NM	NP	-	NM	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	15.96	NP	-	18.35	NA
	3/19/2007	15.26	NP	-	19.05	NA
(34.32)	6/18/2007	15.86	NP	-	18.46	NA
	9/17/2007	17.72	NP	-	16.60	NA
	12/17/2007	16.26	NP	-	18.06	NA
	1/22/2008	15.34	NP	-	18.98	NA
	3/24/2008	15.43	NP	-	18.89	NA
CR-30A	1/30/2006	12.10	NP	-	20.96	NA
(33.06)	3/13/2006	12.95	NP	-	20.11	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	13.66	NP	-	19.40	NA
	3/19/2007	13.17	NP	-	19.89	NA
(33.08)	6/18/2007	14.15	NP	-	18.93	NA
	9/17/2007	18.91	NP	-	14.17	NA
	12/17/2007	13.81	NP	-	19.27	NA
	1/22/2008	13.00	NP	-	20.08	NA
	3/24/2008	13.21	NP	-	19.87	NA
CR-30B	1/30/2006	13.97	NP	-	18.33	NA
(32.30)	3/13/2006	16.13	NP	-	16.17	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	16.97	NP	-	15.33	NA
	3/19/2007	15.70	NP	-	16.60	NA
(32.33)	6/18/2007	16.73	NP	-	15.60	NA
	9/17/2007	14.88	NP	-	17.45	NA
	12/17/2007	17.15	NP	-	15.18	NA
	1/22/2008	16.43	NP	-	15.90	NA
	3/24/2008	16.39	NP	-	15.94	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
CR-31A	1/30/2006	1.30	NP	-	20.26	NA
(21.56)	3/13/2006	2.14	NP	-	19.42	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	2.51	NP	-	19.05	NA
	3/19/2007	2.48	NP	-	19.08	NA
(21.58)	6/18/2007	3.37	NP	-	18.21	NA
	9/17/2007	4.02	NP	-	17.56	NA
	12/17/2007	2.94	NP	-	18.64	NA
	1/22/2008	2.30	NP	-	19.28	NA
	3/24/2008	**2.42**	**NP**	**-**	**19.16**	**NA**
CR-31B	1/30/2006	5.06	NP	-	16.63	NA
(21.69)	3/13/2006	7.75	NP	-	13.94	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	8.68	NP	-	13.01	NA
	3/19/2007	7.30	NP	-	14.39	NA
(21.70)	6/18/2007	8.37	NP	-	13.33	NA
	9/17/2007	10.96	NP	-	10.74	NA
	12/17/2007	8.80	NP	-	12.90	NA
	1/22/2008	8.37	NP	-	13.33	NA
	3/24/2008	**8.22**	**NP**	**-**	**13.48**	**NA**
CR-32A	1/30/2006	1.56	NP	-	20.13	NA
(21.69)	3/13/2006	2.41	NP	-	19.28	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	2.96	NP	-	18.73	NA
	3/19/2007	2.74	NP	-	18.95	NA
(21.91)	6/18/2007	3.63	NP	-	18.28	NA
	9/17/2007	4.32	NP	-	17.59	NA
	12/17/2007	3.23	NP	-	18.68	NA
	1/22/2008	2.58	NP	-	19.33	NA
	3/24/2008	**2.68**	**NP**	**-**	**19.23**	**NA**
CR-32B	1/30/2006	5.34	NP	-	16.68	NA
(22.02)	3/13/2006	7.99	NP	-	14.03	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	8.69	NP	-	13.33	NA
	3/19/2007	7.41	NP	-	14.61	NA
(22.02)	6/18/2007	8.39	NP	-	13.63	NA
	9/17/2007	10.44	NP	-	11.58	NA
(22.08)	12/17/2007	8.84	NP	-	13.24	NA
	1/22/2008	8.42	NP	-	13.66	NA
	3/24/2008	**8.22**	**NP**	**-**	**13.86**	**NA**
CR-32C	1/30/2006	5.38	NP	-	16.42	NA
(21.80)	3/13/2006	8.75	NP	-	13.05	NA
	9/25/2006	NM	NM	NM	NM	NM
	12/11/2006	9.17	NP	-	12.63	NA
	3/19/2007	7.75	NP	-	14.05	NA
(21.76)	6/18/2007	8.94	NP	-	12.82	NA
	9/17/2007	11.38	NP	-	10.38	NA
	12/17/2007	9.20	NP	-	12.56	NA
	1/22/2008	8.97	NP	-	12.79	NA
	3/24/2008	**8.77**	**NP**	**-**	**12.99**	**NA**
CR-33	12/17/2007	5.96	NP	-	10.90	NA
(16.86)	1/22/2008	7.12	NP	-	9.74	NA
	3/24/2008	**5.94**	**NP**	**-**	**10.92**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
GPW-1	12/12/2000	12.99	NP	-	21.67	NA
(34.66)	2/20/2001	12.59	NP	-	22.07	NA
	4/3/2001	12.56	NP	-	22.10	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	12.70	NP	-	21.96	NA
	9/19/2001	13.15	NP	-	21.51	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	7.46	NP	-	27.20	NA
	6/4/2002	11.71	NP	-	22.95	NA
	9/23/2002	12.95	NP	-	21.71	NA
	12/19/2002	12.71	NP	-	21.95	NA
	3/19/2003	7.19	NP	-	27.47	NA
	6/24/2003	10.06	NP	-	24.60	NA
	9/24/2003	13.07	NP	-	21.59	NA
	12/26/2003	11.01	NP	-	23.65	NA
	3/30/2004	7.61	NP	-	27.05	NA
	6/24/2004	12.36	NP	-	22.30	NA
	9/27/2004	12.99	NP	-	21.67	NA
	12/14/2004	12.93	NP	-	21.73	NA
	3/7/2005	11.52	NP	-	23.14	NA
	6/21/2005	9.65	NP	-	25.01	NA
	9/19/2005	13.01	NP	-	21.65	NA
	12/12/2005	8.75	NP	-	25.91	NA
	3/13/2006	7.60	NP	-	27.06	NA
	6/26/2006	NM	NM	NM	NM	NA
	9/25/2006	12.89	NP	-	21.77	NA
	12/11/2006	7.21	NP	-	27.45	NA
	3/19/2007	7.04	NP	-	27.62	NA
	6/18/2007	12.19	NP	-	22.47	NA
	9/17/2007	13.31	NP	-	21.35	NA
	12/17/2007	7.88	NP	-	26.78	NA
	3/24/2008	7.92	NP	-	26.74	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
GPW-2	12/12/2000	NM	NM	NM	NM	-
(34.98)	2/20/2001	10.93	10.68	-	24.05	NA
	4/3/2001	NM	NM	NM	NM	-
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	NM	NM	NM	NM	-
	9/19/2001	12.91	NP	-	22.07	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	7.91	NP	-	27.07	NA
	6/4/2002	NM	NM	1.2E	NM	0.01
	9/23/2002	13.10E	12.97E	0.13E	E	0.05
	12/19/2002	12.32	-	-	-	-
	3/19/2003	9.4E	-	-	-	0.02
	6/24/2003	10.20	NM	Sheen	24.78	NA
	9/24/2003	12.18	11.93	0.25E	23.00	0.01
	12/26/2003	10.80	10.55	0.25	24.38	0.25
	3/30/2004	9.31	8.92	0.39	25.98	0.25
	6/24/2004	10.75	10.73	0.02	24.25	NA
	9/27/2004	12.55	11.83	0.72	23.01	NA
	12/14/2004	12.55	11.94	0.61	22.92	NA
	3/7/2005	10.76	10.75	0.01	24.23	NA
	6/20/2005	10.18	NP	0.00	24.80	NA
	9/19/2005	12.18	11.35	0.83	23.46	0.02
	12/12/2005	9.90	9.90	Sheen	25.08	0.0
	3/13/2006	9.34	9.34	Sheen	25.64	0.0
	6/26/2006	10.77	10.77	Sheen	24.21	0.0
	9/25/2006	11.88	Trace	-	23.10	0.0
	12/11/2006	9.59	NP	-	25.39	0.0
	3/19/2007	9.02	9.00	0.02	25.98	NA
	6/18/2007	11.85	11.08	0.77	23.75	NA
	9/17/2007	12.44	12.28	0.16	22.67	NA
	12/17/2007	9.29	-	0.00	25.69	NA
	3/24/2008	10.01	9.54	0.47	25.35	NA
GPW-3	12/12/2000	12.23	NP	-	22.85	NA
(35.08)	2/20/2001	12.03	NP	-	23.05	NA
	4/3/2001	11.97	NP	-	23.11	NA
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	12.16	NP	-	22.92	NA
	9/19/2001	12.66	NP	-	22.42	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	10.46	NP	-	24.62	NA
	6/4/2002	11.22	NP	-	23.86	NA
	9/23/2002	11.72	NP	-	23.36	NA
	12/19/2002	12.20	-	-	-	0.01
	3/19/2003	10.86E	-	-	-	0.01
	6/24/2003	11.35	11.24	0.11	23.82	0.01
	9/24/2003	11.90	11.78	0.12	23.28	0.01
	12/26/2003	13.49	11.24	2.25	23.39	0.25
	3/30/2004	11.73	10.90	0.83	24.01	0.03
	6/24/2004	11.83	11.59	0.24	23.44	NA
	9/27/2004	12.32	11.86	0.46	23.13	NA
	12/14/2004	12.15	11.87	0.28	23.15	0.006
	3/7/2005	11.81	11.60	0.21	23.44	0.005
	6/21/2005	11.35	11.16	0.19	23.88	0.004
	9/19/2005	11.98	11.85	0.13	23.20	0.003
	12/12/2005	11.27	11.21	0.06	23.66	0.02
	3/13/2006	10.82	10.80	0.02	24.28	0.02
	6/26/2006	11.16	11.16	Sheen	23.92	0.02
	9/25/2006	11.88	Trace	-	23.20	0.00
	12/11/2006	7.85	7.81	0.04	27.26	NA
	3/19/2007	10.57	NP	-	24.51	NA
	6/18/2007	11.47	NP	-	23.61	NA
	9/17/2007	12.05	NP	-	23.03	NA
	12/17/2007	10.97	NP	-	24.11	NA
	3/24/2008	10.92	10.91	0.01	24.17	NA

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
GPW-4	12/12/2000	NM	NM	NM	NM	-
(35.07)	2/20/2001	12.29	NP	-	22.78	NA
	4/3/2001	NM	NM	NM	NM	-
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	NM	NM	NM	NM	-
	9/19/2001	13.02	NP	-	22.05	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	11.08	NP	-	23.99	NA
	6/4/2002	11.98	NP	-	23.09	
	9/23/2002	12.71	NP	-	22.36	NA
	12/19/2002	12.23	NP	-	22.84	NA
	3/19/2003	11.30	NP	-	23.77	NA
	6/24/2003	12.12	NP	-	22.95	NA
	9/24/2003	13.11	13.07	0.04	21.99	Trace
	12/26/2003	12.10	NP	-	22.97	NA
	3/30/2004	12.34	11.78	0.56	23.18	NA
	6/24/2004	12.57	NP	-	22.50	NA
	9/27/2004	12.58	NP	-	22.49	NA
	12/14/2004	12.38	NP	-	22.69	NA
	3/7/2005	12.32	NP	-	22.75	NA
	6/20/2005	12.02	NP	-	23.05	NA
	9/19/2005	12.95	12.93	0.02	22.14	0.003
	12/12/2005	11.89	NP	-	23.18	NA
	3/13/2006	11.27	NP	-	23.80	NA
	6/26/2006	11.96	NP	-	23.11	NA
	9/25/2006	13.05	Trace	-	22.02	NA
	12/11/2006	11.70	NP	-	23.37	NA
	3/19/2007	11.16	NP	-	23.91	NA
	6/18/2007	12.21	NP	-	22.86	NA
	9/17/2007	13.22	NP	-	21.85	NA
	12/17/2007	11.68	NP	-	23.39	NA
	3/24/2008	11.26	11.24	0.02	23.83	NA
GPW-5	12/12/2000	NM	NM	NM	NM	-
(34.85)	2/20/2001	12.02	NP	-	22.83	NA
	4/3/2001	NM	NM	NM	NM	-
	6/8/2001	NM	NM	NM	NM	-
	7/16/2001	NM	NM	NM	NM	-
	9/19/2001	12.79	NP	-	22.06	NA
	12/22/2001	NM	NM	-	NM	-
	3/15/2002	10.72	NP	-	24.13	NA
	6/4/2002	11.66	NP	-	23.19	NA
	9/23/2002	12.46	NP	-	22.39	NA
	12/19/2002	11.96	NP	-	22.89	NA
	3/19/2003	10.97	NP	-	23.88	NA
	6/24/2003	11.80	NP	-	23.05	NA
	9/24/2003	12.92	NP	-	21.93	NA
	12/26/2003	11.64	NP	-	23.21	NA
	3/30/2004	11.57	NP	-	23.28	NA
	6/24/2004	12.21	NP	-	22.64	NA
	9/27/2004	12.21	NP	-	22.64	NA
	12/14/2004	12.05	NP	-	22.80	NA
	3/7/2005	12.04	NP	-	22.81	NA
	6/20/2005	11.72	NP	-	23.13	NA
	9/19/2005	12.70	NP	-	22.15	NA
	12/12/2005	11.56	NP	-	23.29	NA
	3/13/2006	10.84	NP	-	24.01	NA
	6/26/2006	11.68	NP	-	23.17	NA
	9/25/2006	12.81	NP	-	22.04	NA
	12/11/2006	11.42	Trace	-	23.43	NA
	3/19/2007	-	-	-	-	-
	6/18/2007	11.86	NP	-	22.99	-
	9/17/2007	12.82	NP	-	22.03	-
	12/17/2007	11.29	NP	-	23.56	-
	3/24/2008	10.78	NP	-	24.07	-
EW-1	1/22/2008	12.30	NP	-	6.01	-
(18.31)						
EW-2	1/22/2008	10.70	NP	-	7.08	-
(17.78)						

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ChevronTexaco Company - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
EX-1	2/14/2000	15.55	NP	-	18.60	NA
(34.15)	5/22/2000	18.29	NP	-	15.86	NA
	8/22/2000	16.56	NP	-	17.59	NA
	11/27/2000	16.86	NP	-	17.29	NA
	2/20/2001	16.66	NP	-	17.49	NA
	5/15/2001	16.62	NP	-	17.53	NA
	9/19/2001	Covered by Facility Equipment				
	12/22/2001	Covered by Facility Equipment				
	3/15/2002	15.34	NP	-	18.81	NA
	9/23/2002	16.88	NP	-	17.27	NA
	12/19/2002	16.99	NP	-	17.16	NA
	3/19/2003	15.65	NP	-	18.50	NA
	6/24/2003	15.98	NP	-	18.17	NA
	9/24/2003	Could Not Access				
	12/26/2003	Could Not Access				
	3/30/2004	Could Not Access				
	6/24/2004	16.35	NP	-	17.80	NA
	9/27/2004	Could Not Access				
	12/14/2004	16.66	NP	-	17.49	NA
	3/7/2005	16.52	NP	-	17.63	NA
	6/20/2005	16.20	NP	-	17.95	NA
	9/19/2005	16.66	NP	-	17.29	NA
	12/12/2005	16.19	NP	-	17.96	NA
	3/13/2006	15.03	NP	-	19.12	NA
	6/26/2006	15.86	NP	-	18.29	NA
	9/25/2006	16.23	NP	-	17.92	NA
	12/11/2006	15.43	NP	-	18.72	NA
	3/19/2007	14.98	NP	-	19.17	NA
(34.35)	6/18/2007	15.82	NP	-	18.53	NA
	9/17/2007	16.45	Trace	-	17.90	NA
	12/17/2007	15.62		-	18.73	NA
	1/22/2008	14.94	NP	-	19.41	NA
	3/24/2008	15.02	NP	-	19.33	-

NOTES:
Wells B-8 and B-31 were abandoned after first quarter 2000
NP = No measurable product
NA = Not Applicable
NM = Not Measured
NR = None Recovered
* = SPH Recovered for latest quarter monitored
** = Well Contains a Sock for Product Recovery
*** = Product Recovery Part of Chevron Ethanol Study
E = 3/4 inch-diameter well/ SPH thickness estimated with baller
- = No measurable product thickness
Groundwater elevations for wells with product thicknesses have been corrected using 0.8
GWE = TOC -(DTW - (0.8 x DTP - DTW)) Where 0.8 = The density of the SPH

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-1	2/14/2000	3.76	NP	-	31.67	NA
(35.43)	5/22/2000	4.72	NP	-	30.71	NA
	8/23/2000	7.52	NP	-	27.91	NA
	11/28/2000	7.43	NP	-	28.00	NA
	2/21/2001	6.32	NP	-	29.11	NA
	5/15/2001	6.33	NP	-	29.10	NA
	9/19/2001	8.40	NP	-	27.03	NA
	12/19/2001	3.92	NP	-	31.51	NA
	3/13/2002	3.80	NP	-	31.63	NA
	6/24/2002	6.56	NP	-	28.87	NA
	9/26/2002	8.15	NP	-	27.28	NA
	12/20/2002	5.32	NP	-	30.11	NA
	3/17/2003	3.81	NP	-	31.62	NA
	6/26/2003	6.19	NP	-	29.24	NA
	9/24/2003	8.04	NP	-	27.39	NA
	12/30/2003	4.02	NP	-	31.41	NA
	3/29/2004	4.45	NP	-	30.98	NA
	6/29/2004	6.84	NP	-	28.59	NA
	9/27/2004	7.32	NP	-	28.11	NA
	12/14/2004	5.31	NP	-	30.12	NA
	3/7/2005	6.81	NP	-	28.62	NA
	6/20/2005	5.60	NP	-	29.83	NA
	9/19/2005	7.62	NP	-	27.81	NA
	12/12/2005	4.99	NP	-	30.44	NA
	3/13/2006	3.60	NP	-	31.83	NA
	6/27/2006	5.49	NP	-	29.94	NA
	9/25/2006	7.53	NP	-	27.90	NA
	12/11/2006	4.48	NP	-	30.95	NA
	3/19/2007	4.05	NP	-	31.38	NA
	4/20/2007	4.29	NP	-	31.14	NA
	6/18/2007	5.85	NP	-	29.58	NA
	9/17/2007	7.60	NP	-	27.83	NA
	12/17/2007	4.74	NP	-	30.69	NA
	3/24/2008	**3.78**	**NP**	**-**	**31.65**	**NA**
MW-2	2/14/2000	5.59	NP	-	30.18	NA
(35.77)	5/22/2000	6.74	NP	-	29.03	NA
	8/23/2000	8.44	NP	-	27.33	NA
	11/28/2000	9.15	NP	-	26.62	NA
	2/21/2001	8.29	NP	-	27.48	NA
	5/15/2001	8.11	NP	-	27.66	NA
	9/19/2001	9.93	NP	-	25.84	NA
	12/19/2001	6.02	NP	-	29.75	NA
	3/13/2002	5.51	NP	-	30.26	NA
	6/24/2002	7.67	NP	-	28.10	NA
	9/26/2002	9.41	NP	-	26.36	NA
	12/20/2002	9.32	NP	-	26.45	NA
	3/17/2003	5.85	NP	-	29.92	NA
	6/26/2003	7.34	NP	-	28.43	NA
	9/24/2003	9.33	NP	-	26.44	NA
	12/30/2003	6.79	NP	-	28.98	NA
	3/29/2004	6.35	NP	-	29.42	NA
	6/29/2004	8.11	NP	-	27.66	NA
	9/27/2004	9.13	NP	-	26.64	NA
	12/14/2004	8.47	NP	-	27.30	NA
	3/7/2005	8.40	NP	-	27.37	NA
	6/20/2005	7.27	NP	-	28.50	NA
	9/19/2005	9.09	NP	-	26.68	NA
	12/12/2005	7.42	NP	-	28.35	NA
	3/13/2006	5.75	NP	-	30.02	NA
	6/27/2006	7.15	NP	-	28.62	NA
	9/25/2006	9.09	NP	-	26.68	NA
	12/11/2006	6.57	NP	-	29.20	NA
	3/19/2007	5.89	NP	-	29.88	NA
	4/20/2007	6.37	NP	-	29.40	NA
	6/18/2007	7.52	NP	-	28.25	NA
	9/17/2007	9.22	NP	-	26.55	NA
	12/17/2007	7.00	NP	-	28.77	NA
	3/24/2008	**5.65**	**NP**	**-**	**30.12**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-3	2/14/2000	7.02	NP	-	29.00	NA
(36.02)	5/22/2000	8.04	NP	-	27.98	NA
	8/23/2000	9.58	NP	-	26.44	NA
	11/28/2000	10.22	NP	-	25.80	NA
	2/21/2001	9.49	NP	-	26.53	NA
	5/15/2001	9.33	NP	-	26.69	NA
	9/19/2001	10.96	NP	-	25.06	NA
	12/19/2001	7.55	NP	-	28.47	NA
	3/13/2002	7.10	NP	-	28.92	NA
	6/24/2002	8.93	NP	-	27.09	NA
	9/26/2002	10.47	NP	-	25.55	NA
	12/20/2002	10.63	NP	-	25.39	NA
	3/17/2003	7.29	NP	-	28.73	NA
	6/26/2003	8.65	NP	-	27.37	NA
	9/24/2003	10.38	NP	-	25.64	NA
	12/30/2003	8.21	NP	-	27.81	NA
	3/29/2004	7.69	NP	-	28.33	NA
	6/29/2004	9.34	NP	-	26.68	NA
	9/27/2004	10.28	NP	-	25.74	NA
	12/14/2004	9.73	NP	-	26.29	NA
	3/7/2005	9.56	NP	-	26.46	NA
	6/20/2005	8.55	NP	-	27.47	NA
	9/19/2005	10.18	NP	-	25.84	NA
	12/12/2005	8.67	NP	-	27.35	NA
	3/13/2006	7.15	NP	-	28.87	NA
	6/27/2006	8.43	NP	-	27.59	NA
	9/25/2006	10.19	NP	-	25.83	NA
	12/11/2006	7.95	NP	-	28.07	NA
	3/19/2007	7.20	NP	-	28.82	NA
	4/20/2007	7.68	NP	-	28.34	NA
	6/18/2007	8.76	NP	-	27.26	NA
	9/17/2007	10.31	NP	-	25.71	NA
	12/17/2007	8.29	NP	-	27.73	NA
	3/24/2008	7.03	NP	-	28.99	NA
MW-4	2/14/2000	6.36	NP	-	30.03	NA
(36.39)	5/22/2000	7.54	NP	-	28.85	NA
	8/23/2000	9.18	NP	-	27.21	NA
	11/28/2000	9.83	NP	-	26.56	NA
	2/21/2001	9.07	NP	-	27.32	NA
	5/15/2001	8.93	NP	-	27.46	NA
	9/19/2001	10.59	NP	-	25.80	NA
	12/19/2001	6.98	NP	-	29.41	NA
	3/13/2002	6.42	NP	-	29.97	NA
	6/24/2002	8.49	NP	-	27.90	NA
	9/26/2002	10.10	NP	-	26.29	NA
	12/20/2002	10.21	NP	-	26.18	NA
	3/17/2003	6.57	NP	-	29.82	NA
	6/26/2003	8.15	NP	-	28.24	NA
	9/24/2003	10.00	NP	-	26.39	NA
	12/30/2003	7.65	NP	-	28.74	NA
	3/29/2004	7.07	NP	-	29.32	NA
	6/29/2004	8.88	NP	-	27.51	NA
	9/27/2004	9.89	NP	-	26.50	NA
	12/14/2004	9.29	NP	-	27.10	NA
	3/7/2005	9.10	NP	-	27.29	NA
	6/20/2005	8.03	NP	-	28.36	NA
	9/19/2005	9.78	NP	-	26.61	NA
	12/12/2005	8.15	NP	-	28.24	NA
	3/13/2006	6.40	NP	-	29.99	NA
	6/27/2006	7.91	NP	-	28.48	NA
	9/25/2006	9.76	NP	-	26.63	NA
	12/11/2006	7.30	NP	-	29.09	NA
	3/19/2007	6.48	NP	-	29.91	NA
	4/20/2007	7.02	NP	-	29.37	NA
	6/18/2007	8.27	NP	-	28.12	NA
	9/17/2007	9.89	NP	-	26.50	NA
	12/17/2007	7.75	NP	-	28.64	NA
	3/24/2008	6.35	NP	-	30.04	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-5	2/14/2000	6.02	NP	-	27.50	NA
(33.52)	5/22/2000	6.64	NP	-	26.88	NA
	8/23/2000	8.28	NP	-	25.24	NA
	11/28/2000	5.79	NP	-	27.73	NA
	2/21/2001	8.27	NP	-	25.25	NA
	5/15/2001	6.02	sheen	-	27.50	NA
	9/18/2001	9.77	NP	-	23.75	NA
	12/19/2001	6.39	NP	-	27.13	NA
	3/13/2002	6.09	NP	-	27.43	NA
	6/24/2002	7.24	NP	-	26.28	NA
	9/26/2002	9.30	NP	-	24.22	NA
	12/20/2002	8.21	NP	-	25.31	NA
	3/17/2003	5.85	NP	-	27.67	NA
	6/26/2003	7.22	NP	-	26.30	NA
	9/24/2003	9.19	NP	-	24.33	NA
	12/30/2003	7.00	NP	-	26.52	NA
	3/29/2004	6.30	NP	-	27.22	NA
	6/29/2004	8.11	NP	-	25.41	NA
	9/27/2004	9.11	NP	-	24.41	NA
	12/14/2004	8.45	NP	-	25.07	NA
	3/7/2005	8.33	NP	-	25.19	NA
	6/20/2005	7.12	NP	-	26.40	NA
	9/19/2005	9.18	NP	-	24.34	NA
	12/12/2005	7.90	NP	-	25.62	NA
	3/13/2006	5.90	NP	-	27.62	NA
	6/27/2006	6.90	NP	-	26.62	NA
	9/25/2006	9.14	NP	-	24.38	NA
	12/11/2006	6.71	NP	-	26.81	NA
	3/19/2007	5.74	NP	-	27.78	NA
	4/20/2007	6.25	NP	-	27.27	NA
	6/18/2007	7.41	NP	-	26.11	NA
	9/17/2007	9.28	NP	-	24.24	NA
	12/17/2007	7.16	NP	-	26.36	NA
	3/24/2008	5.64	NP	-	27.88	NA
MW-6	2/14/2000	3.72	3.69	0.03	29.64	2.0
(33.34)	5/22/2000	4.70	NP	-	28.64	NA
	8/23/2000	6.24	NP	-	27.10	NA
	11/28/2000	6.98	NP	-	26.36	0.1
	2/21/2001	6.21	sheen	-	27.13	NA
	5/15/2001	8.10	NP	-	25.24	NA
	9/18/2001	7.71	7.66	0.05	25.67	NA
	12/19/2001	4.05	NP	-	29.29	0.06
	3/13/2002	3.70	sheen	-	29.64	NA
	6/24/2002	5.56	NP	-	27.78	NA
	9/26/2002	7.19	NP	-	26.15	NA
	12/20/2002	7.32	sheen	-	26.02	NA
	3/17/2003	3.87	NP	-	29.47	NA
	6/26/2003	5.20	NP	-	28.14	NA
	9/24/2003	7.09	NP	-	26.25	NA
	12/30/2003	4.80	NP	-	28.54	NA
	3/29/2004	4.29	NP	-	29.05	NA
	6/29/2004	5.23	NP	-	28.11	NA
	9/27/2004	6.98	NP	-	26.36	NA
	12/14/2004	6.37	NP	-	26.97	NA
	3/7/2005	6.03	sheen	-	27.31	0.1
	6/20/2005	5.15	NP	-	28.19	NA
	9/19/2005	6.92	NP	-	26.42	NA
	12/12/2005	5.45	sheen	-	27.89	NA
	3/13/2006	4.10	3.88	0.22	29.42	0
	6/27/2006	5.06	NP	-	28.28	NA
	9/25/2006	7.00	NP	-	26.34	NA
	12/11/2006	4.56	NP	-	28.78	0.2
	3/19/2007	4.01	3.98	0.03	29.35	0.35
	4/20/2007	4.35	4.32	0.03	29.01	NA
	6/18/2007	5.40	sheen	-	27.94	0.3
	9/17/2007	6.95	NP	-	26.39	NA
	12/17/2007	4.93	NP	-	28.41	0.02
	3/24/2008	3.68	3.67	0.01	29.67	0.03

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-7	2/14/2000	8.74	8.54	0.20	25.54	3.7
(34.12)	5/22/2000	9.95	8.92	1.03	24.99	11
	8/23/2000	NM	NM	-	NA	2
	11/28/2000	10.94	10.35	0.59	23.65	2.2
	2/21/2001	10.37	10.01	0.36	24.04	1.9
	5/15/2001	10.27	10.00	0.27	24.07	1.75
	9/19/2001	11.04	11.00	0.04	23.11	0.8
	12/19/2001	9.05	8.78	0.27	25.29	1.1
	3/13/2002	9.11	8.30	0.81	25.66	4.5
	6/24/2002	10.38	9.48	0.90	24.46	3.3
	9/26/2002	11.32	10.53	0.79	23.43	2.65
	12/23/2002	11.05	10.82	0.23	23.25	1.10
	3/17/2003	9.18	8.45	0.73	25.52	1.55
	6/26/2003	10.03	9.28	0.75	24.69	1.25
	9/24/2003	11.17	10.46	0.71	23.52	1.00
	12/30/2003	9.83	9.47	0.36	24.58	1.00
	3/29/2004	9.35	8.62	0.73	25.35	1.00
	6/29/2004	10.36	9.80	0.56	24.21	1.00
	9/27/2004	10.97	10.61	0.36	23.44	0.20
	12/14/2004	10.75	10.30	0.45	23.73	1.95
	3/7/2005	10.25	9.98	0.27	24.09	2.5
	6/20/2005	9.89	9.19	0.70	24.79	0.9
	9/19/2005	10.90	10.45	0.45	23.58	1.75
	12/12/2005	9.82	9.50	0.32	24.56	1.05
	3/13/2006	8.35	8.00	0.35	26.05	1.00
	6/27/2006	9.45	9.04	0.41	25.00	NA
	9/25/2006	11.07	9.45	1.62	24.35	2.30
	12/11/2006	9.10	8.92	0.18	25.16	0.60
	3/19/2007	8.40	8.24	0.16	25.85	0.60
	4/20/2007	8.68	8.52	0.16	25.57	NA
	6/18/2007	9.53	9.31	0.22	24.77	0.75
	9/17/2007	10.71	10.45	0.26	23.62	0.75
	12/17/2007	9.36	9.22	0.14	24.87	0.75
	3/24/2008	**8.17**	**8.12**	**0.05**	**25.99**	**0.21**
MW-8	2/14/2000	7.18	NP	-	26.77	NA
(33.95)	5/22/2000	8.00	NP	-	25.95	NA
	8/23/2000	9.26	NP	-	24.69	NA
	11/28/2000	9.91	NP	-	24.04	NA
	2/21/2001	9.40	NP	-	24.55	NA
	5/15/2001	9.30	NP	-	24.65	NA
	9/19/2001	10.49	NP	-	23.46	NA
	12/19/2001	8.42	NP	-	25.53	NA
	3/13/2002	7.38	NP	-	26.57	NA
	6/24/2002	8.81	NP	-	25.14	NA
	9/26/2002	10.15	NP	-	23.80	NA
	12/20/2002	10.50	NP	-	23.45	NA
	3/17/2003	7.48	NP	-	26.47	NA
	6/26/2003	8.61	NP	-	25.34	NA
	9/24/2003	10.10	NP	-	23.85	NA
	12/30/2003	8.74	NP	-	25.21	NA
	3/29/2004	8.74	NP	-	25.21	NA
	6/29/2004	9.19	NP	-	24.76	NA
	9/27/2004	10.12	NP	-	23.83	NA
	12/14/2004	9.74	NP	-	24.21	NA
	3/7/2005	9.34	NP	-	24.61	NA
	6/20/2005	8.48	NP	-	25.47	NA
	9/19/2005	9.86	NP	-	24.09	NA
	12/12/2005	8.73	NP	-	25.22	NA
	3/13/2006	6.96	NP	-	26.99	NA
	6/27/2006	8.43	NP	-	25.52	NA
	9/25/2006	9.92	NP	-	24.03	NA
	12/11/2006	7.95	NP	-	26.00	NA
	3/19/2007	7.00	NP	-	26.95	NA
	6/18/2007	8.53	NP	-	25.42	NA
	9/17/2007	9.92	NP	-	24.03	NA
	12/17/2007	8.44	NP	-	25.51	NA
	3/24/2008	**7.02**	**NP**	**-**	**26.93**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-9	2/14/2000	9.66	NP	-	26.87	NA
(36.53)	5/22/2000	10.24	NP	-	26.29	NA
	8/23/2000	11.42	NP	-	25.11	NA
	11/28/2000	12.18	NP	-	24.35	NA
	2/21/2001	11.85	NP	-	24.68	NA
	5/15/2001	11.83	NP	-	24.70	NA
	9/19/2001	12.86	NP	-	23.67	NA
	12/19/2001	11.87	NP	-	24.66	NA
	3/13/2002	10.30	NP	-	26.23	NA
	6/24/2002	11.21	NP	-	25.32	NA
	9/26/2002	11.43	NP	-	25.10	NA
	12/23/2002	12.97	NP	-	23.56	NA
	3/17/2003	10.62	NP	-	25.91	NA
	6/26/2003	10.86	NP	-	25.67	NA
	9/24/2003	12.27	NP	-	24.26	NA
	12/30/2003	11.77	NP	-	24.76	NA
	3/29/2004	10.39	NP	-	26.14	NA
	6/29/2004	11.58	NP	-	24.95	NA
	9/27/2004	12.56	NP	-	23.97	NA
	12/14/2004	12.42	NP	-	24.11	NA
	3/7/2005	11.71	NP	-	24.82	NA
	6/20/2005	10.95	NP	-	25.58	NA
	9/19/2005	12.22	NP	-	24.31	NA
	12/12/2005	11.34	NP	-	25.19	NA
	3/13/2006	9.45	NP	-	27.08	NA
	6/27/2006	10.64	NP	-	25.89	NA
	9/25/2006	12.10	NP	-	24.43	NA
	12/11/2006	10.47	NP	-	26.06	NA
	3/19/2007	9.33	NP	-	27.20	NA
	6/18/2007	10.68	NP	-	25.85	NA
	9/17/2007	11.98	NP	-	24.55	NA
	12/17/2007	10.88	NP	-	25.65	NA
	3/24/2008	9.40	NP	-	27.13	NA
MW-10	2/14/2000	8.46	NP	-	27.36	NA
(35.82)	5/22/2000	5.59	NP	-	30.23	NA
	8/23/2000	11.21	NP	-	24.61	NA
	11/28/2000	11.86	NP	-	23.96	NA
	2/21/2001	11.16	NP	-	24.66	NA
	5/15/2001	11.04	NP	-	24.78	NA
	9/19/2001	12.59	NP	-	23.23	NA
	12/19/2001	9.42	NP	-	26.40	NA
	3/13/2002	8.58	NP	-	27.24	NA
	6/24/2002	10.54	NP	-	25.28	NA
	9/26/2002	12.12	NP	-	23.70	NA
	12/23/2002	12.14	NP	-	23.68	NA
	3/17/2003	8.78	NP	-	27.04	NA
	6/26/2003	10.24	NP	-	25.58	NA
	9/24/2003	12.02	NP	-	23.80	NA
	12/30/2003	9.98	NP	-	25.84	NA
	3/29/2004	9.26	NP	-	26.56	NA
	6/29/2004	10.98	NP	-	24.84	NA
	9/27/2004	12.00	NP	-	23.82	NA
	12/14/2004	11.38	NP	-	24.44	NA
	3/7/2005	11.19	NP	-	24.63	NA
	6/20/2005	10.13	NP	-	25.69	NA
	9/19/2005	11.84	NP	-	23.98	NA
	12/12/2005	10.29	NP	-	25.53	NA
	3/13/2006	8.35	NP	-	27.47	NA
	6/27/2006	9.98	NP	-	25.84	NA
	9/25/2006	11.80	NP	-	24.02	NA
	12/11/2006	9.49	NP	-	26.33	NA
	3/19/2007	8.57	NP	-	27.25	NA
	6/18/2007	10.30	NP	-	25.52	NA
	9/17/2007	11.91	NP	-	23.91	NA
	12/17/2007	9.94	NP	-	25.88	NA
	3/24/2008	8.42	NP	-	27.40	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-11	2/14/2000	5.04	NP	-	31.43	NA
(36.47)	5/22/2000	3.11	NP	-	33.36	NA
	8/23/2000	7.97	NP	-	28.50	NA
	11/28/2000	7.66	NP	-	28.81	NA
	2/21/2001	7.48	NP	-	28.99	NA
	5/15/2001	7.30	NP	-	29.17	NA
	9/19/2001	9.29	NP	-	27.18	NA
	12/19/2001	5.44	NP	-	31.03	NA
	3/13/2002	5.23	NP	-	31.24	NA
	6/24/2002	7.71	NP	-	28.76	NA
	9/26/2002	9.01	NP	-	27.46	NA
	12/23/2002	7.07	NP	-	29.40	NA
	3/17/2003	5.72	NP	-	30.75	NA
	6/26/2003	7.55	NP	-	28.92	NA
	9/24/2003	8.89	NP	-	27.58	NA
	12/30/2003	5.77	NP	-	30.70	NA
	3/29/2004	6.17	NP	-	30.30	NA
	6/29/2004	8.10	NP	-	28.37	NA
	9/27/2004	8.54	NP	-	27.93	NA
	12/14/2004	6.56	NP	-	29.91	NA
	3/7/2005	7.90	NP	-	28.57	NA
	6/20/2005	6.69	NP	-	29.78	NA
	9/19/2005	8.69	NP	-	27.78	NA
	12/12/2005	6.49	NP	-	29.98	NA
	3/13/2006	5.35	NP	-	31.12	NA
	6/26/2006	6.68	NP	-	29.79	NA
	9/25/2006	8.68	NP	-	27.79	NA
	12/11/2006	9.11	NP	-	27.36	NA
	3/19/2007	5.71	NP	-	30.76	NA
	6/18/2007	7.53	NP	-	28.94	NA
	9/17/2007	8.66	NP	-	27.81	NA
	12/17/2007	6.10	NP	-	30.37	NA
	3/24/2008	5.39	NP	-	31.08	NA
MW-12	2/14/2000	4.99	NP	-	30.96	NA
(35.95)	5/22/2000	6.57	NP	-	29.38	NA
	8/23/2000	8.65	NP	-	27.30	NA
	11/28/2000	9.16	NP	-	26.79	NA
	2/21/2001	8.32	NP	-	27.63	NA
	5/15/2001	8.16	NP	-	27.79	NA
	9/19/2001	10.17	NP	-	25.78	NA
	12/19/2001	5.54	NP	-	30.41	NA
	3/13/2002	4.85	NP	-	31.10	NA
	6/24/2002	7.75	NP	-	28.20	NA
	9/26/2002	9.68	NP	-	26.27	NA
	12/23/2002	8.75	NP	-	27.20	NA
	3/17/2003	5.25	NP	-	30.70	NA
	6/26/2003	7.35	NP	-	28.60	NA
	9/24/2003	9.57	NP	-	26.38	NA
	12/30/2003	6.28	NP	-	29.67	NA
	3/29/2004	5.99	NP	-	29.96	NA
	6/29/2004	8.28	NP	-	27.67	NA
	9/27/2004	9.32	NP	-	26.63	NA
	12/14/2004	8.22	NP	-	27.73	NA
	3/7/2005	8.41	NP	-	27.54	NA
	6/20/2005	7.19	NP	-	28.76	NA
	9/19/2005	9.29	NP	-	26.66	NA
	12/12/2005	7.22	NP	-	28.73	NA
	3/13/2006	5.13	NP	-	30.82	NA
	6/27/2006	7.08	NP	-	28.89	NA
	9/25/2006	9.34	NP	-	26.61	NA
	12/11/2006	6.12	NP	-	29.83	NA
	3/19/2007	5.40	NP	-	30.55	NA
	6/18/2007	7.56	NP	-	28.39	NA
	9/17/2007	9.47	NP	-	26.48	NA
	12/17/2007	6.80	NP	-	29.15	NA
	3/24/2008	5.20	NP	-	30.75	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-13	2/14/2000	3.85	NP	-	34.04	NA
(37.89)	5/22/2000	5.03	NP	-	32.86	NA
	8/23/2000	7.00	NP	-	30.89	NA
	11/28/2000	6.59	NP	-	31.30	NA
	2/21/2001	6.26	NP	-	31.63	NA
	5/15/2001	6.03	NP	-	31.86	NA
	9/19/2001	8.55	NP	-	29.34	NA
	12/19/2001	3.77	NP	-	34.12	NA
	3/13/2002	3.72	NP	-	34.17	NA
	6/24/2002	6.56	NP	-	31.33	NA
	9/26/2002	8.16	NP	-	29.73	NA
	12/23/2002	5.71	NP	-	32.18	NA
	3/17/2003	4.13	NP	-	33.76	NA
	6/26/2003	6.39	NP	-	31.50	NA
	9/24/2003	8.27	NP	-	29.62	NA
	12/30/2003	4.00	NP	-	33.89	NA
	3/29/2004	4.80	NP	-	33.09	NA
	6/29/2004	7.00	NP	-	30.89	NA
	9/27/2004	7.45	NP	-	30.44	NA
	12/14/2004	5.39	NP	-	32.50	NA
	3/7/2005	6.62	NP	-	31.27	NA
	6/20/2005	5.63	NP	-	32.26	NA
	9/19/2005	7.77	NP	-	30.12	NA
	12/12/2005	5.23	NP	-	32.66	NA
	3/13/2006	4.08	NP	-	33.81	NA
	6/27/2006	5.87	NP	-	32.02	NA
	9/25/2006	7.61	NP	-	30.28	NA
	12/11/2006	5.55	NP	-	32.34	NA
	3/19/2007	4.43	NP	-	33.46	NA
	6/18/2007	6.34	NP	-	31.55	NA
	9/17/2007	7.55	NP	-	30.34	NA
	12/17/2007	4.93	NP	-	32.96	NA
	3/24/2008	4.14	NP	-	33.75	NA
MW-14	2/14/2000	2.73	NP	-	33.55	NA
(36.28)	5/22/2000	4.50	NP	-	31.78	NA
	8/23/2000	6.55	NP	-	29.73	NA
	11/28/2000	6.36	NP	-	29.92	NA
	2/21/2001	5.65	NP	-	30.63	NA
	5/15/2001	4.67	NP	-	31.61	NA
	9/19/2001	7.71	NP	-	28.57	NA
	12/19/2001	3.10	NP	-	33.18	NA
	3/13/2002	2.84	NP	-	33.44	NA
	6/24/2002	5.90	NP	-	30.38	NA
	9/26/2002	7.45	NP	-	28.83	NA
	12/23/2002	5.39	NP	-	30.89	NA
	3/17/2003	3.17	NP	-	33.11	NA
	6/26/2003	5.54	NP	-	30.74	NA
	9/24/2003	7.47	NP	-	28.81	NA
	12/30/2003	3.52	NP	-	32.76	NA
	3/29/2004	3.92	NP	-	32.36	NA
	6/29/2004	6.38	NP	-	29.90	NA
	9/27/2004	6.82	NP	-	29.46	NA
	12/14/2004	5.21	NP	-	31.07	NA
	3/7/2005	5.97	NP	-	30.31	NA
	6/20/2005	5.05	NP	-	31.23	NA
	9/19/2005	7.12	NP	-	29.16	NA
	12/12/2005	4.77	NP	-	31.51	NA
	3/13/2006	3.18	NP	-	33.10	NA
	6/27/2006	5.17	NP	-	31.11	NA
	9/25/2006	7.10	NP	-	29.18	NA
	12/11/2006	3.81	NP	-	32.47	NA
	3/19/2007	3.44	NP	-	32.84	NA
	6/18/2007	5.62	NP	-	30.66	NA
	9/17/2007	7.15	NP	-	29.13	NA
	12/17/2007	4.38	NP	-	31.90	NA
	3/24/2008	3.21	NP	-	33.07	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-15	2/14/2000	4.09	NP	-	33.41	NA
(37.50)	5/22/2000	5.80	NP	-	31.70	NA
	8/23/2000	9.21	NP	-	28.29	NA
	11/28/2000	8.90	NP	-	28.60	NA
	2/21/2001	7.46	NP	-	30.04	NA
	5/15/2001	7.80	NP	-	29.70	NA
	9/18/2001	10.46	NP	-	27.04	NA
	12/19/2001	4.03	NP	-	33.47	NA
	3/13/2002	4.14	NP	-	33.36	NA
	6/24/2002	7.93	NP	-	29.57	NA
	9/26/2002	10.13	NP	-	27.37	NA
	12/23/2002	5.72	sheen	-	31.78	NA
	3/17/2003	3.62	NP	-	33.88	NA
	6/26/2003	7.25	NP	-	30.25	NA
	9/24/2003	10.02	NP	-	27.48	NA
	12/30/2003	4.07	NP	-	33.43	NA
	3/29/2004	5.09	NP	-	32.41	NA
	6/29/2004	8.50	NP	-	29.00	NA
	9/27/2004	9.01	NP	-	28.49	NA
	12/14/2004	6.25	NP	-	31.25	NA
	3/7/2005	7.99	NP	-	29.51	NA
	6/20/2005	6.71	NP	-	30.79	NA
	9/19/2005	9.54	NP	-	27.96	NA
	12/12/2005	5.66	NP	-	31.84	NA
	3/13/2006	3.99	NP	-	33.51	NA
	6/27/2006	6.68	NP	-	30.82	NA
	9/25/2006	9.51	NP	-	27.98	NA
	12/11/2006	5.21	NP	-	32.29	NA
	3/19/2007	4.49	NP	-	33.01	NA
	6/18/2007	7.30	NP	-	30.20	NA
	9/17/2007	8.83	NP	-	28.67	NA
	12/17/2007	5.33	NP	-	32.17	NA
	3/24/2008	4.11	NP	-	33.39	NA
MW-16	2/14/2000	3.44	NP	-	31.49	NA
(34.93)	5/22/2000	4.98	NP	-	29.95	NA
	8/23/2000	6.99	NP	-	27.94	NA
	11/28/2000	7.51	NP	-	27.42	NA
	2/21/2001	6.60	NP	-	28.33	NA
	5/15/2001	6.51	NP	-	28.42	NA
	9/19/2001	8.48	NP	-	26.45	NA
	12/19/2001	3.99	NP	-	30.94	NA
	3/13/2002	3.35	NP	-	31.58	NA
	6/24/2002	5.11	NP	-	29.82	NA
	9/26/2002	6.02	NP	-	28.91	NA
	12/23/2002	7.09	NP	-	27.84	NA
	3/17/2003	3.63	NP	-	31.30	NA
	6/26/2003	5.60	NP	-	29.33	NA
	9/24/2003	8.95	NP	-	25.98	NA
	12/30/2003	4.71	NP	-	30.22	NA
	3/29/2004	4.37	NP	-	30.56	NA
	6/29/2004	6.54	NP	-	28.39	NA
	9/27/2004	7.63	NP	-	27.30	NA
	12/14/2004	6.60	NP	-	28.33	NA
	3/7/2005	6.67	NP	-	28.26	NA
	6/20/2005	5.53	NP	-	29.40	NA
	9/19/2005	7.59	NP	-	27.34	NA
	12/12/2005	5.56	NP	-	29.37	NA
	3/13/2006	3.60	NP	-	31.33	NA
	6/27/2006	5.44	NP	-	29.49	NA
	9/25/2006	7.60	NP	-	27.33	NA
	12/11/2006	4.52	NP	-	30.41	NA
	3/19/2007	3.83	NP	-	31.10	NA
	4/20/2007	4.41	NP	-	30.52	NA
	6/18/2007	5.87	NP	-	29.06	NA
	9/17/2007	7.79	NP	-	27.14	NA
	12/17/2007	5.10	NP	-	29.83	NA
	3/24/2008	3.63	NP	-	31.30	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-17	2/14/2000	4.22	NP	-	31.83	NA
(36.05)	5/22/2000	4.70	NP	-	31.35	NA
	8/23/2000	5.91	NP	-	30.14	NA
	11/28/2000	5.82	NP	-	30.23	NA
	2/21/2001	5.46	NP	-	30.59	NA
	5/15/2001	5.26	NP	-	30.79	NA
	9/18/2001	6.84	NP	-	29.21	NA
	12/19/2001	4.67	NP	-	31.38	NA
	3/13/2002	4.17	NP	-	31.88	NA
	6/24/2002	5.31	NP	-	30.74	NA
	9/26/2002	6.62	NP	-	29.43	NA
	3/17/2003	4.40	NP	-	31.65	NA
	6/26/2003	5.22	NP	-	30.83	NA
	9/24/2003	6.57	NP	-	29.48	NA
	12/30/2003	4.61	NP	-	31.44	NA
	3/29/2004	4.45	NP	-	31.60	NA
	6/29/2004	5.25	NP	-	30.80	NA
	9/27/2004	5.96	NP	-	30.09	NA
	12/14/2004	Unable to Access, Due to Fuel Transfer Activities				
	3/7/2005	5.43	NP	-	30.62	NA
	6/20/2005	4.90	NP	-	31.15	NA
	9/19/2005	6.18	NP	-	29.87	NA
	12/12/2005	5.03	NP	-	31.02	NA
	3/13/2006	4.31	NP	-	31.74	NA
	6/27/2006	4.91	Sheen	-	31.14	NA
	9/25/2006	6.22	NP	-	29.83	NA
	12/11/2006	4.42	NP	-	31.63	NA
	3/19/2007	4.35	NP	-	31.70	NA
	4/20/2007	4.48	NP	-	31.57	NA
	6/18/2007	5.10	NP	-	30.95	NA
	9/17/2007	6.28	NP	-	29.77	NA
	12/17/2007	4.69	NP	-	31.36	NA
	3/24/2008	**4.19**	**NP**	-	**31.86**	**NA**
MW-18	2/14/2000	0.87	NP	-	32.89	NA
(33.76)	5/22/2000	2.15	NP	-	31.61	NA
	8/23/2000	3.62	sheen	-	30.14	NA
	11/28/2000	3.55	NP	-	30.21	0.1
	2/21/2001	3.10	NP	-	30.66	0.1
	5/15/2001	2.83	NP	-	30.93	0.1
	9/18/2001	4.68	4.66	0.02	29.10	NA
	12/19/2001	0.25	NP	-	33.51	NA
	3/13/2002	0.97	sheen	-	32.79	NA
	6/24/2002	3.03	NP	-	30.73	NA
	9/26/2002	4.32	NP	-	29.44	NA
	12/20/2002	2.83	NP	-	30.93	NA
	3/17/2003	1.48	NP	-	32.28	NA
	6/26/2003	2.76	NP	-	31.00	NA
	9/24/2003	4.31	NP	-	29.45	NA
	12/30/2003	1.20	NP	-	32.56	NA
	3/29/2004	1.71	NP	-	32.05	NA
	6/29/2004	2.98	NP	-	30.78	NA
	9/27/2004	3.74	NP	-	30.02	NA
	12/14/2004	Unable to Access, Due to Fuel Transfer Activities				
	3/7/2005	3.04	NP	-	30.72	NA
	6/20/2005	2.48	NP	-	31.28	NA
	9/19/2005	3.94	NP	-	29.82	NA
	12/12/2005	2.39	NP	-	31.37	NA
	3/13/2006	1.41	NP	-	32.35	NA
	6/27/2006	2.45	NP	-	31.31	NA
	9/25/2006	Cannot locate well				
	12/11/2006	Cannot locate well				
	3/19/2007	Cannot locate well				
	4/20/2007	Cannot locate well				
	6/18/2007	Cannot locate well				
	9/17/2002	Cannot locate well				
	12/17/2007	Cannot locate well				
	3/24/2008	Cannot locate well				

TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-19	2/14/2000	2.82	NP	-	30.57	NA
(33.39)	5/22/2000	4.62	4.59	0.03	28.79	NA
	8/23/2000	5.89	5.88	0.01	27.51	NA
	11/28/2000	5.91	NP	-	27.48	0.3
	2/21/2001	5.03	sheen	-	28.36	0.1
	5/15/2001	4.09	sheen	-	29.30	NA
	9/18/2001	7.27	7.23	0.04	26.15	NA
	12/19/2001	2.72	NP	-	30.67	NA
	3/13/2002	2.84	sheen	-	30.55	NA
	6/24/2002	4.61	NP	-	28.78	NA
	9/26/2002	6.42	NP	-	26.97	NA
	12/20/2002	5.06	NP	-	28.33	NA
	3/17/2003	2.59	NP	-	30.80	NA
	6/26/2003	3.42	NP	-	29.97	NA
	9/24/2003	6.51	6.48	0.03	26.90	0.2
	12/30/2003	2.84	NP	-	30.55	NA
	3/29/2004	3.32	NP	-	30.07	NA
	6/29/2004	5.34	sheen	-	28.05	NA
	9/27/2004	6.04	sheen	-	27.35	NA
	12/14/2004	4.18	NP	-	29.21	0.1
	3/7/2005	4.78	4.77	0.01	28.62	0.1
	6/20/2005	3.21	sheen	-	30.18	NA
	9/19/2005	6.27	sheen	-	27.12	NA
	12/12/2005	3.94	NP	-	29.45	NA
	3/13/2006	2.70	sheen	-	30.69	0
	6/27/2006	3.39	sheen	-	30.00	0
	9/25/2006	6.15	sheen	-	27.24	0
	12/11/2006	3.08	NP	-	30.31	0
	3/19/2007	2.85	sheen	-	30.54	0
	4/20/2007	3.08	sheen	-	30.31	0
	6/18/2007	4.06	sheen	-	29.33	0.11
	9/17/2007	6.26	sheen	-	27.13	0.12
	12/17/2007	3.68	NP	-	29.71	0.02
	3/24/2008	2.84	NP	-	30.55	0.01
MW-20	2/14/2000	9.80	NP	-	24.96	NA
(34.76)	5/22/2000	10.23	NP	-	24.53	NA
	8/23/2000	11.47	NP	-	23.29	NA
	11/28/2000	11.45	NP	-	23.31	NA
	2/21/2001	11.21	NP	-	23.55	NA
	5/15/2001	11.20	NP	-	23.56	NA
	9/18/2001	12.48	NP	-	22.28	NA
	12/19/2001	10.21	NP	-	24.55	NA
	3/13/2002	9.80	NP	-	24.96	NA
	6/24/2002	10.71	NP	-	24.05	NA
	9/26/2002	12.11	NP	-	22.65	NA
	12/20/2002	11.91	NP	-	22.85	NA
	3/17/2003	9.80	NP	-	24.96	NA
	6/26/2003	10.83	NP	-	23.93	NA
	9/24/2003	12.12	NP	-	22.64	NA
	12/30/2003	10.61	NP	-	24.15	NA
	3/29/2004	10.27	NP	-	24.49	NA
	6/29/2004	11.31	NP	-	23.45	NA
	9/27/2004	11.94	NP	-	22.82	NA
	12/14/2004	11.48	NP	-	23.28	NA
	3/7/2005	11.34	NP	-	23.42	NA
	6/20/2005	10.58	NP	-	24.18	NA
	9/19/2005	12.05	NP	-	22.71	NA
	12/12/2005	11.28	NP	-	23.48	NA
	3/13/2006	9.54	NP	-	25.22	NA
	6/27/2006	10.45	NP	-	24.31	NA
	9/25/2006	12.01	NP	-	22.75	NA
	12/11/2006	10.27	NP	-	24.49	NA
	3/19/2007	9.47	NP	-	25.29	NA
	4/20/2007	10.00	NP	-	24.76	NA
	4/20/2007	10.00	NP	-	24.76	NA
	6/18/2007	10.75	NP	-	24.01	NA
	9/17/2007	12.04	NP	-	22.72	NA
	12/17/2007	10.37	NP	-	24.39	NA
	3/24/2008	9.50	NP	-	25.26	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-21	2/14/2000	1.26	NP	-	33.07	NA
(34.33)	5/22/2000	1.62	NP	-	32.71	NA
	8/23/2000	2.38	NP	-	31.95	NA
	11/28/2000	1.80	NP	-	32.53	NA
	2/21/2001	1.64	NP	-	32.69	NA
	5/15/2001	1.59	NP	-	32.74	NA
	9/18/2001	3.01	NP	-	31.32	NA
	12/19/2001	0.27	NP	-	34.06	NA
	3/13/2002	0.99	NP	-	33.34	NA
	6/24/2002	1.95	NP	-	32.38	NA
	9/26/2002	3.65	NP	-	30.68	NA
	12/20/2002	2.05	NP	-	32.28	NA
	3/17/2003	Unable to Locate				
	6/26/2003	Unable to Access, Covered by Steel Plate				
	9/24/2003	Unable to Access, Covered by Steel Plate				
	12/30/2003	Unable to Access, Covered by Steel Plate				
	3/29/2004	Unable to Access, Covered by Gravel Pile				
	6/29/2004	Unable to Access, Covered by Gravel Pile				
	9/27/2004	Unable to Access, Covered by Gravel Pile				
	12/14/2004	Unable to Access, Covered by Gravel Pile				
	3/7/2005	Unable to Access, Covered by Gravel Pile				
	6/20/2005	Unable to Access, Covered by Gravel Pile				
	9/19/2005	Unable to Access, Covered by Gravel Pile				
	12/12/2005	Unable to Access, Covered by Gravel Pile				
	3/13/2006	Unable to Access, Covered by Gravel Pile				
	6/27/2006	Unable to Access, Covered by Gravel Pile				
	9/25/2006	Unable to Access, Covered by Gravel Pile				
	12/11/2006	Unable to Access, Covered by Gravel Pile				
	3/19/2007	Unable to Access, Covered by Gravel Pile				
	6/18/2007	Unable to Access, Covered by Gravel Pile				
	9/17/2007	Unable to Access, Covered by Gravel Pile				
	12/17/2007	Unable to Access, Covered by Gravel Pile				
	3/24/2008	**Unable to Access, Covered by Gravel Pile**				
MW-22	2/14/2000	2.85	NP	-	32.80	NA
(35.65)	5/22/2000	4.28	NP	-	31.37	NA
	8/23/2000	5.52	NP	-	30.13	NA
	11/28/2000	6.50	NP	-	29.15	NA
	2/21/2001	5.57	sheen	-	30.08	NA
	5/15/2001	5.29	5.28	0.01	30.37	NA
	9/19/2001	6.53	NP	-	29.12	NA
	12/19/2001	3.56	NP	-	32.09	NA
	3/13/2002	3.10	sheen	-	32.55	NA
	6/24/2002	4.89	4.88	0.01	30.77	NA
	9/26/2002	6.14	6.13	0.01	29.52	NA
	12/20/2002	6.29	NP	-	29.36	NA
	3/17/2003	3.81	sheen	-	31.84	0.01
	6/26/2003	4.56	NP	-	31.09	NA
	9/24/2003	6.00	NP	-	29.65	NA
	12/30/2003	4.60	NP	-	31.05	NA
	3/29/2004	4.09	4.08	0.01	31.56	NA
	6/29/2004	5.48	NP	-	30.17	NA
	9/27/2004	5.79	Sheen	-	29.86	NA
	12/14/2004	5.60	NP	-	30.05	NA
	3/7/2005	5.40	Sheen	-	30.25	0.1
	6/20/2005	4.81	NP	-	30.84	NA
	9/19/2005	6.03	Sheen	-	29.62	0.1
	12/12/2005	4.37	Sheen	-	31.28	NA
	3/13/2006	3.44	NP	-	32.21	NA
	6/27/2006	4.68	NP	-	30.97	NA
	9/25/2006	5.99	NP	-	29.66	NA
	12/11/2006	3.40	NP	-	32.25	NA
	3/19/2007	3.31	NP	-	32.34	NA
	6/18/2007	4.89	NP	-	30.76	NA
	9/17/2007	6.35	sheen	-	29.30	0.1
	12/17/2007	4.17	NP	-	31.48	0
	3/24/2008	**3.52**	**NP**	-	**32.13**	**0**

TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-23	2/14/2000	3.56	NP	-	32.50	NA
(36.06)	5/22/2000	5.63	NP	-	30.43	NA
	8/23/2000	5.82	5.82	0.00	30.24	NA
	11/28/2000	5.51	5.51	0.00	30.55	0.1
	2/21/2001	5.33	NP	-	30.73	0.1
	5/15/2001	5.01	sheen	-	31.05	NA
	9/19/2001	6.50	6.49	0.01	29.57	NA
	12/19/2001	4.19	NP	-	31.87	NA
	3/13/2002	3.99	NP	-	32.07	NA
	6/24/2002	5.44	NP	-	30.62	NA
	9/26/2002	8.21	sheen	-	27.85	NA
	12/20/2002	5.20	NP	-	30.86	NA
	3/17/2003	4.47	NP	-	31.59	NA
	6/26/2003	5.54	NP	-	30.52	NA
	9/24/2003	6.35	sheen	-	29.71	0.1
	12/30/2003	4.41	NP	-	31.65	NA
	3/29/2004	4.48	NP	-	31.58	NA
	6/29/2004	6.58	sheen	-	29.48	NA
	9/27/2004	5.91	sheen	-	30.15	NA
	12/14/2004	5.05	NP	-	31.01	NA
	3/7/2005	5.12	NP	-	30.94	NA
	6/20/2005	5.19	NP	-	30.87	NA
	9/19/2005	6.22	NP	-	29.84	NA
	12/12/2005	5.09	NP	-	30.97	NA
	3/13/2006	4.10	NP	-	31.96	NA
	6/27/2006	5.14	sheen	-	30.92	NA
	9/25/2006	6.31	sheen	-	29.75	0.1
	12/11/2006	4.41	NP	-	31.65	0.2
	3/19/2007	4.31	NP	-	31.75	0.15
	6/18/2007	5.20	sheen	-	30.86	0.2
	9/17/2007	6.27	sheen	-	29.79	0.21
	12/17/2007	4.72	sheen	-	31.34	0.01
	3/24/2008	**4.04**	**NP**	**-**	**32.02**	**0.02**
MW-24	2/14/2000	5.00	4.50	0.50	30.55	1.0
(35.15)	5/22/2000	5.34	5.21	0.13	29.91	2.0
	8/23/2000	8.56	NP	-	26.59	NA
	11/28/2000	7.79	NP	-	27.36	0.3
	2/21/2001	7.20	7.15	0.05	27.99	0.4
	5/15/2001	5.45	sheen	-	29.70	0.1
	9/19/2001	9.55	9.54	0.01	25.61	NA
	12/19/2001	5.30	4.84	0.46	30.22	0.1
	3/13/2002	6.78	sheen	-	28.37	0.16
	6/24/2002	6.80	6.79	0.01	28.36	0.2
	9/26/2002	8.86	sheen	-	26.29	0.01
	12/20/2002	6.34	6.35	0.01	28.82	NA
	3/17/2003	4.78	4.70	0.08	30.43	0.1
	6/26/2003	6.51	sheen	-	28.64	0.02
	9/24/2003	8.35	NP	-	26.80	NA
	12/30/2003	4.80	4.60	0.2*	30.35	0.10
	3/29/2004	5.35	5.33	0.02*	29.80	NA
	6/29/2004	6.82	6.81	0.01	28.34	NA
	9/27/2004	8.58	8.56	0.02	26.59	NA
	12/14/2004	5.32	sheen	-	29.83	0.30
	3/7/2005	7.71	NP	-	27.44	0.20
	6/20/2005	5.39	5.36	0.03	29.78	0.10
	9/19/2005	-**	8.01	0.02	-**	0.20
	12/12/2005	5.94	5.89	0.05	29.25	0.30
	3/13/2006	4.60	sheen	-	30.55	0.20
	6/27/2006	-**	5.71	-	-**	NA
	9/25/2006	-**	8.80	-	-**	0.40
	12/11/2006	NM	NM	NM	NM	0.30
	3/19/2007	4.71	sheen	-	30.44	0.20
	4/20/2007	NM	4.86	-	-**	NA
	6/18/2007	NM	5.75	-	-**	0.30
	9/17/2007	NM	8.70	-	-**	0.20
	12/17/2007	NM	5.13	-	-**	0.13
	3/24/2008	NM	4.53	-	-**	0.02

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-25	2/14/2000	10.03	NP	-	24.70	NA
(34.73)	5/22/2000	11.66	NP	-	23.07	NA
	8/23/2000	12.20	NP	-	22.53	NA
	11/28/2000	12.34	NP	-	22.39	NA
	2/21/2001	11.97	NP	-	22.76	NA
	5/15/2001	11.91	NP	-	22.82	NA
	9/19/2001	13.12	NP	-	21.61	NA
	12/19/2001	10.45	NP	-	24.28	NA
	3/13/2002	10.35	NP	-	24.38	NA
	6/24/2002	11.38	NP	-	23.35	NA
	9/26/2002	12.77	NP	-	21.96	NA
	12/20/2002	12.14	NP	-	22.59	NA
	3/17/2003	10.38	NP	-	24.35	NA
	6/26/2003	11.60	NP	-	23.13	NA
	9/24/2003	12.77	NP	-	21.96	NA
	12/30/2003	11.00	NP	-	23.73	NA
	3/29/2004	10.46	NP	-	24.27	NA
	6/29/2004	11.93	NP	-	22.80	NA
	9/27/2004	12.67	NP	-	22.06	NA
	12/14/2004	12.52	NP	-	22.21	NA
	3/7/2005	12.10	NP	-	22.63	NA
	6/20/2005	11.40	NP	-	23.33	NA
	9/19/2005	12.71	NP	-	22.02	NA
	12/12/2005	11.52	NP	-	23.21	NA
	3/13/2006	10.16	NP	-	24.57	NA
	6/27/2006	11.21	NP	-	23.52	NA
	9/25/2006	12.70	NP	-	22.03	NA
	12/11/2006	10.97	NP	-	23.76	NA
	3/19/2007	10.13	NP	-	24.60	NA
	4/20/2007	10.51	NP	-	24.22	NA
	6/18/2007	11.47	NP	-	23.26	NA
	9/17/2007	12.72	NP	-	22.01	NA
	12/17/2007	11.10	NP	-	23.63	NA
	3/24/2008	10.22	NP	-	24.51	NA
MW-26	2/14/2000	10.44	NP	-	24.34	NA
(34.78)	5/22/2000	11.10	NP	-	23.68	NA
	8/23/2000	12.55	NP	-	22.23	NA
	11/28/2000	12.63	NP	-	22.15	NA
	2/21/2001	12.33	sheen	-	22.45	NA
	5/15/2001	12.24	NP	-	22.54	NA
	9/19/2001	13.47	sheen	-	21.31	NA
	12/19/2001	11.04	NP	-	23.74	NA
	3/13/2002	10.91	sheen	-	23.87	NA
	6/24/2002	11.88	NP	-	22.90	NA
	9/26/2002	13.07	NP	-	21.71	NA
	12/20/2002	12.55	NP	-	22.23	NA
	3/17/2003	10.93	NP	-	23.85	NA
	6/26/2003	12.00	NP	-	22.78	NA
	9/24/2003	13.13	NP	-	21.65	NA
	12/30/2003	11.53	NP	-	23.25	NA
	3/29/2004	10.46	NP	-	24.32	NA
	6/29/2004	12.43	NP	-	22.35	NA
	9/27/2004	13.03	NP	-	21.75	NA
	12/14/2004	12.30	NP	-	22.48	NA
	3/7/2005	12.51	NP	-	22.27	NA
	6/20/2005	11.78	NP	-	23.00	NA
	9/19/2005	13.09	NP	-	21.69	NA
	12/12/2005	11.95	NP	-	22.83	NA
	3/13/2006	10.61	NP	-	24.17	NA
	6/27/2006	11.65	NP	-	23.13	NA
	9/25/2006	13.06	NP	-	21.72	NA
	12/11/2006	11.46	NP	-	23.32	NA
	3/19/2007	10.65	NP	-	24.13	NA
	6/18/2007	11.86	NP	-	22.92	NA
	9/17/2007	13.11	NP	-	21.67	NA
	12/17/2007	11.58	NP	-	23.20	NA
	1/22/2008	10.63	NP	-	24.15	NA
	3/24/2008	10.72	NP	-	24.06	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-27	2/14/2000	3.67	NP	-	32.02	NA
(35.69)	5/22/2000	4.91	NP	-	30.78	NA
	8/23/2000	6.15	NP	-	29.54	NA
	11/28/2000	5.49	NP	-	30.20	NA
	2/21/2001	5.64	NP	-	30.05	NA
	5/15/2001	5.31	NP	-	30.38	NA
	9/19/2001	6.68	NP	-	29.01	NA
	12/19/2001	4.40	NP	-	31.29	NA
	3/13/2002	3.97	NP	-	31.72	NA
	6/24/2002	5.75	NP	-	29.94	NA
	9/26/2002	6.50	NP	-	29.19	NA
	12/20/2002	5.19	NP	-	30.50	NA
	3/17/2003	4.46	NP	-	31.23	NA
	6/26/2003	5.83	NP	-	29.86	NA
	9/24/2003	6.60	NP	-	29.09	NA
	12/30/2003	4.60	NP	-	31.09	NA
	3/29/2004	4.83	NP	-	30.86	NA
	6/29/2004	5.94	NP	-	29.75	NA
	9/27/2004	6.07	NP	-	29.62	NA
	12/14/2004	5.20	NP	-	30.49	NA
	3/7/2005	5.78	NP	-	29.91	NA
	6/20/2005	5.35	NP	-	30.34	NA
	9/19/2005	6.32	NP	-	29.37	NA
	12/12/2005	5.36	NP	-	30.33	NA
	3/13/2006	4.32	NP	-	31.37	NA
	6/27/2006	5.21	NP	-	30.48	NA
	9/25/2006	6.45	NP	-	29.24	NA
	12/11/2006	4.67	NP	-	31.02	NA
	3/19/2007	4.70	NP	-	30.99	NA
	6/18/2007	5.39	NP	-	30.30	NA
	9/17/2007	6.41	NP	-	29.28	NA
	12/17/2007	5.15	NP	-	30.54	NA
	3/24/2008	4.27	NP	-	31.42	NA
MW-28	2/14/2000	4.03	NP	-	30.36	NA
(34.39)	5/22/2000	5.44	NP	-	28.95	1.0
	8/23/2000	9.55	NP	-	24.84	NA
	11/28/2000	11.34	sheen	-	23.05	0.4
	2/21/2001	8.52	8.51	0.01	25.88	0.1
	5/15/2001	8.54	sheen	-	25.85	NA
	9/19/2001	13.75	13.48	0.27	20.88	0.6
	12/19/2001	4.47	NP	-	29.92	0.4
	3/13/2002	4.49	sheen	-	29.90	NA
	6/24/2002	7.34	NP	-	27.05	NA
	9/26/2002	9.39	NP	-	25.00	NA
	12/23/2002	7.12	7.11	0.01	27.28	NA
	3/17/2003	4.68	4.66	0.02	29.73	0.05
	6/26/2003	7.15	sheen	-	27.24	0.03
	9/24/2003	13.25	13.21	0.04	21.17	0.2
	12/30/2003	5.87	NP	-	29.90	NA
	3/29/2004	5.97	sheen	-	29.80	NA
	6/29/2004	9.68	sheen	-	26.09	NA
	9/27/2004	13.35	13.33	0.02	21.06	NA
	12/14/2004	7.51	sheen	-	26.88	0.4
	3/7/2005	10.65	sheen	-	23.74	0.2
	6/20/2005	7.85	sheen	-	26.54	0.2
	9/19/2005	12.65	sheen	-	21.74	0.3
	12/12/2005	6.87	6.86	0.01	27.53	0.2
	3/13/2006	4.91	NP	-	29.48	0
	6/27/2006	6.95	NP	-	27.44	0
	9/25/2006	13.05	sheen	-	21.34	0.1
	12/11/2006	5.53	NP	-	28.86	0.3
	3/19/2007	5.40	NP	-	28.99	0
	6/18/2007	7.15	sheen	-	27.24	0.1
	9/17/2007	13.14	NP	-	21.25	0.02
	12/17/2007	5.76	5.75	0.01	28.64	0
	1/22/2008	5.00	4.98	0.02	29.41	0.01
	3/24/2008	4.80	NP	-	29.59	0.01

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-29	2/14/2000	12.98	NP	-	22.79	NA
(35.77)	5/22/2000	13.49	NP	-	22.28	NA
	8/23/2000	14.53	NP	-	21.24	NA
	11/28/2000	14.84	NP	-	20.93	NA
	2/21/2001	14.54	NP	-	21.23	NA
	5/15/2001	14.52	NP	-	21.25	NA
	9/19/2001	15.57	NP	-	20.20	NA
	12/19/2001	13.59	NP	-	22.18	NA
	3/13/2002	13.21	NP	-	22.56	NA
	6/24/2002	13.94	NP	-	21.83	NA
	9/26/2002	15.11	NP	-	20.66	NA
	12/20/2002	14.79	NP	-	20.98	NA
	3/17/2003	13.26	NP	-	22.51	NA
	6/26/2003	13.93	NP	-	21.84	NA
	9/24/2003	15.29	NP	-	20.48	NA
	12/30/2003	13.99	NP	-	21.78	NA
	3/29/2004	13.47	NP	-	22.30	NA
	6/29/2004	14.48	NP	-	21.29	NA
	9/27/2004	15.18	NP	-	20.59	NA
	12/14/2004	14.56	NP	-	21.21	NA
	3/7/2005	14.57	NP	-	21.20	NA
	6/20/2005	13.96	NP	-	21.81	NA
	9/19/2005	15.15	NP	-	20.62	NA
	12/12/2005	14.10	NP	-	21.67	NA
	3/13/2006	12.97	NP	-	22.80	NA
	6/27/2006	13.70	NP	-	22.07	NA
	9/25/2006	15.10	NP	-	20.67	NA
	12/11/2006	13.65	NP	-	22.12	NA
	3/19/2007	13.07	NP	-	22.70	NA
	6/18/2007	13.93	NP	-	21.84	NA
	9/17/2007	15.22	NP	-	20.55	NA
	12/17/2007	13.86	NP	-	21.91	NA
	1/22/2008	12.93	NP	-	22.84	NA
	3/24/2008	13.08	NP	-	22.69	NA
MW-30	2/14/2000	3.97	NP	-	32.42	NA
(36.39)	5/22/2000	5.37	NP	-	31.02	NA
	8/23/2000	7.06	NP	-	29.33	NA
	11/28/2000	7.34	NP	-	29.05	NA
	2/21/2001	6.74	NP	-	29.65	NA
	5/15/2001	6.50	NP	-	29.89	NA
	9/19/2001	8.28	NP	-	28.11	NA
	12/19/2001	4.35	NP	-	32.04	NA
	3/13/2002	4.31	NP	-	32.08	NA
	6/24/2002	6.28	NP	-	30.11	NA
	9/26/2002	7.64	NP	-	28.75	NA
	12/20/2002	7.11	NP	-	29.28	NA
	3/17/2003	4.72	NP	-	31.67	NA
	6/26/2003	6.14	NP	-	30.25	NA
	9/24/2003	7.85	NP	-	28.54	NA
	12/30/2003	4.87	NP	-	31.52	NA
	3/29/2004	5.21	NP	-	31.18	NA
	6/29/2004	6.71	NP	-	29.68	NA
	9/27/2004	7.71	NP	-	28.68	NA
	12/14/2004	6.60	NP	-	29.79	NA
	3/7/2005	6.81	NP	-	29.58	NA
	6/20/2005	5.85	NP	-	30.54	NA
	9/19/2005	7.39	NP	-	29.00	NA
	12/12/2005	5.66	NP	-	30.73	NA
	3/13/2006	4.55	NP	-	31.84	NA
	6/27/2006	5.81	NP	-	30.58	NA
	9/25/2006	7.51	NP	-	28.88	NA
	12/11/2006	4.92	NP	-	31.47	NA
	3/19/2007	4.80	NP	-	31.59	NA
	6/18/2007	6.05	NP	-	30.34	NA
	9/17/2007	7.65	NP	-	28.74	NA
	12/17/2007	5.23	NP	-	31.16	NA
	3/24/2008	4.44	NP	-	31.95	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-31	2/14/2000	5.19	NP	-	30.47	NA
(35.66)	5/22/2000	6.66	NP	-	29.00	NA
	8/23/2000	8.41	NP	-	27.25	NA
	11/28/2000	8.86	NP	-	26.80	NA
	2/21/2001	8.07	NP	-	27.59	NA
	5/15/2001	7.90	NP	-	27.76	NA
	9/19/2001	9.69	NP	-	25.97	NA
	12/19/2001	5.43	NP	-	30.23	NA
	3/13/2002	5.31	NP	-	30.35	NA
	6/24/2002	7.67	NP	-	27.99	NA
	9/26/2002	9.09	9.06	0.03	26.59	NA
	12/20/2002	8.89	NP	-	26.77	NA
	3/17/2003	6.12	sheen	-	29.54	0.01
	6/26/2003	7.58	NP	-	28.08	NA
	9/24/2003	9.54	9.45	0.09	26.19	0.2
	12/30/2003	6.20	NP	-	29.46	NA
	3/29/2004	6.49	NP	-	29.17	NA
	6/29/2004	8.31	sheen	-	27.35	NA
	9/27/2004	9.38	sheen	-	26.28	NA
	12/14/2004	6.55	NP	-	27.11	NA
	3/7/2005	6.43	NP	-	27.23	NA
	6/20/2005	7.43	sheen	-	28.23	0.1
	9/19/2005	9.02	NP	-	26.64	0.1
	12/12/2005	6.99	NP	-	28.67	NA
	3/13/2006	5.61	NP	-	30.05	NA
	6/27/2006	7.19	sheen	-	28.47	NA
	9/25/2006	9.34	9.26	0.08	26.38	0.21
	12/11/2006	5.85	sheen	-	29.81	0.1
	3/19/2007	5.00	sheen	-	30.66	0.3
	6/18/2007	7.58	sheen	-	28.08	0.3
	9/17/2007	9.53	9.35	0.18	26.27	0.3
	12/17/2007	6.50	NP	-	29.16	0.05
	1/22/2008	5.77	sheen	0.00	29.89	0.01
	3/24/2008	5.71	NP	-	29.95	0.03
MW-32	2/14/2000	3.57	NP	-	33.44	NA
(37.01)	5/22/2000	4.83	NP	-	32.18	NA
	8/23/2000	6.41	NP	-	30.60	NA
	11/28/2000	6.69	NP	-	30.32	NA
	2/21/2001	6.11	NP	-	30.90	NA
	5/15/2001	5.99	NP	-	31.02	NA
	9/19/2001	7.64	NP	-	29.37	NA
	12/19/2001	4.30	NP	-	32.71	NA
	3/13/2002	3.71	NP	-	33.30	NA
	6/24/2002	5.72	NP	-	31.29	NA
	9/26/2002	7.18	NP	-	29.83	NA
	12/20/2002	6.72	NP	-	30.29	NA
	3/17/2003	4.15	sheen	-	32.86	0.01
	6/26/2003	5.53	NP	-	31.48	NA
	9/24/2003	7.28	NP	-	29.73	NA
	12/30/2003	4.58	NP	-	32.43	NA
	3/29/2004	4.65	NP	-	32.36	NA
	6/29/2004	6.25	NP	-	30.76	NA
	9/27/2004	7.16	NP	-	29.85	NA
	12/14/2004	6.28	NP	-	30.73	NA
	3/7/2005	6.32	NP	-	30.69	NA
	6/20/2005	5.42	NP	-	31.59	NA
	9/19/2005	6.91	NP	-	30.10	NA
	12/12/2005	5.21	NP	-	31.80	NA
	3/13/2006	3.99	NP	-	33.02	NA
	6/27/2006	5.32	NP	-	31.69	NA
	9/25/2006	7.05	NP	-	29.96	NA
	12/11/2006	4.41	NP	-	32.60	NA
	3/19/2007	4.00	NP	-	33.01	NA
	6/18/2007	5.68	NP	-	31.33	NA
	9/17/2007	7.26	NP	-	29.75	NA
	12/17/2007	5.00	NP	-	32.01	NA
	3/24/2008	4.08	NP	-	32.93	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-33	2/14/2000	19.59	NP	-	19.75	NA
(39.34)	5/22/2000	20.15	NP	-	19.19	NA
	8/23/2000	20.88	NP	-	18.46	NA
	11/28/2000	20.98	NP	-	18.36	NA
	2/21/2001	20.78	NP	-	18.56	NA
	5/15/2001	20.83	NP	-	18.51	NA
	9/19/2001	21.43	NP	-	17.91	NA
	12/19/2001	12.62	NP	-	26.72	NA
	3/13/2002	19.61	NP	-	19.73	NA
	6/24/2002	20.42	NP	-	18.92	NA
	9/26/2002	21.13	NP	-	18.21	NA
	12/20/2002	20.68	NP	-	18.68	NA
	3/17/2003	19.73	NP	-	19.61	NA
	6/26/2003	20.31	NP	-	19.03	NA
	9/24/2003	21.04	NP	-	18.30	NA
	12/30/2003	19.82	NP	-	19.52	NA
	3/29/2004	19.89	NP	-	19.45	NA
	6/29/2004	20.65	NP	-	18.69	NA
	9/27/2004	21.16	NP	-	18.18	NA
	12/14/2004	20.60	NP	-	18.74	NA
	3/7/2005	20.57	NP	-	18.77	NA
	6/20/2005	20.32	NP	-	19.02	NA
	9/19/2005	21.05	NP	-	18.29	NA
	12/12/2005	20.20	NP	-	19.14	NA
	3/13/2006	19.54	NP	-	19.80	NA
	6/27/2006	20.11	NP	-	19.23	NA
	9/25/2006	20.96	NP	-	18.38	NA
	12/11/2006	19.84	NP	-	19.50	NA
	3/19/2007	19.58	NP	-	19.76	NA
(39.33)	6/18/2007	20.27	NP	-	19.06	NA
	9/17/2007	20.98	NP	-	18.35	NA
	12/17/2007	19.92	NP	-	19.41	NA
	1/22/2008	19.35	0.00	-	19.98	NA
	3/24/2008	19.66	NP	-	19.67	NA
MW-34	2/14/2000	19.31	NP	-	20.36	NA
(39.67)	5/22/2000	19.75	NP	-	19.92	NA
	8/23/2000	20.88	NP	-	18.79	NA
	11/28/2000	20.39	NP	-	19.28	NA
	2/21/2001	20.19	NP	-	19.48	NA
	5/15/2001	20.18	NP	-	19.49	NA
	9/19/2001	20.60	NP	-	19.07	NA
	12/19/2001	19.20	NP	-	20.47	NA
	3/13/2002	19.37	NP	-	20.30	NA
	6/24/2002	19.95	NP	-	19.72	NA
	9/26/2002	20.41	NP	-	19.26	NA
	3/17/2003	19.39	NP	-	20.28	NA
	6/26/2003	19.85	NP	-	19.82	NA
	9/24/2003	20.39	NP	-	19.28	NA
	12/30/2003	19.57	NP	-	20.10	NA
	3/29/2004	19.54	NP	-	20.13	NA
	6/29/2004	20.11	NP	-	19.56	NA
	9/27/2004	20.46	NP	-	19.21	NA
	12/14/2004	20.15	NP	-	19.52	NA
	3/7/2005	20.00	NP	-	19.67	NA
	6/20/2005	19.84	NP	-	19.83	NA
	9/19/2005	20.37	NP	-	19.30	NA
	12/12/2005	19.71	NP	-	19.96	NA
	3/13/2006	19.30	NP	-	20.37	NA
	6/27/2006	19.80	NP	-	19.87	NA
	9/25/2006	20.33	NP	-	19.34	NA
	12/11/2006	19.50	NP	-	20.17	NA
	3/19/2007	19.27	NP	-	20.40	NA
(39.64)	6/18/2007	19.87	NP	-	19.77	NA
	9/17/2007	20.32	NP	-	19.32	NA
	12/17/2007	19.51	NP	-	20.13	NA
	1/22/2008	19.02	0.00	-	20.62	NA
	3/24/2008	19.35	NP	-	20.29	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-35	2/14/2000	2.34	NP	-	31.05	NA
(33.39)	5/22/2000	3.21	NP	-	30.18	NA
	8/23/2000	4.98	NP	-	28.41	NA
	11/28/2000	5.54	NP	-	27.85	NA
	2/21/2001	4.67	NP	-	28.72	NA
	5/15/2001	4.35	NP	-	29.04	NA
	9/18/2001	6.33	NP	-	27.06	NA
	12/19/2001	5.84	NP	-	27.55	NA
	3/13/2002	2.61	NP	-	30.78	NA
	6/24/2002	--Unable to Locate--				
	9/26/2002	5.85	NP	-	27.54	NA
	12/20/2002	5.91	sheen	-	27.48	NA
	3/17/2003	3.44	NP	-	29.95	NA
	6/26/2003	3.83	NP	-	29.56	NA
	9/24/2003	5.85	NP	-	27.54	NA
	12/30/2003	3.58	NP	-	29.81	NA
	3/29/2004	2.97	NP	-	30.42	NA
	6/29/2004	2.50	NP	-	30.89	NA
	9/27/2004	5.55	NP	-	27.84	NA
	12/14/2004	4.91	NP	-	28.48	NA
	3/7/2005	4.85	NP	-	28.54	NA
	6/20/2005	4.13	NP	-	29.26	NA
	9/19/2005	5.51	NP	-	27.88	NA
	12/12/2005	4.02	NP	-	29.37	NA
	3/13/2006	2.69	NP	-	30.70	NA
	6/27/2006	3.64	NP	-	29.75	NA
	9/25/2006	5.50	NP	-	27.89	NA
	12/11/2006	3.35	NP	-	30.04	NA
	3/19/2007	2.81	NP	-	30.58	NA
	4/20/2007	3.06	NP	-	30.33	NA
	6/18/2007	3.98	NP	-	29.41	NA
	9/17/2007	6.60	sheen	-	26.79	0
	12/17/2007	3.51	NP	-	29.88	0
	1/22/2008	3.73	0.00	-	29.66	0
	3/24/2008	2.68	NP	-	30.71	0
MW-36	2/14/2000	14.04	NP	-	20.84	NA
(34.88)	5/22/2000	14.62	NP	-	20.26	NA
	8/23/2000	15.39	NP	-	19.49	NA
	11/28/2000	15.72	NP	-	19.16	NA
	2/21/2001	15.49	NP	-	19.39	NA
	5/15/2001	15.51	NP	-	19.37	NA
	9/19/2001	16.08	NP	-	18.80	NA
	12/20/2001	14.98	NP	-	19.90	NA
	3/13/2002	14.18	NP	-	20.70	NA
	6/24/2002	--Unable to Access--				
	9/26/2002	17.92	NP	-	16.96	NA
	12/20/2002	15.59	NP	-	19.29	NA
	3/17/2003	14.25	NP	-	20.63	NA
	6/26/2003	--Unable to Access--				
	9/24/2003	15.74	NP	-	19.14	NA
	12/30/2003	14.97	NP	-	19.91	NA
	3/29/2004	14.37	NP	-	20.51	NA
	6/29/2004	15.33	NP	-	19.55	NA
	9/27/2004	15.87	NP	-	19.01	NA
	12/14/2004	15.54	NP	-	19.34	NA
	3/7/2005	--Unable to Access--				
	6/20/2005	14.98	NP	-	19.90	NA
	9/19/2005	15.75	NP	-	19.13	NA
	12/12/2005	15.01	NP	-	19.87	NA
	3/13/2006	13.82	NP	-	21.06	NA
	6/27/2006	14.78	NP	-	20.10	NA
	9/25/2006	15.61	NP	-	19.27	NA
	12/11/2006	14.45	NP	-	20.43	NA
	3/19/2007	13.98	NP	-	20.90	NA
(35.00)	6/18/2007	14.88	NP	-	20.12	NA
	9/17/2007	15.70	NP	-	19.30	NA
	12/17/2007	14.70	NP	-	20.30	NA
	1/22/2008	13.77	0.00	-	21.23	NA
	3/24/2008	14.07	NP	-	20.93	NA

TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-37	2/14/2000	14.71	NP	-	20.15	NA
(34.86)	5/22/2000	15.27	NP	-	19.59	NA
	8/23/2000	16.06	NP	-	18.80	NA
	11/28/2000	16.32	NP	-	18.54	NA
	2/21/2001	16.10	NP	-	18.76	NA
	5/15/2001	16.11	NP	-	18.75	NA
	9/19/2001	16.69	NP	-	18.17	NA
	12/19/2001	15.10	NP	-	19.76	NA
	3/13/2002	14.64	14.62	0.02	20.24	0.1
	6/24/2002	15.66	NP	-	19.20	NA
	9/26/2002	16.39	NP	-	18.47	NA
	12/20/2002	16.11	sheen	-	18.75	NA
	3/17/2003	14.92	NP	-	19.94	NA
	6/26/2003	--Unable to Acess--				
	9/24/2003	16.40	16.37	0.03	18.48	0.1
	12/30/2003	15.35	NP	NP	19.51	NA
	3/29/2004	14.93	14.94	0.01	19.94	0.1
	6/29/2004	15.96	sheen	-	18.90	NA
	9/27/2004	16.52	16.51	0.01	18.35	0.1
	12/14/2004	16.10	NP	-	18.76	NA
	3/7/2005	16.07	NP	-	18.79	0.1
	6/20/2005	15.60	NP	-	19.26	NA
	9/19/2005	16.34	NP	-	18.52	NA
	12/12/2005	15.59	NP	-	19.27	NA
	3/13/2006	14.21	NP	-	20.65	NA
	6/27/2006	15.29	NP	-	19.57	NA
	9/25/2006	16.19	NP	-	18.67	NA
	12/11/2006	15.04	NP	-	19.82	NA
	3/19/2007	14.44	NP	-	20.42	NA
(34.97)	6/18/2007	15.54	NP	-	19.43	NA
	9/17/2007	16.34	NP	-	18.63	NA
	12/17/2007	15.22	NP	-	19.75	NA
	1/22/2008	14.26	0.00	-	20.71	NA
	3/24/2008	14.51	NP	-	20.46	NA
MW-38	2/14/2000	4.72	NP	-	32.78	NA
(37.50)	5/22/2000	6.17	NP	-	31.33	NA
	8/23/2000	8.02	NP	-	29.48	NA
	11/28/2000	8.41	NP	-	29.09	NA
	2/21/2001	7.62	NP	-	29.88	NA
	5/15/2001	7.65	sheen	-	29.85	NA
	9/18/2001	9.52	NP	-	27.98	NA
	12/19/2001	6.05	NP	-	31.45	NA
	3/13/2002	4.97	NP	-	32.53	NA
	6/24/2002	7.10	NP	-	30.40	NA
	9/26/2002	9.09	NP	-	28.41	NA
	12/23/2002	7.82	NP	-	29.68	NA
	3/17/2003	4.89	NP	-	32.61	NA
	6/26/2003	6.55	NP	-	30.95	NA
	9/24/2003	9.04	NP	-	28.46	NA
	12/30/2003	6.57	NP	-	30.93	NA
	3/29/2004	5.42	NP	-	32.08	NA
	6/29/2004	7.34	NP	-	30.16	NA
	9/27/2004	8.57	NP	-	28.93	NA
	12/14/2004	7.84	NP	-	29.66	NA
	3/7/2005	7.85	NP	-	29.65	NA
	6/20/2005	6.69	NP	-	30.81	NA
	9/19/2005	8.73	NP	-	28.77	NA
	12/12/2005	6.95	NP	-	30.55	NA
	3/13/2006	4.92	NP	-	32.58	NA
	6/27/2006	6.49	NP	-	31.01	NA
	9/25/2006	8.64	NP	-	28.86	NA
	12/11/2006	5.70	NP	-	31.80	NA
	3/19/2007	4.66	NP	-	32.84	NA
	6/18/2007	6.87	NP	-	30.63	NA
	9/17/2007	9.52	NP	-	27.98	NA
	12/17/2007	6.70	NP	-	30.80	NA
	3/24/2008	5.09	NP	-	32.41	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-39	2/14/2000	NM	NP	-	NA	NA
(35.02)	5/22/2000	13.56	NP	-	21.46	NA
	8/23/2000	14.15	NP	-	20.87	NA
	11/28/2000	14.52	NP	-	20.50	NA
	2/21/2001	14.30	NP	-	20.72	NA
	5/15/2001	14.24	NP	-	20.78	NA
	9/19/2001	14.82	NP	-	20.20	NA
	12/19/2001	13.52	NP	-	21.50	NA
	3/13/2002	13.26	NP	-	21.76	NA
	6/24/2002	--Unable to Locate--				
	9/26/2002	17.01	NP	-	18.01	NA
	12/20/2002	14.71	NP	-	20.31	NA
	3/17/2003	13.37	NP	-	21.65	NA
	6/26/2003	--Unable to Access--				
	9/24/2003	14.59	NP	-	20.43	NA
	12/30/2003	13.97	NP	-	21.05	NA
	3/29/2004	13.42	NP	-	21.60	NA
	6/29/2004	14.17	NP	-	20.85	NA
	9/27/2004	14.71	NP	-	20.31	NA
	12/14/2004	--Unable to Access--				
	3/7/2005	--Unable to Access--				
	6/20/2005	--Unable to Access--				
	9/19/2005	14.54	NP	-	20.48	NA
	12/12/2005	13.98	NP	-	21.04	NA
	3/13/2006	12.96	NP	-	22.06	NA
	6/27/2006	13.61	NP	-	21.41	NA
	9/25/2006	14.44	NP	-	20.58	NA
	12/11/2006	5.67	NP	-	29.35	NA
	3/19/2007	12.96	NP	-	22.06	NA
(35.18)	6/18/2007	13.73	NP	-	21.45	NA
	9/17/2007	14.41	NP	-	20.77	NA
	12/17/2007	13.61	NP	-	21.57	NA
	1/22/2008	12.81	0.00	-	22.37	NA
	3/24/2008	13.00	NP	-	22.18	NA

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TABLE 1B
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
Kinder Morgan - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-40	2/14/2000	13.64	NP	-	20.01	NA
(33.65)	5/22/2000	14.28	NP	-	19.37	NA
	8/23/2000	15.01	NP	-	18.64	NA
	11/28/2000	15.15	NP	-	18.50	NA
	2/21/2001	14.97	NP	-	18.68	NA
	5/15/2001	15.00	NP	-	18.65	NA
	8/19/2001	15.58	NP	-	18.07	NA
	12/19/2001	13.72	NP	-	19.93	NA
	3/13/2002	13.58	NP	-	20.07	NA
	6/24/2002	14.62	NP	-	19.03	NA
	9/26/2002	17.30	NP	-	16.35	NA
	12/20/2002	15.78	NP	-	17.87	NA
	3/17/2003	13.84	NP	-	19.81	NA
	6/26/2003	14.45	NP	-	19.20	NA
	9/24/2003	15.25	NP	-	18.40	NA
	12/30/2003	14.03	NP	-	19.62	NA
	3/29/2004	14.04	NP	-	19.61	NA
	6/29/2004	14.85	NP	-	18.80	NA
	9/27/2004	15.35	NP	-	18.30	NA
	12/14/2004	14.80	NP	-	18.85	NA
	3/7/2005	14.84	NP	-	18.81	NA
	6/20/2005	14.50	NP	-	19.15	NA
	9/19/2005	15.25	NP	-	18.40	NA
	12/12/2005	14.40	NP	-	19.25	NA
	3/13/2006	13.57	NP	-	20.08	NA
	6/27/2006	14.39	NP	-	19.26	NA
	9/25/2006	15.15	NP	-	18.50	NA
	12/11/2006	14.04	NP	-	19.61	NA
	3/19/2007	13.67	NP	-	19.98	NA
(33.75)	6/18/2007	14.52	NP	-	19.23	NA
	9/17/2007	15.19	NP	-	18.56	NA
	12/17/2007	14.11	NP	-	19.64	NA
	1/22/2008	13.45	NP	-	20.30	NA
	3/24/2008	13.73	NP	-	20.02	NA
MW-41B	1/22/2008	15.76	NP	-	19.06	NA
(34.84)	3/24/2008	15.84	NP		19.00	NA
MW-41C	1/22/2008	15.34	NP	-	19.34	NA
(34.68)	3/24/2008	15.40	NP		19.28	NA
MW-42B	1/22/2008	23.52	NP	-	15.73	NA
(39.25)	3/24/2008	23.60	NP		15.65	NA
MW-42C	1/22/2008	24.83	NP	-	14.40	NA
(39.23)	3/24/2008	24.71	NP		14.52	NA

NOTES:
If SPH Thickness equals 0.0 feet, then non-measurable sheen was observed
NP - No measurable product
NA - Not Applicable
NM - Not Measured
* - SPH recovered for latest quarter monitored
** - Unable to determine due to SPH viscosity
GWE = TOC -(DTW - (0.8 x DTP - DTW)) Where 0.8 = The density of the SPH

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-1	2/14/2000	16.82	NP	-	17.86	NA
(34.68)	5/22/2000	17.05	NP	-	17.63	NA
	8/22/2000	17.48	NP	-	17.20	NA
	11/27/2000	17.82	NP	-	16.86	NA
	2/20/2001	17.71	NP	-	16.97	NA
	5/15/2001	17.68	NP	-	17.00	NA
	9/18/2001	18.01	NP	-	16.67	NA
	12/20/2001	17.10	NP	-	17.58	NA
	3/13/2002	16.77	NP	-	17.91	NA
	6/24/2002	17.32	NP	-	17.36	NA
	9/26/2002	17.74	NP	-	16.94	NA
	12/20/2002	17.57	NP	-	17.11	NA
	3/17/2003	16.97	NP	-	17.71	NA
	6/26/2003	17.24	NP	-	17.44	NA
	9/24/2003	17.77	NP	-	16.91	NA
	12/30/2003	17.09	NP	-	17.59	NA
	3/29/2004	16.98	NP	-	17.70	NA
	6/29/2004	17.45	NP	-	17.23	NA
	9/27/2004	17.71	NP	-	16.97	NA
	12/14/2004	17.58	NP	-	17.10	NA
	3/7/2005	17.62	NP	-	17.06	NA
	6/20/2005	17.30	NP	-	17.38	NA
	9/19/2005	17.74	NP	-	16.94	NA
	12/12/2005	17.22	NP	-	17.46	NA
	3/13/2006	16.50	NP	-	18.18	NA
	6/26/2006	17.03	NP	-	17.65	NA
	9/25/2006	17.39	NP	-	17.29	NA
	12/11/2006	16.96	NP	-	17.72	NA
	3/19/2007	16.63	NP	-	18.05	NA
(34.65)	6/18/2007	17.15	NP	-	17.50	NA
	9/17/2007	17.63	NP	-	17.02	NA
	12/17/2007	17.11	NP	-	17.54	NA
	1/22/2008	16.61	NP	-	18.04	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	16.80	NP		17.85	NA
B-2	2/14/2000	16.68	NP	-	18.67	NA
(35.35)	5/22/2000	17.06	NP	-	18.29	NA
	8/22/2000	17.61	NP	-	17.74	NA
	11/27/2000	17.97	NP	-	17.38	NA
	2/20/2001	17.82	NP	-	17.53	NA
	5/15/2001	17.74	NP	-	17.61	NA
	9/18/2001	18.23	NP	-	17.12	NA
	12/20/2001	17.06	NP	-	18.29	NA
	3/13/2002	16.80	NP	-	18.55	NA
	6/24/2002	17.44	NP	-	17.91	NA
	9/26/2002	17.99	NP	-	17.36	NA
	12/20/2002	18.06	NP	-	17.29	NA
	3/17/2003	17.03	NP	-	18.32	NA
	6/26/2003	17.29	NP	-	18.06	NA
	9/24/2003	18.03	NP	-	17.32	NA
	12/30/2003	17.38	NP	-	17.97	NA
	3/29/2004	16.89	NP	-	18.46	NA
	6/29/2004	17.62	NP	-	17.73	NA
	9/27/2004	18.09	NP	-	17.26	NA
	12/14/2004	17.94	NP	-	17.41	NA
	3/7/2005	17.78	NP	-	17.57	NA
	6/20/2005	17.41	NP	-	17.94	NA
	9/19/2005	17.98	NP	-	17.37	NA
	12/12/2005	17.37	NP	-	17.98	NA
	3/13/2006	16.50	NP	-	18.85	NA
	6/26/2006	17.14	NP	-	18.21	NA
	9/25/2006	17.63	NP	-	17.72	NA
	12/11/2006	16.90	NP	-	18.45	NA
	3/19/2007	16.47	NP	-	18.88	NA
(35.54)	6/18/2007	17.18	NP	-	18.36	NA
	9/17/2007	17.77	NP	-	17.77	NA
	12/17/2007	17.01	NP	-	18.53	NA
	1/22/2008	16.40	NP	-	19.14	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	16.69	NP	-	18.85	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-3	2/14/2000	18.14	NP	-	16.67	NA
(34.81)	5/22/2000	18.36	NP	-	16.45	NA
	8/22/2000	19.05	NP	-	15.76	NA
	11/27/2000	19.31	NP	-	15.50	NA
	2/20/2001	19.22	NP	-	15.59	NA
	5/15/2001	19.26	NP	-	15.55	NA
	9/18/2001	19.63	NP	-	15.18	NA
	12/20/2001	18.03	NP	-	16.78	NA
	3/13/2002	18.12	NP	-	16.69	NA
	6/24/2002	18.84	NP	-	15.97	NA
	9/26/2002	19.21	NP	-	15.60	NA
	12/20/2002	18.79	NP	-	16.02	NA
	3/17/2003	18.14	NP	-	16.67	NA
	6/26/2003	18.87	NP	-	15.94	NA
	9/24/2003	19.20	NP	-	15.61	NA
	12/30/2003	18.22	NP	-	16.59	NA
	3/29/2004	18.30	NP		16.51	NA
	6/29/2004	18.93	NP	-	15.88	NA
	9/27/2004	19.19	NP	-	15.62	NA
	12/14/2004	18.89	NP	-	15.92	NA
	3/7/2005	19.14	NP	-	15.67	NA
	6/20/2005	18.88	NP	-	15.93	NA
	9/19/2005	19.24	NP	-	15.57	NA
	12/12/2005	18.50	NP	-	16.31	NA
	3/13/2006	17.75	NP	-	17.06	NA
	6/26/2006	18.43	NP	-	16.38	NA
	9/25/2006	18.87	NP	-	15.94	NA
	12/11/2006	18.04	NP	-	16.77	NA
	3/19/2007	18.02	NP	-	16.79	NA
(34.80)	6/18/2007	18.76	NP	-	16.04	NA
	9/17/2007	19.18	NP	-	15.62	NA
	12/17/2007	18.36	NP	-	16.44	NA
	1/22/2008	17.97	NP	-	16.83	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	18.34	NP	-	16.46	NA
B-4	2/14/2000	18.25	17.59	0.66	16.98	3
(34.70)	5/22/2000	17.80	NP	-	16.90	0.5
	8/22/2000	18.22	18.21	0.01	16.49	NA
	11/27/2000	18.55	NP	-	16.15	NA
	2/20/2001	18.49	18.48	0.01	16.22	NA
	5/15/2001	18.47	18.46	0.01	16.24	0.1
	9/18/2001	18.75	18.74	0.01	15.96	0.1
	12/20/2001	18.05	NP	-	16.65	NA
	3/13/2002	17.69	NP	-	17.01	0.1
	6/24/2002	18.10	NP	-	16.60	NA
	9/26/2002	18.43	NP	-	16.27	NA
	12/20/2002	18.43	NP	-	16.27	NA
	3/17/2003	18.14	17.81	0.33	16.82	0.01
	6/26/2003	18.08	18.05	0.03	16.64	0.04
	9/24/2003	18.45	18.44	0.01	16.26	NA
	12/30/2003	18.05	NP	-	16.65	NA
	3/29/2004	17.90	17.70	0.20	16.96	0.1
	6/29/2004	18.61	sheen	-	16.09	NA
	9/27/2004	18.46	NP	-	16.24	NA
	12/14/2004	18.42	NP	-	16.28	NA
	3/7/2005	18.35	NP	-	16.35	NA
	6/20/2005	18.19	18.11	0.08	16.57	0.1
	9/19/2005	18.45	sheen	-	16.25	0.11
	12/12/2005	18.17	NP	-	16.53	0.2
	3/13/2006	17.43	17.24	0.19	17.42	0.1
	6/26/2006	17.79	NP	-	16.91	NA
	9/25/2006	18.28	NP	-	16.42	NA
	12/11/2006	--	17.87	-	-	0
	3/19/2007	17.51	NP	-	17.19	0.3
(34.69)	6/18/2007	18.00	NP	-	16.69	0.12
	9/17/2007	18.38	sheen	-	16.31	0.03
	12/17/2007	17.98	NP	-	16.71	0.01
	1/22/2008	17.53	NP	-	17.16	0
	3/24/2008	17.61	NP	-	17.08	0

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-5	2/14/2000	16.24	NP	-	18.59	NA
(34.83)	5/22/2000	16.63	NP	-	18.20	NA
	8/22/2000	16.98	sheen	-	17.85	NA
	11/27/2000	17.36	NP	-	17.47	NA
	2/20/2001	17.23	NP	-	17.60	NA
	5/15/2001	17.18	NP	-	17.65	NA
	9/18/2001	17.49	NP	-	17.34	NA
	12/20/2001	16.68	NP	-	18.15	NA
	3/13/2002	16.28	NP	-	18.55	NA
	6/24/2002	16.88	NP	-	17.95	NA
	9/26/2002	17.28	NP	-	17.55	NA
	12/20/2002	17.43	NP	-	17.40	NA
	3/17/2003	16.51	NP	-	18.32	NA
	6/26/2003	16.71	NP	-	18.12	NA
	9/24/2003	17.33	NP	-	17.50	NA
	12/30/2003	16.86	NP	-	17.97	NA
	3/29/2004	16.33	NP	-	18.50	NA
	6/29/2004	16.99	NP	-	17.84	NA
	9/27/2004	17.35	NP	-	17.48	NA
	12/14/2004	17.25	NP	-	17.58	NA
	3/7/2005	17.15	NP	-	17.68	NA
	6/20/2005	16.77	NP	-	18.06	NA
	9/19/2005	17.25	NP	-	17.58	NA
	12/12/2005	16.75	NP	-	18.08	NA
	3/13/2006	15.90	NP	-	18.93	NA
	6/26/2006	16.58	NP	-	18.25	NA
	9/25/2006	17.10	NP	-	17.73	NA
	12/11/2006	16.50	NP	-	18.33	NA
	3/19/2007	15.90	NP	-	18.93	NA
(34.83)	6/18/2007	16.66	NP	-	18.17	NA
	9/17/2007	17.23	NP	-	17.60	NA
	12/17/2007	16.71	16.68	0.03	18.14	0.02
	1/22/2008	15.97	NP	-	18.86	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	16.20	NP	-	18.63	NA
B-6	2/14/2000	16.53	NP	-	18.96	NA
(35.49)	5/22/2000	16.95	NP	-	18.54	NA
	8/22/2000	17.40	NP	-	18.09	NA
	11/27/2000	17.80	NP	-	17.69	NA
	2/20/2001	17.64	NP	-	17.85	NA
	5/15/2001	17.56	NP	-	17.93	NA
	9/18/2001	17.95	NP	-	17.54	NA
	12/20/2001	17.02	NP	-	18.47	NA
	3/13/2002	16.57	NP	-	18.92	NA
	6/24/2002	17.22	NP	-	18.27	NA
	9/26/2002	17.71	NP	-	17.78	NA
	12/20/2002	17.80	NP	-	17.69	NA
	3/17/2003	16.81	NP	-	18.68	NA
	6/26/2003	17.04	NP	-	18.45	NA
	9/24/2003	17.73	NP	-	17.76	NA
	12/30/2003	17.21	NP	-	18.28	NA
	3/29/2004	16.61	NP	-	18.88	NA
	6/29/2004	17.35	NP	-	18.14	NA
	9/27/2004	17.80	NP	-	17.69	NA
	12/14/2004	17.66	NP	-	17.83	NA
	3/7/2005	17.50	NP	-	17.99	NA
	6/20/2005	17.12	NP	-	18.37	NA
	9/19/2005	17.66	NP	-	17.83	NA
	12/12/2005	17.12	NP	-	18.37	NA
	3/13/2006	16.14	NP	-	19.35	NA
	6/26/2006	16.90	NP	-	18.59	NA
	9/25/2006	17.50	NP	-	17.99	NA
	12/11/2006	16.82	NP	-	18.67	NA
	3/19/2007	16.23	NP	-	19.26	NA
(35.46)	6/18/2007	17.01	NP	-	18.45	NA
	9/17/2007	17.63	NP	-	17.83	NA
	12/17/2007	16.68	NP	-	18.78	NA
	1/22/2008	16.22	NP	-	19.24	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	16.49	NP	-	18.97	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-16	2/14/2000	16.84	NP	-	18.98	NA
(35.82)	5/22/2000	17.27	NP	-	18.55	NA
	8/22/2000	17.76	NP	-	18.06	NA
	11/27/2000	18.16	NP	-	17.66	NA
	2/20/2001	17.98	NP	-	17.84	NA
	5/15/2001	18.04	NP	-	17.78	NA
	9/18/2001	18.44	NP	-	17.38	NA
	12/20/2001	17.43	NP	-	18.39	NA
	3/13/2002	17.02	NP	-	18.80	NA
	6/24/2002	17.67	NP	-	18.15	NA
	9/26/2002	18.18	NP	-	17.64	NA
	12/20/2002	18.31	NP	-	17.51	NA
	3/17/2003	17.24	NP	-	18.58	NA
	6/26/2003	17.46	NP	-	18.36	NA
	9/24/2003	18.21	NP	-	17.61	NA
	12/30/2003	17.67	NP	-	18.15	NA
	3/29/2004	17.06	NP	-	18.76	NA
	6/29/2004	17.80	NP	-	18.02	NA
	9/27/2004	18.28	NP	-	17.54	NA
	12/14/2004	18.14	NP	-	17.68	NA
	3/7/2005	17.95	NP	-	17.87	NA
	6/20/2005	17.58	NP	-	18.24	NA
	9/19/2005	18.16	NP	-	17.66	NA
	12/12/2005	17.58	NP	-	18.24	NA
	3/13/2006	16.59	NP	-	19.23	NA
	6/26/2006	17.33	NP	-	18.49	NA
	9/25/2006	17.94	NP	-	17.88	NA
	12/11/2006	17.18	NP	-	18.64	NA
	3/19/2007	16.65	NP	-	19.17	NA
(35.93)	6/18/2007	17.38	NP	-	18.55	NA
	9/17/2007	18.08	NP	-	17.85	NA
	12/17/2007	17.20	NP	-	18.73	NA
	1/22/2008	16.65	NP	-	19.28	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	16.90	NP	-	19.03	NA
B-17	2/14/2000	16.83	NP	-	18.78	NA
(35.61)	5/22/2000	17.20	NP	-	18.41	NA
	8/22/2000	17.76	NP	-	17.85	NA
	11/27/2000	18.05	NP	-	17.56	NA
	2/20/2001	17.88	NP	-	17.73	NA
	5/15/2001	17.84	NP	-	17.77	NA
	9/18/2001	18.21	NP	-	17.40	NA
	12/20/2001	17.31	NP	-	18.30	NA
	3/13/2002	16.91	NP	-	18.70	NA
	6/24/2002	17.50	NP	-	18.11	NA
	9/26/2002	17.97	NP	-	17.64	NA
	12/20/2002	18.07	NP	-	17.54	NA
	3/17/2003	17.13	NP	-	18.48	NA
	6/26/2003	17.33	NP	-	18.28	NA
	9/24/2003	18.00	NP	-	17.61	NA
	12/30/2003	17.48	NP	-	18.13	NA
	3/29/2004	16.39	NP	-	19.22	NA
	6/29/2004	17.62	NP	-	17.99	NA
	9/27/2004	18.03	NP	-	17.58	NA
	12/14/2004	17.95	NP	-	17.66	NA
	3/7/2005	17.81	NP	-	17.80	NA
	6/20/2005	17.40	NP	-	18.21	NA
	9/19/2005	17.93	NP	-	17.68	NA
	12/12/2005	17.42	NP	-	18.19	NA
	3/13/2006	16.50	NP	-	19.11	NA
	6/26/2006	17.17	NP	-	18.44	NA
	9/25/2006	17.74	NP	-	17.87	NA
	12/11/2006	17.08	NP	-	18.53	NA
	3/19/2007	16.56	NP	-	19.05	NA
(35.61)	6/18/2007	17.30	NP	-	18.31	NA
	9/17/2007	17.86	NP	-	17.75	NA
	12/17/2007	17.24	NP	-	18.37	NA
	1/22/2008	16.57	NP	-	19.04	NA
	3/24/2008	-	-	-	-	-
	4/16/2008	16.80	NP	-	18.81	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-18	2/14/2000	18.55	NP	-	16.94	NA
(35.49)	5/22/2000	18.66	NP	-	16.83	NA
	8/22/2000	19.11	NP	-	16.38	NA
	11/27/2000	19.43	NP	-	16.06	NA
	2/20/2001	19.44	NP	-	16.05	NA
	5/15/2001	19.43	NP	-	16.06	NA
	9/18/2001	19.68	NP	-	15.81	NA
	12/20/2001	---Unable to Locate---				
	3/13/2002	---Inaccessible - Covered with Sand---				
	6/24/2002	---Inaccessible - Covered with Sand---				
	9/26/2002	---TOC broken, bentonite blocking well---				
(36.00)	12/20/2002	3.88	NP	-	32.12	NA
	3/17/2003	Unable to access				
	6/26/2003	Well blocked ~5 feet bgs				
	9/24/2003	Well blocked ~5 feet bgs				
	12/30/2003	Well blocked ~5 feet bgs				
	3/29/2004	Well blocked ~5 feet bgs				
	6/29/2004	Abandoned				
B-22	2/14/2000	17.91	NP	-	17.92	1
(35.83)	5/22/2000	18.00	NP	-	17.83	NA
	8/22/2000	18.66	18.65	0.01	17.18	NA
	11/27/2000	19.02	sheen	-	16.81	0.1
	2/20/2001	19.02	18.99	0.03	16.83	NA
	5/15/2001	19.01	19.00	0.01	16.83	0.1
	9/18/2001	------ Well Has Been Buried ------				
	12/20/2001	---Well Damaged During Construction Activities---				
	3/13/2002	---Well Damaged During Construction Activities---				
	6/24/2002	---Well Damaged During Construction Activities---				
	9/26/2002	---Well Damaged During Construction Activities---				
		---- Well Abandoned December 10, 2002 ----				

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-22A	12/20/2002	19.10	NP	-	15.77	NA
(34.87)	3/17/2003	18.33	18.30	0.03	16.54	0.01
	6/26/2003	18.72	18.69	0.03	16.15	0.05
	9/24/2003	19.08	19.05	0.03	15.79	0.10
	12/30/2003	18.52	NP	-	16.35	NA
	3/29/2004	18.25	18.25	sheen	16.62	NA
	6/29/2004	18.78	NP	-	16.09	NA
	9/27/2004	19.07	NP	-	15.80	NA
	12/14/2004	18.95	NP	-	15.92	NA
	3/7/2005	19.08	NP	-	15.79	NA
	6/20/2005	18.75	NP	-	16.12	NA
	9/19/2005	19.07	NP	-	15.80	NA
	12/12/2005	18.55	NP	-	16.32	NA
	3/13/2006	17.66	NP	-	17.21	NA
	6/26/2006	18.12	NP	-	16.75	NA
	9/25/2006	18.43	NP	-	16.44	NA
	12/11/2006	18.49	NP	-	16.38	NA
	3/19/2007	17.97	NP	-	16.90	NA
(34.85)	6/18/2007	18.59	NP	-	16.26	NA
	9/17/2007	19.02	NP	-	15.83	NA
	12/17/2007	18.58	NP	-	16.27	NA
	3/24/2008	18.16	NP	-	16.69	NA
B-25	2/14/2000	18.39	NP	-	17.39	NA
(35.78)	5/22/2000	17.67	NP	-	18.11	NA
	8/22/2000	19.09	NP	-	16.69	NA
	11/27/2000	19.51	NP	-	16.27	NA
	2/20/2001	18.79	NP	-	16.99	NA
	5/15/2001	19.54	NP	-	16.24	NA
	9/18/2001	19.86	NP	-	15.92	NA
	12/20/2001	—Could Not Access—				
	3/13/2002	18.52	NP	-	17.26	NA
	6/24/2002	18.89	NP	-	16.89	NA
	9/26/2002	19.33	NP	-	16.45	NA
	12/20/2002	19.43	NP	-	16.35	NA
	3/17/2003	18.65	NP	-	17.13	NA
	6/26/2003	18.82	NP	-	16.96	NA
	9/24/2003	19.24	NP	-	16.54	NA
	12/30/2003	18.95	NP	-	16.83	NA
	3/29/2004	18.42	NP	-	17.36	NA
	6/29/2004	—Could Not Access—				
	9/27/2004	19.25	NP	-	16.53	NA
	12/14/2004	19.21	NP	-	16.57	NA
	3/7/2005	21.57	NP	-	14.21	NA
	6/20/2005	18.89	NP	-	16.89	NA
	9/19/2005	19.26	NP	-	16.52	NA
	12/12/2005	18.89	NP	-	16.89	NA
	3/13/2006	-	-	-	-	-
	6/26/2006	18.27	NP	-	17.51	NA
	9/25/2006	18.75	NP	-	17.03	NA
	12/11/2006	18.68	NP	-	17.10	NA
	3/19/2007	18.00	NP	-	17.78	NA
(35.76)	6/18/2007	18.55	NP	-	17.21	NA
	9/17/2007	19.10	NP	-	16.66	NA
	12/17/2007	18.79	NP	-	16.97	NA
	3/24/2008	—Could Not Access—				

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-27	2/14/2000	17.61	NP	-	18.13	NA
(35.74)	5/22/2000	17.76	NP	-	17.98	NA
	8/22/2000	18.27	NP	-	17.47	NA
	11/27/2000	18.71	NP	-	17.03	0.1
	2/20/2001	18.66	18.65	0.01	17.09	0.2
	5/15/2001	18.74	18.66	0.08	17.06	0.2
	9/18/2001	18.99	NP	-	16.75	0.3
	12/20/2001	18.66	NP	-	17.08	0.2
	3/13/2002	17.76	NP	-	17.98	0.02
	6/24/2002	18.09	NP	-	17.65	NA
	9/26/2002	18.50	NP	-	17.24	NA
	12/20/2002	18.65	18.68	0.03	17.11	0.1
	3/17/2003	17.91	17.90	0.01	17.84	0.01
	6/26/2003	17.96	NP	-	17.78	NA
	9/24/2003	18.51	NP	-	17.23	NA
	12/30/2003	18.21	NP	-	17.53	NA
	3/29/2004	17.72	17.31	0.41	18.35	0.1
	6/29/2004	18.03	NP	-	17.71	NA
	9/27/2004	18.53	NP	-	17.21	NA
	12/14/2004	18.50	NP	-	17.24	NA
	3/7/2005	18.34	NP	-	17.40	NA
	6/20/2005	18.03	NP	-	17.71	NA
	9/19/2005	18.48	NP	-	17.26	NA
	12/12/2005	18.13	NP	-	17.61	NA
	3/13/2006	17.20	16.70	0.50	18.94	0.2
	6/26/2006	17.44	NP	-	18.30	NA
	9/25/2006	18.22	NP	-	17.52	NA
	12/11/2006	17.64	17.61	0.03	17.92	0
	3/19/2007	17.14	NP	-	18.60	0
	6/18/2007	17.70	NP	-	18.04	0.01
	9/17/2007	18.30	NP	-	17.44	0.02
	12/17/2007	17.96	NP	-	17.78	0.01
	1/22/2008	17.00	NP	-	18.74	0
	3/24/2008	17.16	NP	-	18.59	0
B-35	2/14/2000	15.71	NP	-	17.85	NA
(33.56)	5/22/2000	16.00	NP	-	17.56	NA
	8/22/2000	16.36	NP	-	17.20	NA
	11/27/2000	16.71	NP	-	16.85	NA
	2/20/2001	16.65	NP	-	16.91	NA
	5/15/2001	15.56	NP	-	18.00	NA
	9/18/2001	16.90	NP	-	16.66	NA
	12/20/2001	15.95	NP	-	17.61	NA
	3/13/2002	15.70	NP	-	17.86	NA
	6/24/2002	16.22	NP	-	17.34	NA
	9/26/2002	16.64	NP	-	16.92	NA
	12/20/2002	16.48	NP	-	17.08	NA
	3/17/2003	15.91	NP	-	17.65	NA
	6/26/2003	16.13	NP	-	17.43	NA
	9/24/2003	16.67	NP	-	16.89	NA
	12/30/2003	16.04	NP	-	17.52	NA
	3/29/2004	15.81	NP	-	17.75	NA
	6/29/2004	16.33	NP	-	17.23	NA
	9/27/2004	16.61	NP	-	16.95	NA
	12/14/2004	16.52	NP	-	17.04	NA
	3/7/2005	16.52	NP	-	17.04	NA
	6/20/2005	16.17	NP	-	17.39	NA
	9/19/2005	16.63	NP	-	16.93	NA
	12/12/2005	16.08	NP	-	17.48	NA
	3/13/2006	15.42	NP	-	18.14	NA
	6/26/2006	15.95	NP	-	17.61	NA
	9/25/2006	16.30	NP	-	17.26	NA
	12/11/2006	15.90	sheen	-	17.66	NA
	3/19/2007	15.52	NP	-	18.04	NA
(33.54)	6/18/2007	16.04	NP	-	17.50	NA
	9/17/2007	16.53	NP	-	17.01	NA
	12/17/2007	15.59	NP	-	17.95	NA
	1/22/2008	15.51	NP	-	18.03	NA
	3/24/2008	15.68	NP	-	17.86	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-36	2/14/2000	14.33	NP	-	16.69	NA
(31.02)	5/22/2000	14.64	NP	-	16.38	NA
	8/22/2000	15.28	NP	-	15.74	NA
	11/27/2000	15.55	NP	-	15.47	NA
	2/20/2001	15.48	NP	-	15.54	NA
	5/15/2001	15.47	NP	-	15.55	NA
	9/18/2001	15.83	NP	-	15.19	NA
	12/20/2001	14.17	NP	-	16.85	NA
	3/13/2002	14.31	NP	-	16.71	NA
	6/24/2002	15.06	NP	-	15.96	NA
	9/26/2002	15.43	NP	-	15.59	NA
	12/20/2002	14.98	NP	-	16.04	NA
	3/17/2003	14.35	NP	-	16.67	NA
	6/26/2003	15.09	NP	-	15.93	NA
	9/24/2003	15.44	NP	-	15.58	NA
	12/30/2003	14.41	NP	-	16.61	NA
	3/29/2004	14.53	NP	-	16.49	NA
	6/29/2004	15.19	NP	-	15.83	NA
	9/27/2004	15.41	NP	-	15.61	NA
	12/14/2004	15.10	NP	-	15.92	NA
	3/7/2005	15.39	NP	-	15.63	NA
	6/20/2005	15.08	NP	-	15.94	NA
	9/19/2005	15.45	NP	-	15.57	NA
	12/12/2005	14.68	NP	-	16.34	NA
	3/13/2006	13.97	NP	-	17.05	NA
	6/26/2006	14.64	NP	-	16.38	NA
	9/25/2006	15.12	NP	-	15.90	NA
	12/11/2007	14.46	NP	-	16.56	NA
	3/19/2007	13.98	NP	-	17.04	NA
(31.00)	6/18/2007	15.04	NP	-	15.96	NA
	9/17/2007	15.39	NP	-	15.61	NA
	12/17/2007	15.56	NP	-	15.44	NA
	3/24/2008	14.57	NP	-	16.43	NA
B-37	2/14/2000	16.96	NP	-	16.87	NA
(35.83)	5/22/2000	19.05	NP	-	16.78	NA
	8/22/2000	19.77	NP	-	16.06	NA
	11/27/2000	20.18	NP	-	15.65	NA
	2/20/2001	22.05	NP	-	13.78	NA
	5/15/2001	20.16	NP	-	15.67	NA
	9/18/2001	——— Well Has Been Buried ———				
	12/20/2001	---Could Not Locate---				
	3/13/2002	19.09	NP	-	16.74	NA
	6/24/2002	19.58	NP	-	16.25	NA
	9/26/2002	20.00	NP	-	15.83	NA
	12/20/2002	20.08	NP	-	15.75	NA
	3/17/2003	19.17	NP	-	16.66	NA
	6/26/2003	19.52	NP	-	16.31	NA
	9/24/2003	19.88	NP	-	15.95	NA
	12/31/2003	---Well Covered with Ice---				
	3/29/2004	19.07	NP	-	16.76	NA
	6/29/2004	19.96	NP	-	15.87	NA
	9/27/2004	19.88	NP	-	15.95	NA
	12/14/2004	19.76	NP	-	16.07	NA
	3/7/2005	20.92	NP	-	14.91	NA
	6/20/2005	19.57	NP	-	16.26	NA
	9/19/2005	19.89	NP	-	15.94	NA
	12/12/2005	19.40	NP	-	16.43	NA
	3/13/2006	18.42	NP	-	17.41	NA
	6/26/2006	—Unable to locate well; under sand—				
	9/25/2006	19.08	NP	-	16.75	NA
	12/11/2006	NM	NM	NM	NM	NA
	3/19/2007	18.69	NP	-	17.14	NA
(35.79)	6/18/2007	19.28	NP	-	16.51	NA
	9/17/2007	19.77	NP	-	16.02	NA
	12/17/2007	19.40	NP	-	16.39	NA
	1/22/2008	18.64	NP	-	17.15	NA
	3/24/2008	18.81	NP	-	16.98	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-38	9/26/2002	20.91	20.69	0.22	15.74	NA
(36.65)	12/20/2002	20.53	20.75	0.22	16.12	NA
	3/17/2003	19.71	NP	-	16.94	NA
	6/26/2003	20.10	NP	-	16.55	NA
	9/24/2003	Dry at 20.41 feet bgs				
	12/30/2003	19.93	NP	-	16.72	NA
	3/29/2004	dry	NP	-	-	NA
	6/29/2004	Dry at 20.23 feet bgs				
	9/27/2004	dry	NP	-	-	NA
	6/20/2005	20.10	NP	-	16.55	NA
	9/19/2005	20.22	NP	-	16.43	NA
	12/12/2005	19.91	NP	-	16.74	NA
	3/13/2006	18.90	NP	-	17.75	NA
	6/26/2006	dry	NP	-	-	NA
	9/25/2006	19.60	NP	-	17.05	NA
	12/11/2006	19.71	NP	-	16.94	NA
	3/19/2007	19.26	NP	-	17.39	NA
(36.07)	6/18/2007	Dry	NP	-	-	NA
	9/17/2007	Dry	NP	-	-	NA
	12/17/2007	19.85	NP	-	16.22	NA
	3/24/2008	19.49	NP	-	16.58	NA
B-40	2/14/2000	17.34	NP	-	17.36	1
(34.70)	5/22/2000	18.28	17.48	0.80	17.06	5.5
	8/22/2000	19.65	18.21	1.44	16.20	0.6
	11/27/2000	20.03	18.55	1.48	15.85	1.25
	2/20/2001	19.85	18.54	1.31	15.90	1.3
	5/15/2001	19.88	18.58	1.30	15.86	0.85
	9/18/2001	20.90	19.07	1.83	15.26	1
	12/20/2001	18.35	17.36	0.99	17.14	0.65
	3/13/2002	17.51	17.32	0.19	17.34	0.85
	6/24/2002	18.36	18.24	0.12	16.44	0.30
	9/26/2002	19.22	18.53	0.69	16.03	0.46
	12/20/2002	18.27	18.81	0.54	16.86	0.57
	3/17/2003	18.12	17.45	0.67	17.12	0.30
	6/26/2003	18.47	18.30	0.17	16.37	0.10
	9/24/2003	18.61	18.51	0.10	16.17	0.10
	12/30/2003	17.64	17.58	0.06	17.11	0.10
	3/29/2004	17.70	17.69	0.01	17.01	0.10
	6/29/2004	18.58	sheen	-	16.05	NA
	9/27/2004	18.76	sheen	-	15.87	0.10
	12/14/2004	18.18	18.17	0.01	16.53	0.20
	3/7/2005	18.35	sheen	-	16.35	0.70
	6/20/2005	18.37	18.36	0.01	16.34	0.20
	9/19/2005	18.55	sheen	-	16.15	0.12
	12/12/2005	17.71	16.81	0.90	17.71	0.30
	3/13/2006	17.14	NP	-	17.56	0.00
	6/26/2006	17.76	NP	-	16.94	0.00
	9/25/2006	18.01	NP	-	16.69	0.11
	12/11/2006	18.22	17.95	0.27	16.70	0.20
	3/19/2007	15.57	NP	-	19.13	0.30
(33.68)	6/18/2007	18.40	NP	-	15.28	0.21
	9/17/2007	18.75	sheen	-	14.93	0.11
	12/17/2007	17.98	17.94	0.04	15.73	0.00
	1/22/2008	17.54	NP	-	16.14	0.10
	3/24/2008	17.85	NP	-	15.83	0.10
B-41	2/14/2000	17.73	NP	-	16.90	NA
(34.63)	5/22/2000	18.89	NP	-	15.74	NA
	8/22/2000	18.44	NP	-	16.19	NA
	11/27/2000	18.81	NP	-	15.82	NA
	2/20/2001	18.78	sheen	-	15.85	NA
	5/15/2001	18.78	NP	-	15.85	NA
	9/18/2001	Well Has Been Buried				
	12/20/2001	16.86	NP	-	17.77	NA
	3/13/2002	20.07	20.03	0.04	14.59	NA
	6/24/2002	20.54	20.52	0.02	14.11	NA
	9/26/2002	18.75	18.72	0.03	15.90	NA
	Well Abandoned December 9, 2002					

TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
B-41A	12/20/2002	19.13	NP	-	16.00	NA
(35.13)	3/17/2003	18.40	NP	-	16.73	NA
	6/26/2003	18.73	NP	-	16.40	NA
	9/24/2003	19.10	NP	-	16.03	NA
	12/30/2003	18.61	NP	-	16.52	NA
	3/29/2004	18.32	NP	-	16.81	NA
	6/29/2004	18.82	NP	-	16.31	NA
	9/27/2004	19.11	NP	-	16.02	NA
	12/14/2004	19.00	NP	-	16.13	NA
	3/7/2005	19.07	NP	-	16.06	NA
	6/20/2005	18.80	NP	-	16.33	NA
	9/19/2005	19.13	NP	-	16.00	NA
	12/12/2005	18.65	NP	-	16.48	NA
	3/13/2006	17.71	NP	-	17.42	NA
	6/26/2006	18.25	NP	-	16.88	NA
	9/25/2006	18.60	NP	-	16.53	NA
	12/11/2006	18.54	NP	-	16.59	NA
	3/19/2007	18.04	NP	-	17.09	NA
(35.08)	6/18/2007	18.62	NP	-	16.46	NA
	9/17/2007	19.06	NP	-	16.02	NA
	12/17/2007	18.65	NP	-	16.43	NA
	1/22/2008	18.14	NP	-	16.94	NA
	3/24/2008	18.20	NP	-	16.88	NA
DW-1	2/14/2000	18.87	NP	-	17.06	NA
(35.93)	5/22/2000	18.94	NP	-	16.99	NA
	8/22/2000	19.51	NP	-	16.42	NA
	11/27/2000	19.88	NP	-	16.05	NA
	2/20/2001	19.83	NP	-	16.10	NA
	5/15/2001	19.87	NP	-	16.06	NA
	9/18/2001	20.19	NP	-	15.74	NA
	12/20/2001	19.56	NP	-	16.37	NA
	3/13/2002	18.96	NP	-	16.97	NA
	6/24/2002	19.38	NP	-	16.55	NA
	9/26/2002	19.77	NP	-	16.16	NA
	12/20/2002	19.77	NP	-	16.16	NA
	3/17/2003	18.85	NP	-	17.08	NA
	6/26/2003	19.33	NP	-	16.60	NA
	9/24/2003	19.66	NP	-	16.27	NA
	12/30/2003	19.27	NP	-	16.66	NA
	3/29/2004	18.87	NP	-	17.06	NA
	6/29/2004	19.39	NP	-	16.54	NA
	9/27/2004	19.69	NP	-	16.24	NA
	12/14/2004	19.65	NP	-	16.28	NA
	3/7/2005	19.66	NP	-	16.27	NA
	6/20/2005	19.41	NP	-	16.52	NA
	9/19/2005	19.71	NP	-	16.22	NA
	12/12/2005	19.30	NP	-	16.63	NA
	3/13/2006	18.30	NP	-	17.63	NA
	6/26/2006	18.85	NP	-	17.08	NA
	9/25/2006	19.15	NP	-	16.78	NA
	12/11/2006	19.12	NP	-	16.81	NA
	3/19/2007	18.62	NP	-	17.31	NA
(35.90)	6/18/2007	19.05	NP	-	16.85	NA
	9/17/2007	19.60	NP	-	16.30	NA
	12/17/2007	19.22	NP	-	16.68	NA
	3/24/2008	18.76	NP	-	17.14	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
DW-2	2/14/2000	18.91	NP	-	17.14	NA
(36.05)	5/22/2000	19.03	NP	-	17.02	NA
	8/22/2000	19.62	NP	-	16.43	NA
	11/27/2000	10.01	NP	-	26.04	NA
	2/20/2001	20.02	NP	-	16.03	NA
	5/15/2001	20.00	NP	-	16.05	NA
	9/18/2001	20.35	NP	-	15.70	NA
	12/20/2001	19.62	NP	-	16.43	NA
	3/13/2002	19.06	NP	-	16.99	NA
	6/24/2002	19.44	NP	-	16.61	NA
	9/26/2002	19.65	NP	-	16.20	NA
	12/20/2002	19.68	NP	-	16.17	NA
	3/17/2003	18.97	NP	-	17.08	NA
	6/26/2003	19.40	NP	-	16.65	NA
	9/24/2003	19.78	NP	-	16.27	NA
	12/30/2003	19.37	NP	-	16.68	NA
	3/29/2004	18.97	NP	-	17.08	NA
	6/29/2004	19.46	NP	-	16.59	NA
	9/27/2004	19.85	NP	-	16.20	NA
	12/14/2004	19.75	NP	-	16.30	NA
	3/7/2005	19.74	NP	-	16.31	NA
	6/20/2005	19.49	NP	-	16.56	NA
	9/19/2005	19.81	NP	-	16.24	NA
	12/12/2005	19.41	NP	-	16.64	NA
	3/13/2006	18.40	NP	-	17.65	NA
	6/26/2006	18.89	NP	-	17.16	NA
	9/25/2006	19.25	NP	-	16.80	NA
	12/11/2006	19.23	19.22	0.01	16.83	NA
	3/19/2007	18.69	NP	-	17.36	NA
(36.04)	6/18/2007	19.15	NP	-	16.89	NA
	9/17/2007	19.69	NP	-	16.35	NA
	12/17/2007	19.33	NP	-	16.71	NA
	3/24/2008	18.84	NP	-	17.20	NA
EW-3	1/22/2008	10.13	NP	-	4.89	NA
(15.02)						
EW-4	1/22/2008	12.15	NP	-	5.48	NA
(17.63)						
EX-39	2/14/2000	17.42	17.09	0.33	15.93	10
(33.09)	5/22/2000	17.35	17.29	0.06	15.79	5
	8/22/2000	17.98	17.95	0.03	15.13	0.1
	11/27/2000	18.38	sheen	-	14.71	0.1
	2/20/2001	18.49	18.36	0.13	14.70	2.55
	5/15/2001	19.29	18.19	1.10	14.68	5.0
	9/18/2001	——— Well Has Been Buried ———				
	12/20/2001	—Well Damaged During Construction Activities—				
	3/13/2002	—Well Damaged During Construction Activities—				
	6/24/2002	—Well Damaged During Construction Activities—				
	9/26/2002	—Well Damaged During Construction Activities—				
		—— Well Abandoned December 9, 2002 ——				
EX-39B	12/20/2002	18.65	18.67	0.02	15.80	0.10
(34.63)	3/17/2003	18.15	18.13	0.02	16.50	0.10
	6/26/2003	18.71	18.71	sheen	15.92	0.05
	9/24/2003	18.98	NP	-	15.65	NA
	12/30/2003	18.30	sheen	sheen	16.33	NA
	3/29/2004	18.12	NP	-	16.51	NA
	6/29/2004	18.37	NP	-	16.26	NA
	9/27/2004	18.83	NP	-	15.80	NA
	12/14/2004	21.18	NP	-	13.45	NA
	3/7/2005	18.97	sheen	-	15.66	0.20
	6/20/2005	16.85	NP	-	17.78	0.10
	9/19/2005	16.65	NP	-	17.98	NA
	12/12/2005	16.67	NP	-	17.96	NA
	3/13/2006	17.20	sheen	-	17.43	0.00
	6/26/2006	18.00	sheen	-	16.63	NA
	9/25/2006	18.68	sheen	-	15.95	NA
	12/11/2006	**	18.33	-	-	NA
	3/19/2007	NM	NM	NM	NM	NA
(34.46)	6/18/2007	NM	NM	NM	NM	NA
	9/17/2007	NM	NM	NM	NM	NA
	12/17/2007	NM	NM	NM	NM	NA
	1/22/2008	19.86	NP	-	14.60	NA
	3/24/2008	NM	NM	NM	NM	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
IT-E	2/14/2000	19.01	NP	-	17.06	NA
(36.07)	5/22/2000	19.03	NP	-	17.04	NA
	8/22/2000	19.93	NP	-	16.14	NA
	11/27/2000	20.12	NP	-	15.95	NA
	2/20/2001	20.11	NP	-	15.96	NA
	5/15/2001	20.29	NP	-	15.78	NA
	9/18/2001	20.65	NP	-	15.42	NA
	12/20/2001	—Could Not Access Well—				
	3/13/2002	19.31	NP	-	16.76	NA
	6/24/2002	19.80	NP	-	16.27	NA
	9/26/2002	20.18	NP	-	15.89	NA
	12/20/2002	19.95	NP	-	16.12	NA
	3/17/2003	19.25	NP	-	16.82	NA
	6/26/2003	19.68	NP	-	16.39	NA
	9/24/2003	20.01	NP	-	16.06	NA
	12/30/2003	19.45	NP	-	16.62	NA
	3/29/2004	19.28	NP	-	16.79	NA
	6/29/2004	19.79	NP	-	16.28	NA
	9/27/2004	20.05	NP	-	16.02	NA
	12/14/2004	20.00	NP	-	16.07	NA
	3/7/2005	20.11	NP	-	15.96	NA
	6/20/2005	19.74	NP	-	16.33	NA
	9/19/2005	20.18	NP	-	15.89	NA
	12/12/2005	19.65	NP	-	16.42	NA
	3/13/2006	18.62	NP	-	17.45	NA
	6/26/2006	19.30	NP	-	16.77	NA
	9/25/2006	19.65	NP	-	16.42	NA
	12/11/2006	19.47	NP	-	16.60	NA
	3/19/2007	18.97	NP	-	17.10	NA
(36.07)	6/18/2007	19.64	NP	-	16.43	NA
	9/17/2007	20.06	NP	-	16.01	NA
	12/17/2007	19.56	NP	-	16.51	NA
	3/24/2008	19.23	NP	-	16.84	NA
IT-W	2/14/2000	17.46	NP	-	18.53	NA
(35.99)	5/22/2000	17.75	NP	-	18.24	NA
	8/22/2000	18.17	NP	-	17.82	NA
	11/27/2000	18.51	NP	-	17.48	NA
	2/20/2001	18.43	NP	-	17.56	NA
	5/15/2001	18.33	NP	-	17.66	NA
	9/18/2001	18.68	NP	-	17.31	NA
	12/20/2001	17.76	NP	-	18.23	NA
	3/13/2002	17.50	NP	-	18.49	NA
	6/24/2002	17.98	NP	-	18.01	NA
	9/26/2002	18.40	NP	-	17.59	NA
	12/20/2002	18.28	NP	-	17.71	NA
	3/17/2003	17.70	NP	-	18.29	NA
	6/26/2003	17.94	NP	-	18.05	NA
	9/24/2003	18.42	NP	-	17.57	NA
	12/30/2003	17.81	NP	-	18.18	NA
	3/29/2004	17.61	NP	-	18.38	NA
	6/29/2004	18.10	NP	-	17.89	NA
	9/27/2004	18.45	NP	-	17.54	NA
	12/14/2004	18.37	NP	-	17.62	NA
	3/7/2005	18.31	NP	-	17.68	NA
	6/20/2005	18.02	NP	-	17.97	NA
	9/19/2005	18.46	NP	-	17.53	NA
	12/12/2005	17.94	NP	-	18.05	NA
	3/13/2006	17.22	NP	-	18.77	NA
	6/26/2006	17.78	NP	-	18.21	NA
	9/25/2006	18.18	NP	-	17.81	NA
	12/11/2006	17.68	NP	-	18.31	NA
	3/19/2007	17.35	NP	-	18.64	NA
(35.91)	6/18/2007	17.84	NP	-	18.07	NA
	9/17/2007	18.34	NP	-	17.57	NA
	12/17/2007	17.79	NP	-	18.12	NA
	3/24/2008	17.40	NP	-	18.51	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
P-1	2/14/2000	6.26	NP	-	11.98	NA
(18.24)	5/22/2000	6.89	NP	-	11.35	NA
	8/22/2000	10.51	NP	-	7.73	NA
	11/27/2000	8.62	NP	-	9.62	NA
	2/20/2001	9.14	NP	-	9.10	NA
	5/15/2001	9.17	NP	-	9.07	NA
	9/18/2001	9.97	NP	-	8.27	NA
	12/20/2001	6.01	NP	-	12.23	NA
	3/13/2002	7.07	NP	-	11.17	NA
	6/24/2002	5.89	NP	-	12.35	NA
	9/26/2002	9.13	NP	-	9.11	NA
	12/20/2002	7.87	NP	-	10.37	NA
	3/17/2003	8.38	NP	-	9.86	NA
	6/26/2003	Dry at 10 feet bgs				
	9/24/2003	9.62	NP	-	8.62	NA
	12/30/2003	7.21	NP	-	11.03	NA
	3/29/2004	8.17	NP	-	10.07	NA
	6/29/2004	7.89	NP	-	10.35	NA
	9/27/2004	9.19	NP	-	9.05	NA
	12/14/2004	6.79	NP	-	11.45	NA
	3/7/2005	9.16	NP	-	9.08	NA
	6/20/2005	8.80	NP	-	9.44	NA
	9/19/2005	Dry	NP	-	Dry	NA
	12/12/2005	8.38	NP	-	9.86	NA
	3/13/2006	8.56	NP	-	9.68	NA
	6/26/2006	7.60	NP	-	10.64	NA
	9/25/2006	9.03	NP	-	9.21	NA
	12/11/2006	7.40	NP	-	10.84	NA
	3/19/2007	7.54	NP	-	10.70	NA
(18.19)	6/18/2007	8.58	NP	-	9.61	NA
	9/17/2007	9.88	NP	-	8.31	NA
	Well Abandoned					
P-1A	12/17/2007	8.53	NP	-	9.95	NA
(18.48)	1/22/2008	8.12	NP	-	10.36	NA
	3/24/2008	7.81	NP	-	10.67	NA
P-2	2/14/2000	4.18	NP	-	13.67	NA
(17.85)	5/22/2000	4.66	NP	-	13.19	NA
	8/22/2000	5.27	NP	-	12.58	NA
	11/27/2000	5.28	NP	-	12.57	NA
	2/20/2001	5.32	NP	-	12.53	NA
	5/15/2001	5.18	NP	-	12.67	NA
	9/18/2001	5.50	NP	-	12.35	NA
	12/20/2001	4.21	NP	-	13.64	NA
	3/13/2002	4.40	NP	-	13.45	NA
	6/24/2002	3.26	NP	-	14.59	NA
	9/26/2002	5.74	NP	-	12.11	NA
	12/20/2002	5.93	NP	-	11.92	NA
	3/17/2003	4.84	NP	-	13.01	NA
	6/26/2003	5.31	NP	-	12.54	NA
	9/24/2003	5.70	NP	-	12.15	NA
	12/30/2003	4.66	NP	-	13.19	NA
	3/29/2004	4.97	NP	-	12.88	NA
	6/29/2004	5.35	NP	-	12.50	NA
	9/27/2004	5.95	NP	-	11.90	NA
	12/14/2004	4.98	NP	-	12.87	NA
	3/7/2005	5.52	NP	-	12.33	NA
	6/20/2005	5.55	NP	-	12.30	NA
	9/19/2005	5.89	NP	-	11.96	NA
	12/12/2005	5.04	NP	-	12.81	NA
	3/13/2006	4.39	NP	-	13.46	NA
	6/26/2006	4.90	NP	-	12.95	NA
	Well Abandoned					

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
RES-N	2/14/2000	20.90	NP	-	17.68	NA
(38.58)	5/22/2000	21.01	NP	-	17.57	NA
	8/22/2000	21.58	NP	-	17.00	NA
	11/27/2000	21.95	NP	-	16.63	NA
	2/20/2001	21.98	NP	-	16.60	NA
	5/15/2001	21.94	NP	-	16.64	NA
	9/18/2001	22.27	NP	-	16.31	NA
	12/20/2001	21.55	NP	-	17.03	NA
	3/13/2002	21.02	NP	-	17.56	NA
	6/24/2002	21.41	NP	-	17.17	NA
	9/26/2002	21.79	NP	-	16.79	NA
	12/20/2002	21.83	NP	-	16.75	NA
	6/26/2003	21.35	NP	-	17.23	NA
	9/24/2003	21.72	NP	-	16.86	NA
	12/30/2003	21.34	NP	-	17.24	NA
	3/29/2004	20.93	NP	-	17.65	NA
	9/27/2004	21.15	NP	-	17.43	NA
	12/14/2004	21.66	NP	-	16.92	NA
	3/7/2005	21.70	NP	-	16.88	NA
	6/20/2005	21.44	NP	-	17.14	NA
	9/19/2005	21.74	NP	-	16.84	NA
	12/12/2005	21.37	NP	-	17.21	NA
	3/13/2006	20.40	NP	-	18.18	NA
	6/26/2006	22.00	NP	-	16.58	NA
	9/25/2006	21.24	NP	-	17.34	NA
	12/11/2006	21.19	sheen	-	17.39	NA
	3/19/2007	19.66	NP	-	18.92	NA
(38.00)	6/18/2007	21.19	NP	-	16.81	NA
	9/17/2007	20.61	NP	-	17.39	NA
	12/17/2007	21.29	NP	-	16.71	NA
	3/24/2008	20.81	NP	-	17.19	NA
RES-O	2/14/2000	16.89	NP	-	19.14	NA
(36.03)	5/22/2000	17.29	NP	-	18.74	NA
	8/22/2000	17.86	NP	-	18.17	NA
	11/27/2000	18.38	NP	-	17.65	NA
	2/20/2001	NM	NP	-	-	NA
	5/15/2001	18.04	NP	-	17.99	NA
	9/18/2001	18.43	NP	-	17.60	NA
	12/20/2001	17.63	NP	-	18.40	NA
	3/13/2002	16.87	NP	-	19.16	NA
	6/24/2002	18.52	NP	-	17.51	NA
	9/26/2002	19.23	NP	-	16.80	NA
	12/20/2002	18.35	NP	-	17.68	NA
	3/17/2003	17.18	NP	-	18.85	NA
	6/26/2003	17.40	NP	-	18.63	NA
	9/24/2003	18.25	NP	-	17.78	NA
	12/30/2003	17.56	NP	-	18.47	NA
	3/29/2004	16.74	NP	-	19.29	NA
	6/29/2004	No Access To Well				
	9/27/2004	No Access To Well				
	12/14/2004	15.74	NP	-	20.29	NA
	3/7/2005	16.29	NP	-	19.74	NA
	6/20/2005	15.29	sheen	-	20.74	NA
	9/19/2005	15.92	NP	-	20.11	NA
	12/12/2005	15.28	NP	-	20.75	NA
	3/13/2006	14.05	NP	-	21.98	NA
	6/26/2006	14.99	NP	-	21.04	NA
	9/25/2006	15.97	NP	-	20.06	NA
	12/11/2006	15.02	NP	-	21.01	NA
	3/19/2007	14.26	NP	-	21.77	NA
(34.65)	6/18/2007	15.20	NP	-	19.45	NA
	9/17/2007	16.03	NP	-	18.62	NA
	12/17/2007	15.21	NP	-	19.44	NA
	3/24/2008	14.34	NP	-	20.31	NA
RW-1	1/22/2008	14.30	NP	-	7.44	NA
(21.74)	3/24/2008	NM	NM	NM	NM	NA
RW-2	1/22/2008	18.00	NP	-	9.45	NA
(27.45)	3/24/2008	NM	NM	NM	NM	NA
RW-3	1/22/2008	23.20	NP	-	10.82	NA
(34.02)	3/24/2008	NM	NM	NM	NM	NA
RW-4	1/22/2008	18.94	NP	-	14.87	NA
(33.81)	3/24/2008	NM	NM	NM	NM	NA
RW-5	1/22/2008	10.95	NP	-	7.38	NA
(18.33)	3/24/2008	12.45	12.35	0.10	5.96	NA
RW-6	1/22/2008	10.70	NP	-	7.99	NA
(18.69)	3/24/2008	NM	NM	NM	NM	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
U-2	2/14/2000	15.31	NP	-	19.71	NA
(35.02)	5/22/2000	15.41	NP	-	19.61	NA
	8/22/2000	16.13	NP	-	18.89	NA
	11/27/2000	16.81	NP	-	18.21	NA
	2/20/2001	16.81	NP	-	18.21	NA
	5/15/2001	16.82	NP	-	18.20	NA
	9/18/2001	17.20	NP	-	17.82	NA
	12/20/2001	16.99	NP	-	18.03	NA
	3/13/2002	15.59	NP	-	19.43	NA
	6/24/2002	15.80	NP	-	19.22	NA
	9/26/2002	16.50	NP	-	18.52	NA
	12/20/2002	16.95	NP	-	18.07	NA
	3/17/2003	15.77	NP	-	19.25	NA
	6/26/2003	15.89	NP	-	19.13	NA
	9/24/2003	16.42	NP	-	18.60	NA
	12/30/2003	16.28	NP	-	18.74	NA
	3/29/2004	15.06	NP	-	19.96	NA
	6/29/2004	15.79	NP	-	19.23	NA
	9/27/2004	16.30	NP	-	18.72	NA
	12/14/2004	16.59	NP	-	18.43	NA
	3/7/2005	17.52	NP	-	17.50	NA
	6/20/2005	15.82	NP	-	19.20	NA
	9/19/2005	16.42	NP	-	18.60	NA
	12/12/2005	15.96	NP	-	19.06	NA
	3/13/2006	14.22	NP	-	20.80	NA
	6/26/2006	15.02	NP	-	20.00	NA
	9/25/2006	16.07	NP	-	18.95	NA
	12/11/2006	15.67	NP	-	19.35	NA
	3/19/2007	14.63	NP	-	20.39	NA
	6/18/2007	15.33	NP	-	19.69	NA
	9/17/2007	16.18	NP	-	18.84	NA
	12/17/2007	15.88	NP	-	19.14	NA
	1/22/2008	14.94	NP	-	20.08	NA
	3/24/2008	14.75	NP	-	20.27	NA
U-3	2/14/2000	12.95	NP	-	22.30	NA
(35.25)	5/22/2000	13.55	NP	-	21.70	NA
	8/22/2000	14.19	NP	-	21.06	NA
	11/27/2000	15.68	NP	-	19.57	NA
	2/20/2001	14.38	NP	-	20.87	NA
	5/15/2001	14.26	NP	-	20.99	NA
	9/18/2001	14.89	NP	-	20.36	NA
	12/20/2001	13.22	NP	-	22.03	NA
	3/13/2002	13.01	NP	-	22.24	NA
	6/24/2002	13.57	NP	-	21.68	NA
	9/26/2002	14.39	NP	-	20.86	NA
	12/20/2002	14.23	NP	-	21.02	NA
	3/17/2003	13.97	NP	-	21.28	NA
	6/26/2003	13.56	NP	-	21.69	NA
	9/24/2003	14.54	NP	-	20.71	NA
	12/30/2003	13.41	NP	-	21.84	NA
	3/29/2004	12.83	NP	-	22.42	NA
	6/29/2004	14.75	NP	-	20.50	NA
	9/27/2004	14.21	NP	-	21.04	NA
	12/14/2004	13.98	NP	-	21.27	NA
	3/7/2005	14.02	NP	-	21.23	NA
	6/20/2005	13.68	NP	-	21.57	NA
	9/19/2005	14.49	NP	-	20.76	NA
	12/12/2005	13.43	NP	-	21.82	NA
	3/13/2006	12.58	NP	-	22.67	NA
	6/26/2006	14.27	NP	-	20.98	NA
	9/25/2006	15.24	NP	-	20.01	NA
	12/11/2006	15.08	NP	-	20.17	NA
	3/19/2007	13.54	NP	-	21.71	NA
	6/18/2007	13.60	NP	-	21.65	NA
	9/17/2007	-	-	-	-	NA
	12/17/2007	13.07	NP	-	22.18	NA
	3/24/2008	12.54	NP	-	22.71	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
U-4	2/14/2000	15.86	15.77	0.09	18.67	2.5
(34.46)	5/22/2000	16.03	NP	-	18.43	NA
	8/22/2000	16.38	NP	-	18.08	NA
	11/27/2000	18.83	NP	-	17.63	NA
	2/20/2001	16.85	sheen	-	17.61	NA
	5/15/2001	16.61	16.57	0.04	17.88	0.1
	9/18/2001	19.96	sheen	-	14.50	0.1
	12/20/2001	16.37	16.30	0.07	18.15	0.11
	3/13/2002	15.60	NP	-	18.86	0.11
	6/24/2002	15.50	NP	-	18.96	0.06
	9/26/2002	17.64	NP	-	16.82	NA
	12/20/2002	16.77	NP	-	17.69	NA
	3/17/2003	16.05	15.80	0.25	18.61	0.35
	6/26/2003	16.10	15.98	0.12	18.46	0.18
	9/24/2003	16.68	16.61	0.07	17.84	0.1
	12/30/2003	16.28	NP	-	18.18	NA
	3/29/2004	15.45	15.43	0.02	19.03	0.2
	6/29/2004	16.14	NP	-	18.32	NA
	9/27/2004	16.55	NP	-	17.91	NA
	12/14/2004	16.50	NP	-	17.96	NA
	3/7/2005	16.35	NP	-	18.11	NA
	6/20/2005	15.90	NP	-	18.56	NA
	9/19/2005	16.48	16.45	0.03	18.00	0.1
	12/12/2005	16.15	NP	-	18.31	NA
	3/13/2006	14.25	sheen	-	20.21	0
	6/26/2006	15.50	sheen	-	18.96	NA
	9/25/2006	16.21	sheen		18.25	0.1
	12/11/2006	15.76	15.75	0.01	18.71	0.1
	3/19/2007	14.56	NP	-	19.90	0.3
(34.06)	6/18/2007	15.87	NP	-	18.19	0.3
	9/17/2007	16.42	sheen	-	17.64	0.03
	12/17/2007	15.22	NP	-	18.84	0
	1/22/2008	14.27	NP	-	19.79	0
	3/24/2008	14.60	14.55	0.05	19.50	0
U-5	2/14/2000	17.85	NP	-	16.28	NA
(34.13)	5/22/2000	18.03	NP	-	16.10	NA
	8/22/2000	19.02	NP	-	15.11	NA
	11/27/2000	19.03	NP	-	15.10	NA
	2/20/2001	19.44	NP	-	14.69	NA
	5/15/2001	19.57	19.22	0.35	14.84	0.65
	9/18/2001	20.04	20.02	0.02	14.11	0.6
	12/20/2001	—Unable to Locate—				
	3/13/2002	—Inaccessible - Covered by Sand—				
	6/24/2002	—Inaccessible - Covered by Sand—				
	9/26/2002	19.63	19.41	0.22	14.68	0.20
	12/20/2002	19.49	NP	-	14.64	0.42
	3/17/2003	17.99	NP	-	16.14	NA
	6/26/2003	19.17	NP	-	14.96	NA
	9/24/2003	19.42	NP	-	14.71	NA
	12/30/2003	18.80	NP	-	15.33	NA
	3/29/2004	18.39	NP	-	15.74	NA
	6/29/2004	19.00	NP	-	15.13	NA
	9/27/2004	19.14	Sheen	-	14.99	NA
	12/14/2004	18.55	NP	-	15.58	NA
	3/7/2005	19.23	NP	-	14.90	0.1
	6/20/2005	18.95	NP	-	15.18	NA
	9/19/2005	18.93	NP	-	15.20	0.1
	12/12/2005	18.09	NP	-	16.04	NA
	3/13/2006	17.06	NP	-	17.07	NA
	6/26/2006	—Unable to locate well; under sand—				
	9/25/2006	18.86	18.80	0.06	15.27	NA
	12/11/2006	NM	NM	NM	NM	0.1
	3/19/2007	18.00	NP	-	16.13	NA
(34.10)	6/18/2007	18.52	NP	-	15.58	NA
	9/17/2007	19.60	NP	-	14.50	NA
	12/17/2007	—Unable to locate well; under sand—				
	1/22/2008	18.15	NP	-	15.95	NA
	3/24/2008	17.39	sheen	-	16.71	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
U-5A	2/14/2000	6.46	NP	-	27.31	NA
(33.77)	5/22/2000	7.00	6.99	0.01	26.78	1
	8/22/2000	8.58	8.57	0.01	25.20	0.1
	11/27/2000	9.71	NP	-	24.06	0.1
	2/20/2001	9.04	NP	-	24.73	0.1
	5/15/2001	8.99	sheen	-	24.78	NA
	9/18/2001	10.29	sheen	-	23.48	0.1
	12/20/2001	7.81	NP	-	25.96	NA
	3/13/2002	6.51	NP	-	27.26	NA
	6/24/2002	7.60	NP	-	26.17	NA
	9/26/2002	9.31	NP	-	24.46	NA
	12/20/2002	9.43	NP	-	24.34	NA
	3/17/2003	7.03	NP	-	26.74	NA
	6/26/2003	7.41	NP	-	26.36	NA
	9/24/2003	9.16	NP	-	24.61	NA
	12/30/2003	7.79	NP	-	25.98	NA
	3/29/2004	6.49	NP	-	27.28	NA
	6/29/2004	7.76	7.75	0.01	26.02	NA
	9/27/2004	9.03	8.98	0.05	24.78	NA
	12/14/2004	8.60	NP	-	25.17	0.1
	3/7/2005	8.22	sheen	-	25.55	0.2
	6/20/2005	7.41	sheen	-	26.36	0.1
	9/19/2005	19.14	NP	-	14.63	0.1
	12/12/2005	7.91	sheen	-	25.86	0.3
	3/13/2006	5.32	NP	-	28.45	0.2
	6/26/2006	6.83	NP	-	26.94	NA
	9/25/2006	**	8.68	**	NM	NA
	12/11/2006	7.31	7.30	0.01	26.47	0.2
	3/19/2007	5.98	5.96	0.02	27.81	0.1
	6/18/2007	NM	7.30	**	-	0.3
	9/17/2007	9.03	NP	-	24.74	0.3
	12/17/2007	7.85	NP	-	25.92	0.02
	3/24/2008	6.04	5.94	0.10	27.81	0
U-10	6/26/2003	4.76	NP	-	NM	NA
	9/24/2003	5.00	NP	-	NM	NA
	12/30/2003	3.65	NP	-	NM	NA
	3/29/2004	4.45	NP	-	NM	NA
	9/27/2004	5.03	NP	-	NM	NA
	12/14/2004	4.10	NP	-	NM	NA
	3/7/2005	5.12	NP	-	NM	NA
	6/20/2005	4.94	NP	-	NM	NA
	9/19/2005	5.26	NP	-	NM	NA
	12/12/2005	4.11	sheen	-	NM	NA
	3/13/2006	3.45	NP	-	NM	NA
	6/26/2006	3.96	NP	-	NM	NA
	Well Abandoned					
U-11	6/26/2003	3.30	NP	-	NM	NA
	9/24/2003	3.29	NP	-	NM	NA
	12/30/2003	2.51	NP	-	NM	NA
	3/29/2004	2.94	NP	-	NM	NA
	9/27/2004	3.91	NP	-	NM	NA
	12/14/2004	2.35	NP	-	NM	NA
	3/7/2005	3.43	NP	-	NM	NA
	6/20/2005	3.95	NP	-	NM	NA
	9/19/2005	4.11	NP	-	NM	NA
	12/12/2005	3.09	NP	-	NM	NA
	3/13/2006	2.40	NP	-	NM	NA
	6/26/2006	2.38	NP	-	NM	NA
	Well Abandoned					

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
U-12	6/26/2003	3.08	NP	-	NM	NA
	9/24/2003	3.17	NP	-	NM	NA
	12/30/2003	2.98	NP	-	NM	NA
	3/29/2004	2.97	NP	-	NM	NA
	9/27/2004	4.14	NP	-	NM	NA
	12/14/2004	3.18	NP	-	NM	NA
	3/7/2005	3.72	NP	-	NM	NA
	6/20/2005	3.66	NP	-	NM	NA
	9/19/2005	4.14	NP	-	NM	NA
	12/12/2005	3.44	NP	-	NM	NA
	3/13/2006	2.51	NP	-	NM	NA
	6/26/2006	2.82	NP	-	NM	NA
	Well Abandoned					
U-13	12/14/2004	15.93	NP	-		
(35.77)	3/7/2005	14.51	14.45	0.01	NM	NA
	6/20/2005	14.71	14.47	0.24	NM	0.1
	9/19/2005	16.30	15.72	0.58	NM	0.2
	12/12/2005	15.28	14.93	0.35	NM	0.3
	3/13/2006	12.79	12.45	0.34	NM	1.15
	6/26/2006	13.92	13.64	0.28	NM	NA
	9/25/2006	15.52	15.35	0.17	20.39	0.65
	12/11/2006	13.98	NP	-	21.79	0.65
	3/19/2007	13.27	13.10	0.17	22.64	0.6
	6/18/2007	14.48	14.17	0.31	21.54	0.5
	9/17/2007	15.67	15.64	0.03	22.51	0.3
	12/17/2007	14.73	14.62	0.11	20.95	0.02
	3/24/2008	13.30	13.25	0.05	22.43	0.02
U-14	8/18/2006	14.65	NP	-	NM	NA
(37.21)	9/25/2006	15.22	NP	-	21.99	NA
	12/11/2006	13.21	NP	-	24.00	NA
	3/19/2007	12.66	NP	-	24.55	NA
	6/18/2007	14.33	NP	-	22.88	NA
	9/17/2007	15.24	NP	-	21.97	NA
	12/17/2007	13.01	NP	-	24.20	NA
	3/24/2008	12.77	NP	-	24.44	NA
U-15	8/18/2006	14.18	NP	-	NM	NA
(35.57)	9/25/2006	14.95	NP	-	20.62	NA
	12/11/2006	NM	NM	NM	NM	NA
	3/19/2007	12.90	NP	-	22.67	NA
	6/18/2007	13.87	NP	-	21.70	NA
	9/17/2007	14.81	NP	-	20.76	NA
	12/17/2007	13.80	NP	-	21.77	NA
	3/24/2008	12.88	NP	-	22.69	NA
U-16	8/18/2006	13.46	NP	-	NM	NA
(36.08)	9/25/2006	14.35	NP	-	21.73	NA
	12/11/2006	13.32	NP	-	22.76	NA
	3/19/2007	12.19	NP	-	23.89	NA
	6/18/2007	13.26	NP	-	22.82	NA
	9/17/2007	14.55	NP	-	21.53	NA
	12/17/2007	13.19	NP	-	22.89	NA
	3/24/2008	12.22	NP	-	23.86	NA
U-17	8/18/2006	14.21	NP	-	NM	NA
(35.77)	9/25/2006	14.86	NP	-	20.91	NA
	12/11/2006	14.19	NP	-	21.58	NA
	3/19/2007	12.72	NP	-	23.05	NA
	6/18/2007	13.76	NP	-	22.01	NA
	9/17/2007	15.07	NP	-	20.70	NA
	12/17/2007	14.65	NP	-	21.12	NA
	3/24/2008	12.91	NP	-	22.86	NA
U-18	3/19/2007	8.08	NP	-	26.75	NA
(34.83)	6/18/2007	9.16	NP	-	25.67	NA
	9/17/2007	10.89	NP	-	23.94	NA
	12/17/2007	9.50	NP	-	25.33	NA
	3/24/2008	7.99	NP	-	26.84	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
U-19	3/19/2007	14.89	NP	-	19.33	NA
(34.22)	6/18/2007	15.14	NP	-	19.08	NA
	9/17/2007	15.29	NP	-	18.93	NA
	12/17/2007	14.57	NP	-	19.65	NA
	3/24/2008	13.64	NP	-	20.58	NA
U-20	3/19/2007	13.50	NP	-	21.89	NA
(35.39)	6/18/2007	14.50	NP	-	20.89	NA
	9/17/2007	15.29	NP	-	20.10	NA
	12/17/2007	14.22	NP	-	21.17	NA
	3/24/2008	13.50	NP	-	21.89	NA
U-21	3/19/2007	13.71	NP	-	22.03	NA
(35.74)	6/18/2007	14.71	NP	-	21.03	NA
	9/17/2007	15.50	NP	-	20.24	NA
	12/17/2007	14.38	NP	-	21.36	NA
	3/24/2008	13.66	NP	-	22.08	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
U-22A	12/17/2007	9.43	NP	-	7.87	NA
(17.30)	1/22/2008	8.74	NP	-	8.56	NA
	3/24/2008	8.85	NP	-	8.45	NA
U-22B	12/17/2007	6.22	NP	-	10.69	NA
(16.91)	1/22/2008	5.61	NP	-	11.30	NA
	3/24/2008	6.02	NP	-	10.89	NA
U-23	12/17/2007	5.70	NP	-	13.60	NA
(19.30)	1/22/2008	4.96	NP	-	14.34	NA
	3/24/2008	4.98	NP	-	14.32	NA
U-24A	12/17/2007	9.19	NP	-	10.75	NA
(19.94)	1/22/2008	9.09	NP	-	10.85	NA
	3/24/2008	8.83	NP	-	11.11	NA
U-24B	12/17/2007	8.71	NP	-	11.38	NA
(20.09)	1/22/2008	7.99	NP	-	12.10	NA
	3/24/2008	8.15	NP	-	11.94	NA
U-25	12/17/2007	6.19	NP	-	14.80	NA
(20.99)	1/22/2008	5.83	NP	-	15.16	NA
	3/24/2008	6.18	NP	-	14.81	NA
U-26	12/17/2007	7.70	NP	-	11.81	NA
(19.51)	1/22/2008	7.45	NP	-	12.06	NA
	3/24/2008	7.65	NP	-	11.86	NA
U-27	12/17/2007	11.87	NP	-	14.57	NA
(26.44)	1/22/2008	11.64	NP	-	14.80	NA
	3/24/2008	11.76	NP	-	14.68	NA
U-28	12/17/2007	10.28	NP	-	9.78	NA
(20.06)	1/22/2008	9.75	NP	-	10.31	NA
	3/24/2008	9.96	NP	-	10.10	NA
U-29A	12/17/2007	NM	NM	NM	NM	NA
(33.40)	1/22/2008	17.65	NP	-	15.75	NA
	3/24/2008	18.00	17.85	0.15	15.28	NA
U-29B	12/17/2007	NM	NM	NM	NM	NA
(32.85)	1/22/2008	32.30	NP	-	0.55	NA
	3/24/2008	19.73	NP	-	13.12	NA
U-29C	12/17/2007	NM	NM	NM	NM	NA
(32.73)	1/22/2008	28.25	NP	-	4.48	NA
	3/24/2008	22.03	NP	-	10.70	NA

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TABLE 1C
GROUNDWATER ELEVATION AND SPH REMOVAL DATA
ConocoPhillips - Willbridge Terminal
Portland, Oregon

Well Designation (TOC)	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)

NOTES:
NP = No measurable product
NA = Not Applicable
NM = Not Measured
* = SPH Recovered for latest quarter monitored
** - Unable to determine due to SPH viscosity
- = No Measurable Product Thickness
GWE = TOC -(DTW - (0.8 x DTP - DTW)) Where 0.8 = The density of the SPH

COPPOR00006957

TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
WILLBRIDGE TERMINAL
PORTLAND, OREGON

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
CHEVRON			
B-7	12/17/2007	trace	-
B-10	12/17/2007	trace	-
	1/22/2008	0.01	-
B-14	12/17/2007	0.02	-
	1/22/2008	trace	-
B-24	12/17/2007	0.03	-
	1/22/2008	0.03	-
	3/24/2008	0.03	-
B-30	12/17/2007	0.04	-
	1/22/2008	0.02	-
	3/24/2008	0.01	-
CR-10	Oct-07	0.37	0.7
	Nov-07	0.18	0.3
	Dec-07	0.06	-
	Jan-08	0.02	0.03
	Feb-08	Not Measured	0
	Mar-08	0.04	0.05
CR-15	Oct-07	0.06	0.03
	Nov-07	0.00	0
	Dec-07	0.10	-
	Jan-08	0.21	0.16
	Feb-08	Not Measured	0
	Mar-08	0.23	0.13
CR-19	Oct-07	trace	0
	Nov-07	0.00	0
	Dec-07	1.03	-
	Jan-08	1.80	0.6
	Feb-08	Not Measured	0
	Mar-08	0.06	0.11
CR-21A	Oct-07	trace	0.03
	Nov-07	trace	0
	Dec-07	Not Accessible	-
	Jan-08	0.20	0.02
	Feb-08	Not Measured	0
	Mar-08	0.05	0.07
CR-25	Oct-07	trace	0
	Nov-07	0.15	0.07
	Dec-07	0.07	-
	Jan-08	0.11	0.07
	Feb-08	Not Measured	0
	Mar-08	0.09	0.03

TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
WILLBRIDGE TERMINAL
PORTLAND, OREGON

CONOCOPHILLIPS			
B-4	10/30/2007	0.00	Trace
	11/28/2007	0.00	0.01
	12/17/2007	0.00	0
	1/22/2008	0.00	0
	2/28/2008	0.00	0
	3/24/2008	0.00	0
B-27	10/30/2007	0.00	0
	11/28/2007	0.00	0
	12/17/2007	0.00	0
	1/22/2008	0.00	0
	2/28/2008	0.00	0
	3/24/2008	0.00	0
B-40	10/30/2007	0.00	0
	11/28/2007	0.00	0
	12/17/2007	0.04	0
	1/22/2008	0.01	trace
	2/28/2008	0.00	0
	3/24/2008	0.00	0
U-4	10/30/2007	0.00	0
	11/28/2007	0.00	0
	12/17/2007	0.00	0
	1/22/2008	0.00	0
	2/28/2008	0.00	0
	3/24/2008	0.05	trace
U-5A	10/30/2007	0.00	0.01
	11/28/2007	0.00	0.01
	12/17/2007	0.00	0.01
	1/22/2008	0.04	0.01
	2/28/2008	0.05	0.01
	3/24/2008	0.10	0.03
U-13	10/30/2007	0.11	0.02
	11/28/2007	0.00	0
	12/17/2007	0.11	0.05
	1/22/2008	0.11	0.1
	2/28/2008	0.08	0.02
	3/24/2008	0.05	0.01

TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
WILLBRIDGE TERMINAL
PORTLAND, OREGON

KINDER MORGAN			
MW-6	10/30/2007	0.00	0.01
	11/29/2007	0.00	0.01
	12/28/2007	0.00	Trace
	1/22/2008	0.00	Trace
	2/26/2008	0.00	0.01
	3/31/2008	0.01	0.02
	4/17/2008	0.00	0.02
MW-7	10/30/2007	0.33	0.25
	11/29/2007	0.09	0.2
	12/28/2007	0.14	0.3
	1/22/2008	0.03	0.01
	2/26/2008	0.05	0.1
	3/31/2008	0.05	0.1
	4/17/2008	0.11	0.1
MW-19	10/30/2007	0.00	0.01
	11/29/2007	0.00	0.01
	12/28/2007	0.00	Trace
	1/22/2008	0.00	Trace
	2/26/2008	0.00	Trace
	3/31/2008	0.00	0.01
	4/17/2008	0.00	0
MW-22	10/30/2007	0.00	Trace
	11/29/2007	0.00	0
	12/28/2007	0.00	Trace
	1/22/2008	0.00	Trace
	2/26/2008	0.00	0
	3/31/2008	0.00	0
	4/17/2008	0.00	0
MW-23	10/30/2007	0.00	Trace
	11/29/2007	0.00	Trace
	12/28/2007	0.00	Trace
	1/22/2008	0.00	Trace
	2/26/2008	0.00	Trace
	3/31/2008	0.00	0.02
	4/17/2008	0.00	0
MW-24	10/30/2007	-**	0.01
	11/29/2007	-**	0.02
	12/28/2007	-**	0.1
	1/22/2008	-**	0.01
	2/26/2008	-**	0.01
	3/31/2008	-**	0
	4/17/2008	0.00	0.03
MW-28	10/30/2007	0.00	0
	11/29/2007	0.00	0
	12/28/2007	0.00	0
	1/22/2008	0.02	Trace
	2/26/2008	0.00	0
	3/31/2008	0.00	0.01
	4/17/2008	0.00	0
MW-31	10/30/2007	0.00	0.02
	11/29/2007	0.00	0.02
	12/28/2007	0.00	0.01
	1/22/2008	0.00	Trace
	2/26/2008	0.00	0.01
	3/31/2008	0.00	0.02
	4/17/2008	0.00	0
MW-35	10/30/2007	0.00	0
	11/29/2007	0.00	0
	12/28/2007	0.00	Trace
	1/22/2008	0.00	0
	2/26/2008	0.00	Trace
	3/31/2008	0.00	0
	4/17/2008	0.00	0

Notes:
** - Unable to determine due to SPH viscosity

TABLE 2
DOCK AREA WELL CONSTRUCTION SUMMARY
Willbridge Terminal
Portland, Oregon

Well Designation	TOC (ft.)	Well Depth (ft.)	Well Diameter (in.)	Top of Screen (ft. bgs.)	Bottom of Screen (ft. bgs)	Screened Interval (ft.)
CHEVRON						
B-7	33.85	35.00	2.00	5.00	35.00	30.00
B-9A	33.58	29.50	2.00	15.00	25.00	10.00
B-10	34.78	35.00	2.00	5.00	35.00	30.00
B-11	34.99	35.00	2.00	5.00	35.00	30.00
B-12	35.17	35.00	2.00	5.00	35.00	30.00
B-14	36.62	35.00	2.00	5.00	45.00	40.00
B-15	35.58	30.00	2.00	5.00	30.00	25.00
B-19	34.66	35.00	2.00	5.00	35.00	30.00
B-20	33.33	41.50	2.00	5.00	40.00	35.00
B-21	34.82	35.00	2.00	5.00	35.00	30.00
B-26	35.33	35.00	2.00	5.00	35.00	30.00
B-33	34.34	35.00	2.00	10.00	35.00	25.00
CR-1	21.71	21.20	4.00	Unknown	Unknown	Unknown
CR-3	34.31	21.70	4.00	Unknown	Unknown	Unknown
CR-26	33.21	60.00	2.00	50.00	60.00	10.00
CR-27C	33.31	76.00	2.00	66.00	76.00	10.00
CR-28A	34.9	24.50	2.00	13.00	23.00	10.00
CR-28B	34.87	51.00	2.00	40.00	50.00	10.00
CR-28C	34.75	83.00	2.00	72.50	82.50	10.00
CR-29A	34.19	31.50	2.00	13.00	23.00	10.00
CR-29B	34.32	51.00	2.00	40.00	50.00	10.00
CR-30A	33.08	26.00	2.00	13.00	23.00	10.00
CR-30B	32.33	53.00	2.00	42.00	52.00	10.00
CR-31A	21.58	16.00	2.00	4.00	14.00	10.00
CR-31B	21.70	46.00	2.00	35.00	45.00	10.00
CR-32A	21.91	15.00	2.00	4.00	14.00	10.00
CR-32B	22.02	46.00	2.00	35.00	45.00	10.00
CR-32C	21.76	66.00	2.00	55.00	65.00	10.00
CR-33	16.86	15.00	2.00	10.00	15.00	5.00
EX-1	34.35	35.00	10.00	10.00	35.00	25.00

TABLE 2
DOCK AREA WELL CONSTRUCTION SUMMARY
Willbridge Terminal
Portland, Oregon

Well Designation	TOC (ft.)	Well Depth (ft.)	Well Diameter (in.)	Top of Screen (ft. bgs.)	Bottom of Screen (ft. bgs)	Screened Interval (ft.)
CONOCOPHILLIPS						
B-1	34.65	34.00	2.00	5.00	32.00	27.00
B-2	35.54	35.00	2.00	5.00	35.00	30.00
B-3	34.8	35.00	2.00	5.00	35.00	30.00
B-4	34.69	41.5	2.00	5.00	40.50	35.50
B-5	34.83	35.00	2.00	5.00	32.00	27.00
B-6	35.46	35.00	2.00	5.00	35.00	30.00
B-16	35.93	35.00	2.00	5.00	35.00	30.00
B-17	35.61	30.00	2.00	5.00	30.00	25.00
B-22A	34.85	Unknown	2.00	Unknown	Unknown	Unknown
B-25	35.76	30.00	2.00	5.00	30.00	25.00
B-35	33.54	31.00	11.00	31.00	20.00	11.00
B-36	31.00	31.00	2.00	11.00	31.00	20.00
B-37	35.79	31.00	2.00	11.00	31.00	20.00
B-38	36.07	31.00	2.00	11.00	31.00	20.00
B-40	33.68	31.00	2.00	11.00	31.00	20.00
B-41A	35.08	Unknown	2.00	Unknown	Unknown	Unknown
DW-1	35.90	Unknown	Unknown	Unknown	Unknown	Unknown
DW-2	36.04	Unknown	Unknown	Unknown	Unknown	Unknown
EX-39B	34.46	27.80	4.00	14.00	27.80	13.80
IT-E	36.07	30.00	10.00	Unknown	Unknown	Unknown
IT-W	35.91	30.50	10.00	Unknown	Unknown	Unknown
P-1A	18.48	19.00	2.00	4.00	19.00	15.00
RES-N	38.00	41.20	8.00	6.00	36.00	30.00
RES-O	34.65	49.00	8.00	14.00	29.00	15.00
RW-1	21.74	23.50	6.00	5.00	20.00	15.00
RW-2	27.45	25.00	6.00	8.00	22.00	14.00
RW-3	34.02	27.50	6.00	13.50	24.50	11.00
RW-4	33.81	25.00	6.00	12.00	22.00	10.00
RW-5	18.33	21	6.00	8.00	18.00	10.00
RW-6	18.69	21	6.00	8.00	18.00	10.00
U-5	34.10	Unknown	4.00	Unknown	Unknown	Unknown
U-22A	17.3	19.00	2.00	4.00	19.00	15.00
U-22B	16.91	29.00	2.00	24.00	29.00	5.00
U-23	19.30	20.00	2.00	5.00	20.00	15.00
U-24A	19.94	20.00	2.00	5.00	20.00	15.00
U-24B	20.09	30.00	2.00	25.00	30.00	5.00
U-25	20.99	19.00	2.00	5.00	20.00	15.00
U-26	19.51	19.00	2.00	4.00	19.00	15.00
U-27	26.44	19.00	2.00	4.00	19.00	15.00
U-28	20.06	25.00	2.00	20.00	25.00	5.00
U-29A	33.40	20.00	2.00	10.00	20.00	10.00
U-29B	32.85	50.00	2.00	40.00	50.00	10.00
U-29C	32.73	86.00	2.00	71.00	81.00	10.00

TABLE 2
DOCK AREA WELL CONSTRUCTION SUMMARY
Willbridge Terminal
Portland, Oregon

Well Designation	TOC (ft.)	Well Depth (ft.)	Well Diameter (in.)	Top of Screen (ft. bgs.)	Bottom of Screen (ft. bgs)	Screened Interval (ft.)
KINDER MORGAN						
MW-33	39.33	23.00	4.00	12.50	22.50	10.00
MW-34	39.64	23.00	4.00	12.50	22.50	10.00
MW-36	35.00	30.00	4.00	8.50	28.50	20.00
MW-37	34.97	30.00	4.00	9.50	29.50	20.00
MW-40	33.75	14.20	4.00	9.50	29.50	20.00
MW-41B	34.84	51.50	2.00	41.50	51.50	10.00
MW-41C	34.68	90.00	2.00	80.00	90.00	10.00
MW-42B	39.25	50	2.00	40.00	50.00	10.00
MW-42C	39.23	88	2.00	78.00	88.00	10.00

NOTES:
TOC = Top of Casing Elevation (City of Portland Datum)

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
CHEVRON									
B-7	02/18/00	-	-	-	ND	20.1	ND	44.8	-
	05/23/00	-	-	-	ND	0.678	1.41	1.22	-
dup	05/23/00	-	-	-	ND	0.691	1.06	ND	-
	08/25/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	11/30/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	02/22/01	-	-	-	0.690	0.736	ND	ND	-
	05/17/01	-	-	-	ND	0.700	ND	ND	-
	03/20/03	-	-	-	ND	0.740	ND	ND	-
	09/29/03	-	-	-	<0.500	0.870	<0.500	1.93	-
	03/30/04	-	-	-	<0.500	0.750	<0.500	<1.00	-
	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	1.54
dup	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	1.51
	09/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	1.08
	03/25/08	<400	42,000[5]	736[12]	<0.200	<0.500	<0.500	<1.00	<2.00
B-9	05/23/00	-	-	-	ND	0.535	0.737	ND	-
	08/25/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/17/01	-	-	-	ND	ND	ND	ND	-
	09/19/01	-	-	-	ND	ND	0.913	ND	-
	03/21/02	-	-	-	ND	ND	ND	ND	-
	09/24/02	-	-	-	ND	ND	ND	ND	-
	03/20/03	-	-	-	ND	ND	ND	ND	-
	03/30/04	-	-	-	<0.500	0.560	<0.500	<1.00	-
	10/06/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/08/05	-	-	-	<1.00	<1.00	<1.00	<2.00	<1.00
	06/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/21/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<1.00	<1.00	<2.00	<1.00
B-9A	09/19/07	-	-	-	0.900	2.08	<1.00[10]	3.28	<4.00[10]
	03/25/08	478	105,000[5]	2,620[12]	<0.200	<0.500	<0.500	<1.00	<2.00
B-10	02/18/00	-	-	-	3.85	4.42	8.78	14.7	-
dup	02/18/00	-	-	-	3.72	4.1	7.8	13.8	-
	05/23/00	-	-	-	3.72	4.1	7.8	13.8	-
dup	05/23/00	-	-	-	1.2	2.93	4.14	6.53	-
	08/25/00	-	-	-	1.40	2.80	1.45	4.80	-
	11/30/00	-	-	-	1.20	2.69	ND	4.60	-
	02/23/01	-	-	-	3.74	0.983	3.94	6.78	-
	05/17/01	-	-	-	4.87	1.25	4.36	8.56	-
	09/19/01	-	-	-	0.711	ND	1.80	2.50	-
	03/21/02	-	-	-	3.15	2.60	1.19	2.43	-
	09/24/02	-	-	-	1.41	1.43	0.753	2.46	-
	03/20/03	-	-	-	0.680	1.76	ND	2.34	-
	09/29/03	-	-	-	2.26	1.60	0.781	4.29	-
	03/30/04	-	-	-	<0.500	1.42	<0.500	2.66	-
	10/06/04	-	-	-	0.810	2.62	<0.500	6.55	-
	03/08/05	-	-	-	<1.00	2.00	<1.00	2.89	<1.00
	09/21/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	03/14/06	-	-	-	<1.00	1.08	<1.00	<3.00	<1.00
	09/26/06	-	-	-	0.970	3.17	0.770	4.09	<2.00
	03/21/07	-	-	-	0.770	1.79	<1.00	6.20	<1.00
dup	03/21/07	-	-	-	0.720	1.74	<1.00	5.52	<1.00
	09/18/07	-	-	-	<0.400[10]	<1.00[10]	<1.00[10]	<2.00[10]	<4.00[10]
	03/25/08	618	695[3]	<500	0.730	1.35	<0.500	4.30	-

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
B-11	02/18/00	-	-	-	29.2	6.14	4.36	14.1	-
	05/23/00	-	-	-	7.45	4.95	1.42	8.52	-
	08/25/00	-	-	-	11.2	6.53	2.39	11.2	-
	11/30/00	-	-	-	8.72	5.36	ND	ND	-
	02/22/01	-	-	-	24.2	2.13	5.11	8.98	-
	05/17/01	-	-	-	17.9	2.77	6.46	11.4	-
	03/30/04	-	-	-	9.20	4.74	0.790	5.90	-
	03/09/05	-	-	-	4.25	3.72	<1.00	4.18	<1.00
	06/22/05	-	-	-	3.03	3.77	<1.00	4.66	<1.00
	09/21/05	-	-	-	1.80	4.57	<1.00	5.63	<1.00
B-14	02/18/00	-	-	-	119	18.1	80	38	-
	05/23/00	-	-	-	125	15.9	69.2	30.7	-
	08/25/00	-	-	-	382	44.6	194	70.3	-
	11/30/00	-	-	-	292	37.3	148	52.4	-
	02/22/01	-	-	-	402	229	42.6	78.2	-
	05/17/01	-	-	-	332	190	37.4	56.2	-
B-19	03/20/03	-	-	-	7.76	2.09	0.620	2.51	-
	09/29/03	-	-	-	5.93	1.98	1.56	7.44	-
	03/29/04	-	-	-	2.26	1.32	<0.500	2.88	-
	03/09/05	-	-	-	5.53	2.57	<1.00	2.76	<1.00
	06/22/05	-	-	-	<1.00	2.02	<1.00	2.61	<1.00
	09/22/05	-	-	-	1.54	1.99	<1.00	3.60	<1.00
	03/14/06	-	-	-	<1.00	1.11	<1.00	2.21	<1.00
B-20	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	<0.500	<0.500	<0.500	1.38	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/09/05	-	-	-	<1.00	1.47	<1.00	1.15	<1.00
	09/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	03/25/08	344	2,410[3]	<490	0.350	0.970	<0.500	2.19	<2.00
B-21	09/19/01	-	-	-	ND	ND	1.47	ND	-
	03/21/02	-	-	-	ND	0.679	ND	ND	-
	09/24/02	-	-	-	ND	1.20	0.517	1.20	-
	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	0.659	1.3	<0.500	2.20	-
	03/29/04	-	-	-	<0.500	0.720	<0.500	<1.00	-
	10/06/04	-	-	-	<0.500	<0.880	<0.500	<1.00	-
	03/08/05	-	-	-	<1.00	<1.00	<1.00	<2.00	17.4
	09/22/05	-	-	-	<1.00	1.15	<1.00	<3.00	11.2
	03/15/06	-	-	-	<1.00	<1.00	<1.00	<3.00	1.30
	09/26/06	-	-	-	0.460	0.980	<0.500	1.01	<2.00
	03/21/07	-	-	-	0.400	1.64	<1.00	<2.00	1.20
	09/19/07	-	-	-	0.330	1.78	<0.500	1.03	<2.00
	03/26/08[13]	431	7,960[3]	<490	0.570	1.93	<0.500	1.18	<2.00
B-26	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/09/05	-	-	-	2.94	<1.00	12.5	2.36	<1.00
	06/22/05	-	-	-	11.9	<1.00	46.1	4.26	<1.00
	09/22/05	-	-	-	12.4	1.19	56.8	6.21	<1.00

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
B-28	02/18/00	-	-	-	0.754	0.368	0.545	0.986	-
	05/23/00	-	-	-	ND	ND	ND	ND	-
	08/25/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	ND	ND	ND	ND	-
	05/17/01	-	-	-	ND	ND	ND	ND	-
	09/20/01	-	-	-	2.12	2.93	ND	ND	-
	03/21/02	-	-	-	ND	ND	ND	ND	-
	09/24/02	-	-	-	ND	ND	ND	ND	-
	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	0.699	<0.500	1.04	<1.00	-
	03/29/04	-	-	-	<0.500	<0.500	0.930	<1.00	-
	03/09/05	-	-	-	1.59		4.68	<1.00	<1.00
	09/21/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	03/14/06	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/28/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/18/07	-	-	-	0.350	<0.500	<0.500	<1.00	<2.00
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
B-29	09/20/01	-	-	-	1.30	ND	0.710	ND	-
	03/21/02	-	-	-	ND	ND	ND	ND	-
	09/24/02	-	-	-	ND	ND	ND	ND	-
	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	<1.00
	09/21/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	03/14/06	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/28/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<1.00	<1.00	<2.00	<1.00
	09/18/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
B-30	02/18/00	-	-	-	38.9	5.29	2.44	10.3	-
	05/23/00	-	-	-	18.8	2.53	0.682	4.57	-
	08/25/00	-	-	-	81.2	12.5	2.35	21.9	-
	11/30/00	-	-	-	59.6	10.0	1.92	18.8	-
	02/23/01	-	-	-	61.6	5.31	9.52	19.4	-
dup**	02/23/01	-	-	-	61.8	3.24	9.23	16.0	-
	05/17/01	-	-	-	95.1	4.12	18.0	14.6	-
	09/20/01	-	-	-	38.7	ND	5.66	ND	-
dup	09/20/01	-	-	-	38.6	ND	6.18	ND	-
	03/21/02	-	-	-	113	17.0	6.09	24.2	-
	09/24/02	-	-	-	30.1	6.60	1.56	12.0	-
dup***	09/24/02	-	-	-	28.0	6.42	1.44	11.3	-
	03/20/03	-	-	-	17.3	4.49	0.500	5.96	-
dup*	03/20/03	-	-	-	17.4	4.43	0.510	6.68	-
	09/29/03	-	-	-	32.6	7.34	1.62	12.2	-
	03/29/04	-	-	-	15.6	3.13	1.16	7.07	-
dup	03/29/04	-	-	-	17.5	3.38	1.24	7.32	-
	03/09/05	-	-	-	12.6	3.04	<1.00	6.26	<1.00
	06/22/05	-	-	-	19.6	4.53	1.06	7.80	<1.00
	09/21/05	-	-	-	15.1	2.75	<1.00	3.72	<1.00
dup****	09/21/05	-	-	-	18.9	3.17	<1.00	4.40	<1.00
	03/14/06	-	-	-	15.9	2.53	<1.00	4.15	<1.00
dup	03/14/06	-	-	-	15.8	2.51	1.02	4.42	<1.00
	09/28/06	-	-	-	48.9	8.50	1.51	12.1	<2.00
	03/22/07	-	-	-	28.5	1.09	<1.00	<2.00	<1.00
	09/18/07	-	-	-	2.78	1.78	<0.500	4.31	<2.00
dup	09/18/07	-	-	-	2.55	1.23	<1.00	2.99	<1.00
B-32	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	<0.500	<0.500	0.636	<1.00	-
	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	2.17
	09/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	1.66
	03/15/06	-	-	-	<1.00	<1.00	<1.00	<3.00	1.84
B-33	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	0.558	0.735	<0.500	1.35	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	<1.00
	06/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	03/15/06	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
CR-1	09/20/01	-	-	-	ND	ND	ND	ND	-
	03/21/02	-	-	-	ND	ND	ND	ND	-
	09/24/02	-	-	-	ND	ND	ND	ND	-
	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/30/04	-	-	-	25.8	1.13	120	9.06	-
	10/06/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/08/05	-	-	-	<1.00	<1.00	<1.00	<2.00	<1.00
	09/21/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<1.00	<1.00	<2.00	<1.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
CR-3	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	<1.00
	06/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
CR-8	02/18/00	-	-	-	0.314	0.673	3.82	6.55	-
	05/23/00	-	-	-	ND	ND	ND	ND	-
	08/25/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	0.841	0.519	1.77	-
CR-9	02/18/00	-	-	-	ND	ND	ND	ND	-
	05/23/00	-	-	-	ND	ND	ND	ND	-
	08/25/00	-	-	-	ND	ND	ND	ND	-
dup	08/25/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
dup	11/30/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-
dup	05/16/01	-	-	-	ND	ND	ND	ND	-
CR-11	02/18/00	-	-	-	81	4.95	4.41	6.17	-
	05/23/00	-	-	-	40.2	1.95	2.54	ND	-
	08/25/00	-	-	-	107	5.30	22.1	8.41	-
	11/30/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	02/22/01	-	-	-	84.2	3.24	2.47	6.25	-
	05/16/01	-	-	-	119	5.85	4.43	14.3	-
CR-26	03/09/05	-	-	-	<1.00	<1.00	<1.00	<2.00	<1.00
	06/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	09/22/05	-	-	-	<1.00	<1.00	<1.00	<3.00	<1.00
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
CR-27C	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
CR-33	03/26/08[10]	<400	1,960[5]	<481	<0.400	<1.00	<1.00	<2.00	<4.00
TB-LB	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-
	09/19/01	-	-	-	ND	ND	ND	ND	-
	03/21/02	-	-	-	1.16	3.9	ND	1.95	-
	09/24/02	-	-	-	ND	ND	ND	ND	-
	03/20/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/22/07	-	-	-	<0.200	<1.00	<1.00	<2.00	<1.00
TB-1	03/25/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
TB-01	03/26/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
TB-02	03/26/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
Kinder Morgan									
MW-8	02/16/00	-	-	-	9.79	2.51	7.97	12.1	-
	05/31/00	-	-	-	16.6	3.85	3.05	10.2	-
	08/24/00	-	-	-	26.0	5.78	28.2	24.0	-
	12/01/00	-	-	-	17.8	4.59	3.19	11.1	-
	02/22/01	-	-	-	11.4	ND	2.79	8.88	-
	05/16/01	-	-	-	15.1	1.18	2.79	6.4	-
	09/21/01	-	-	-	13.0	1.08	9.54	7.66	-
	03/14/02	-	-	-	1.95	1.09	0.618	2.22	-
dup	03/14/02	-	-	-	1.96	0.955	ND	1.93	-
	09/27/02	-	-	-	4.85	2.30	0.819	4.25	-
	03/18/03	-	-	-	3.12	ND	ND	2.24	-
dup	03/18/03	-	-	-	2.36	ND	ND	2.62	-
	09/24/03	-	-	-	5.00	1.20	0.759	7.05	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/04	-	-	-	3.03	0.576	<0.500	1.80	-
dup	09/27/04	-	-	-	3.25	<0.500	<0.500	1.75	-
	03/29/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
dup	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/26/06	-	-	-	0.290	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
dup	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/24/08	-	-	-	<0.14	<0.11	<0.13	<0.33	<0.20
MW-9	03/29/05	-	-	-	-	-	-	-	<2.00
	09/21/05	-	-	-	-	-	-	-	<2.00
MW-10	02/16/00	-	-	-	6.6	2.33	0.996	3.33	-
	05/31/00	-	-	-	6.78	0.794	ND	1.02	-
	08/24/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	5.40	1.32	ND	1.78	-
	02/22/01	-	-	-	1.15	ND	1.15	1.98	-
	05/16/01	-	-	-	11.6	0.894	1.42	2.92	-
	03/29/05	-	-	-	-	-	-	-	<2.00
	09/21/05	-	-	-	-	-	-	-	<2.00
MW-11	02/16/00	-	-	-	5,260	2,360	2,580	11,200	-
	05/31/00	-	-	-	4,120	1,460	2,720	9,290	-
	08/24/00	-	-	-	2,490	787	2,020	5,960	-
	12/01/00	-	-	-	2,330	755	1,610	5,420	-
	02/22/01	-	-	-	3,520	2,230	1,230	8,130	-
	05/16/01	-	-	-	3,800	2,510	1,290	8,980	-
	03/29/05	-	-	-	-	-	-	-	<100
1,2,4=1590	09/21/05	-	-	-	-	-	-	-	<40.0
MW-13	02/16/00	-	-	-	ND	0.392	ND	0.903	-
	05/31/00	-	-	-	ND	ND	ND	ND	-
	08/24/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	ND	ND	ND	ND	-
dup	12/01/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
MW-15	02/17/00	-	-	-	2.89	0.493	0.442	1.15	-
	05/30/00	-	-	-	ND	ND	ND	ND	-
	08/24/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-
MW-20	03/29/05	-	-	-	-	-	-	-	<2.00
	09/21/05	-	-	-	-	-	-	-	<2.00
MW-21	02/17/00	-	-	-	ND	1.21	0.997	3.36	-
	05/30/00	-	-	-	ND	ND	ND	ND	-
	08/23/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-
MW-22	02/17/00	-	-	-	2060	2060	4720	13200	-
	05/30/00	-	-	-	2140	1560	4240	9150	-
	08/23/00	-	-	-	1670	1500	3670	7720	-
	12/01/00	-	-	-	1450	1330	3960	8280	-
	02/21/01	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	05/16/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
MW-23	02/17/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	05/30/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	08/23/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	12/01/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	02/22/01	-	-	-	76.8	102	12.6	90.4	-
	05/16/01	-	-	-	NS/S	NS/S	NS/S	NS/S	-
MW-25	09/21/01	-	-	-	ND	ND	ND	ND	-
	03/14/02	-	-	-	ND	ND	ND	ND	-
	09/27/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/29/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/24/08	-	-	-	<0.14	0.17[14]	<0.13	<0.33	<0.20

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
MW-26	02/17/00	-	-	-	1.31	4.01	18.6	26.2	-
dup	02/17/00	-	-	-	1.04	3.11	11.9	17.1	-
	05/30/00	-	-	-	ND	7.11	7.4	9.62	-
	08/23/00	-	-	-	ND	3.67	10.8	3.54	-
dup	08/23/00	-	-	-	ND	4.81	15.9	6.20	-
	12/01/00	-	-	-	3.43	29.8	7.28	15.6	-
	02/21/01	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	05/17/01	-	-	-	15.1	8.76	10.1	10.6	-
	09/27/02	-	-	-	7.66	7.24	5.90	6.44	-
	03/18/03	-	-	-	9.11	ND	1.57	4.80	-
	09/24/03	-	-	-	2.18	<0.500	2.90	12.7	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	1.67	-
	09/27/04	-	-	-	2.41	1.42	4.64	7.57	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	0.540	1.85	-
	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
dup	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	0.600	2.35	<2.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/24/08	-	-	-	<0.14	0.47[14]	0.49[14]	2.4	<0.20
dup	03/24/08	-	-	-	<0.14	0.51	0.49[14]	2.6	<0.20
MW-28	02/16/00	-	-	-	1.29	3.13	8.26	14.7	-
	05/30/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	08/23/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	12/01/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	02/21/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	05/16/01	-	-	-	NS/S	NS/S	NS/S	NS/S	-
MW-29	03/28/05	-	-	-	-	-	-	-	<2.00
	09/21/05	-	-	-	-	-	-	-	<2.00
MW-31	02/16/00	-	-	-	0.579	0.629	0.481	1.51	-
	05/30/00	-	-	-	ND	ND	ND	ND	-
	08/23/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/17/01	-	-	-	ND	ND	ND	ND	-
MW-32	02/16/00	-	-	-	ND	0.608	0.379	1.31	-
	05/30/00	-	-	-	ND	ND	ND	ND	-
	08/23/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-

COPPOR00006971

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
MW-33	02/16/00	-	-	-	ND	0.718	0.589	1.21	-
	05/30/00	-	-	-	ND	ND	ND	ND	-
	08/24/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
	02/22/01	-	-	-	ND	ND	ND	ND	-
dup	02/22/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	ND	ND	-
	09/21/01	-	-	-	ND	ND	ND	ND	-
	03/14/02	-	-	-	ND	ND	ND	ND	-
	09/27/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/24/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
dup	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
dup	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00
	03/25/08	<13	<13	42[14]	<0.14	<0.11	<0.13	<0.33	<0.20
MW-34	09/21/01	-	-	-	ND	ND	ND	ND	-
	03/14/02	-	-	-	ND	ND	ND	ND	-
	09/27/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/24/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
dup	03/29/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00
	03/25/08	20[14]	12[14]	44[14]	<0.14	0.17[14]	<0.13	<0.33	<0.20
MW-36	02/16/00	-	-	-	0.322	2.36	1.32	6.29	-
	05/31/00	-	-	-	ND	ND	ND	ND	-
	08/24/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	0.548	ND	-
	02/21/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	0.882	ND	ND	ND	-
	09/21/01	-	-	-	ND	ND	ND	ND	-
	03/13/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/24/03	-	-	-	0.727	<0.500	<0.500	1.38	-
	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
dup	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00
dup	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00
	03/25/08	<13	<12	40[14]	<0.14	<0.11	<0.13	<0.33	<0.20

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
MW-37	02/16/00	-	-	-	1.06	0.456	0.492	1.78	-
	05/30/00	-	-	-	33	0.957	ND	2.1	-
dup	05/30/00	-	-	-	31.4	0.775	0.786	1.72	-
	08/24/00	-	-	-	40.9	0.731	ND	1.44	-
	11/30/00	-	-	-	10.7	0.594	ND	ND	-
	02/21/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	0.691	ND	0.740	1.25	-
	09/21/01	-	-	-	ND	ND	1.04	1.31	-
	09/27/02	-	-	-	ND	ND	ND	ND	-
dup	09/27/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/24/03	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	09/27/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00
	03/25/08	480[15]	12,000	480[14]	<0.14	0.27[14]	<0.13	<0.33	<0.20
dup	03/25/08	670[15]	3,500	130[14]	<0.14	0.26[14]	<0.13	0.11[14]	<0.20
MW-38	03/29/05	-	-	-	-	-	-	-	10.2
	09/21/05	-	-	-	-	-	-	-	22.0
MW-39	09/27/04	-	-	-	<0.500	<0.500	<0.500	7.45	-
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
MW-40	02/16/00	-	-	-	ND	0.424	0.492	0.759	-
	05/30/00	-	-	-	ND	ND	ND	ND	-
	08/24/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
	02/21/01	-	-	-	ND	ND	ND	ND	-
	05/16/01	-	-	-	ND	ND	0.505	ND	-
	09/21/01	-	-	-	ND	ND	ND	ND	-
	03/13/02	-	-	-	ND	ND	ND	ND	-
	09/27/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/24/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
dup	09/24/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
dup	03/29/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/27/04	-	-	-	<0.500	<0.500	<0.500	<1.00	
	03/29/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/21/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/15/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00
	03/25/08	48[14]	14[14]	46[14]	<0.14	<0.11	<0.13	<0.33	<0.20
MW-41B	03/25/08	<13	12[14]	52[14]	<0.14	0.13[14]	<0.13	<0.33	<0.20
MW-41C	03/25/08	42[14]	19[14]	68[14]	<0.14	0.11[14]	<0.13	<0.33	<0.20
MW-42B	03/25/08	<13	<12	58[14]	<0.14	0.12[14]	<0.13	<0.33	<0.20
MW-42C	03/25/08	17[14]	15[14]	110[14]	0.14[14]	0.20[14]	<0.13	<0.33	<0.20

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
CONOCOPHILLIPS									
B-2	03/28/05	-	-	-	-	-	-	-	3.47
dup	03/28/05	-	-	-	-	-	-	-	3.52
	09/20/05	-	-	-	-	-	-	-	4.30
B-3	03/28/05	-	-	-	-	-	-	-	10.7
	09/20/05	-	-	-	-	-	-	-	8.26
B-4	05/26/00	-	-	-	82.3	12.7	4	14.8	-
dup	05/26/00	-	-	-	74.8	10.7	2.77	10.3	-
	08/23/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	11/29/00	-	-	-	7.04	5.81	2.10	8.09	-
	02/20/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	05/17/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	09/26/02	-	-	-	16.5	8.36	5.14	27.6	-
	09/25/03	-	-	-	48.1	7.55	8.02	17.9	-
	03/28/05	-	-	-	-	-	-	-	<2.00
	09/26/06	-	-	-	25.6	5.03	<0.500	6.46	<2.00
	03/21/07	-	-	-	43.2	5.10	1.33	7.02	<2.00
	09/20/07	-	-	-	2.65	2.59	<0.500	4.46	<2.00
	03/26/08	2,830[11]	31,700[5]	<490	2.66	3.54	<1.00	4.90	<4.00
B-6	03/28/05	-	-	-	-	-	-	-	<2.00
	09/20/05	-	-	-	-	-	-	-	<2.00
B-16	03/28/05	-	-	-	-	-	-	-	2.11
	09/20/05	-	-	-	-	-	-	-	<2.00
B-17	02/17/00	-	-	-	274	24	15.4	37.7	-
	05/26/00	-	-	-	434	44.4	49.9	158	-
	08/28/00	-	-	-	372	21.1	10.8	15.4	-
	11/29/00	-	-	-	293	18.2	9.89	13.6	-
	02/23/01	-	-	-	258	11.8	21.3	21.6	-
dup	02/23/01	-	-	-	238	10.2	19.6	17.3	-
	05/17/01	-	-	-	165	6.82	17.0	15.7	-
dup	05/17/01	-	-	-	173	7.14	17.2	15.6	-
B-18	02/17/00	-	-	-	ND	1.04	3.46	6.13	-
	05/26/00	-	-	-	ND	ND	ND	ND	-
	08/28/00	-	-	-	ND	ND	ND	ND	-
	11/29/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	ND	ND	ND	ND	-
	05/17/01	-	-	-	ND	0.502	ND	ND	-
B-22	02/17/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	05/26/00	-	-	-	0.508	0.522	0.543	2.17	-
	08/28/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	11/29/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	02/20/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	05/17/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
B-27	03/28/05	-	-	-	-	-	-	-	2.16

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
B-35	02/17/00	-	-	-	31.6	13.5	11	27.4	-
	05/26/00	-	-	-	194	16.3	12.5	39.8	-
	08/28/00	-	-	-	287	15.3	8.42	ND	-
	11/29/00	-	-	-	384	17.0	12.0	30.2	-
	02/23/01	-	-	-	45.6	4.87	12.4	20.5	-
	05/17/01	-	-	-	15.2	4.32	5.62	7.99	-
	09/20/01	-	-	-	58.0	3.31	9.78	15.9	-
	03/14/02	-	-	-	34.1	15.8	2.41	11.4	-
	09/26/02	-	-	-	95.8	11.3	14.0	26.3	-
	03/18/03	-	-	-	8.11	6.39	1.42	3.20	-
	09/25/03	-	-	-	66.7	7.41	3.74	19.2	-
	03/30/04	-	-	-	15.1	1.39	6.49	13.0	-
	09/28/04	-	-	-	93.4	11.7	<5.00	19.7	-
	03/28/05	-	-	-	3.71	6.72	0.660	10.5	7.20
	09/20/05	-	-	-	82.0	10.4	1.79	12.2	6.48
	03/14/06	-	-	-	18.8	7.31	1.32	10.9	-
	09/26/06	-	-	-	20.9	7.63	2.45	10.2	<2.00
	03/20/07	-	-	-	11.4	5.16	1.02	11.2	<2.00
	09/20/07	-	-	-	3.44	6.55	<0.500	10.1	<2.00
	03/27/08	1,120	88,300[5]	2,910[12]	1.65	3.00	<2.50	5.15	<10.0
B-36	02/17/00	-	-	-	0.925	1.16	0.762	3.16	-
	05/26/00	-	-	-	ND	0.82	0.502	ND	-
	08/28/00	-	-	-	2.08	2.54	0.693	2.53	-
	11/29/00	-	-	-	1.14	2.53	1.02	2.78	-
	02/23/01	-	-	-	ND	0.512	1.15	1.44	-
	05/17/01	-	-	-	ND	0.545	0.819	1.8	-
	09/20/01	-	-	-	ND	0.609	0.761	1.50	-
dup	09/20/01	-	-	-	ND	0.547	0.820	1.51	-
	03/14/02	-	-	-	ND	ND	ND	ND	-
	09/26/02	-	-	-	1.18	1.33	0.635	2.48	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/25/03	-	-	-	0.940	1.10	0.954	2.90	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	1.23	-
	09/28/04	-	-	-	0.614	0.679	<0.500	<1.00	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/05	-	-	-	0.390	0.930	<0.500	<1.00	2.63
	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/26/06	-	-	-	0.760	1.18	<0.500	1.57	3.50
	03/20/07	-	-	-	0.610	0.500	<0.500	1.37	<2.00
	09/20/07	-	-	-	1.32	1.67	<0.500	1.72	3.47
	03/27/08	227	469[3]	<476	<0.400	<1.00	<1.00	<2.00	<4.00

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
B-37	02/17/00	-	-	-	ND	0.517	0.63	1.18	-
dup	02/17/00	-	-	-	0.342	1.06	0.795	1.97	-
	05/26/00	-	-	-	ND	ND	ND	ND	-
	08/28/00	-	-	-	ND	ND	ND	ND	-
	11/29/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	ND	ND	ND	ND	-
	05/17/01	-	-	-	ND	ND	ND	ND	-
	03/14/02	-	-	-	ND	ND	ND	ND	-
	09/26/02	-	-	-	ND	ND	ND	ND	-
	03/18/03	-	-	-	ND	ND	ND	ND	-
dup	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/25/03	-	-	-	<0.500	<0.500	0.639	1.30	-
dup	09/25/03	-	-	-	<0.500	<0.500	0.628	1.24	-
	03/31/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/28/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	3.98
	09/20/05	-	-	-	<0.200	<0.500	<0.500	<1.00	6.14
	09/20/05	-	-	-	-	-	-	-	5.82
	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
dup	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/27/08	147[11]	<240	<481	<0.200	<0.500	<0.500	<1.00	<2.00
B-40	02/17/00	-	-	-	NS/S	NS/S	NS/S	NS/S	-
	05/26/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	08/28/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	11/29/00	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	02/20/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	05/17/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	09/26/06	-	-	-	21.5	2.94	89.4	225	<4.00
	03/20/07	-	-	-	15.2	2.74	86	213	<4.00
	09/20/07	-	-	-	15.9	2.12	63.6	153	<2.00
	03/26/08	2,860	37,600[3]	5,700	3.40	1.85	61.6	132	<2.00
OF-1	03/26/08	953[11]	6,920[5]	<490	<0.200	<0.500	<0.500	<1.00	<2.00
P-1	03/17/03	-	-	-	ND	ND	ND	ND	-
	03/31/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/28/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	-	-	-	-	<2.00
	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	Well Abandoned								
P-1A	03/26/08	<80.0	<245	<490	0.240	<0.500	<0.500	<1.00	<2.00
P-2	03/17/03	-	-	-	ND	0.534	ND	ND	-
	09/25/03	-	-	-	<0.500	<0.500	0.823	<1.00	-
	03/30/04	-	-	-	0.540	<0.500	<0.500	<1.00	-
	09/28/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	2.84
	09/20/05	-	-	-	<0.200	<0.500	<0.500	<1.00	4.48
	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
U-2	02/17/00	-	-	-	3.13	1.93	3.59	3.43	-
	05/26/00	-	-	-	0.885	1.45	ND	ND	-
	08/28/00	-	-	-	ND	ND	0.604	ND	-
	11/29/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	ND	ND	ND	ND	-
	05/17/01	-	-	-	ND	ND	ND	ND	-
	09/20/01	-	-	-	ND	ND	ND	ND	-
	03/14/02	-	-	-	0.986	1.60	0.905	ND	
	09/26/02	-	-	-	ND	ND	ND	ND	
	03/18/03	-	-	-	ND	ND	ND	ND	
	09/25/03	-	-	-	<0.500	<0.500	<0.500	<1.00	
	03/31/04	-	-	-	2.60	<0.500	0.820	<1.00	-
	09/28/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/14/06	-	-	-	4.71	<0.500	3.19	1.05	-
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/20/07	-	-	-	4.05	<0.500	1.10	<1.00	<2.00
	09/19/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/25/08	1,010	673[3]	<476	8.15	0.630	1.88	<1.00	<2.00
U-3	02/17/00	-	-	-	0.355	0.993	0.952	3.17	-
	05/26/00	-	-	-	1.5	0.954	1.01	2.39	-
	08/28/00	-	-	-	ND	ND	0.793	ND	-
	11/29/00	-	-	-	ND	ND	0.744	ND	-
dup	11/29/00	-	-	-	0.500	0.567	0.727	ND	-
	02/23/01	-	-	-	14.8	1.84	2.58	ND	-
	05/17/01	-	-	-	7.83	ND	0.620	1.16	-
	03/28/05	-	-	-	-	-	-	-	<2.00
	09/20/05	-	-	-	-	-	-	-	5.09
U-4	05/26/00	-	-	-	62.3	ND	ND	ND	-
	08/28/00	-	-	-	15.0	ND	1.76	ND	-
dup	08/28/00	-	-	-	14.3	0.509	2.99	1.04	-
	11/29/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	0.844	6.84	1.07	11.2	-
	05/17/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	09/26/02	-	-	-	0.760	0.552	1.07	2.99	-
dup	09/26/02	-	-	-	0.771	0.623	2.21	4.14	-
	03/28/05	-	-	-	-	-	-	-	5.62
	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	6.69
	03/21/07	-	-	-	<0.200	<0.500	<0.500	<1.00	5.24
	09/19/07	-	-	-	<0.200	<0.500	<0.500	<1.00	6.36
	03/27/08	2,390[11]	51,500[5]	664[12]	<0.200	<0.500	<0.500	<1.00	4.47
U-5	02/17/00	-	-	-	3.86	0.654	0.501	2.54	-
	05/26/00	-	-	-	3.49	ND	ND	ND	-
	08/28/00	-	-	-	ND	ND	ND	ND	-
	11/29/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	1.56	1.16	ND	ND	-
	05/17/01	-	-	-	NS/F	NS/F	NS/F	NS/F	-
	03/18/03	-	-	-	2.49	2.21	5.77	33.7	-
	09/25/03	-	-	-	2.39	1.71	7.89	7.66	-
	03/31/04	-	-	-	1.53	<0.500	<0.500	<1.00	-
	09/28/04	-	-	-	<0.500	0.806	<0.500	1.80	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/14/06	-	-	-	0.560	<0.500	<0.500	<1.00	-
	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
U-5A	03/27/08	2,100	14,100[5]	4,650	0.400	1.18	<0.500	1.66	<2.00

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
U-10	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/25/03	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/30/04	-	-	-	0.680	2.08	<0.500	4.01	-
	09/28/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	09/20/05	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00
	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
U-11	03/18/03	-	-	-	ND	ND	ND	ND	-
	09/25/03	-	-	-	1.74	1.37	1.04	1.74	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
dup	03/30/04	-	-	-	0.650	1.93	<0.500	3.26	-
	09/28/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	03/28/05	-	-	-	0.360	0.830	<0.500	1.09	<2.00
	09/20/05	-	-	-	0.480	1.10	<0.500	1.17	<2.00
	03/14/06	-	-	-	0.780	1.74	<0.500	2.86	-
U-12	03/18/03	-	-	-	5.30	2.12	0.642	3.72	-
	09/25/03	-	-	-	<0.500	0.563	<0.500	2.00	-
	03/30/04	-	-	-	<0.500	<0.500	<0.500	<1.00	-
	09/28/04	-	-	-	1.03	0.978	0.719	2.58	-
	03/28/05	-	-	-	<0.200	<0.500	<0.500	<1.00	4.21
	09/20/05	-	-	-	<0.200	<0.500	<0.500	<1.00	4.54
	03/14/06	-	-	-	<0.500	<0.500	<0.500	<1.00	-
U-14	09/27/06	-	3,980[1]	<526[1]	<0.200	<0.500	<0.500	<1.00	<2.00
	03/21/07	<80.0	428[3]	<500	<0.200	<0.500	<0.500	<1.00	<2.00
	09/19/07	2,760	1,920[9]	<500	<1.00[10]	<2.50[10]	<2.50[10]	<5.00[10]	<10.0[10]
	03/25/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00
U-15	09/27/06	-	466	<485	7.01	<0.500	1.38	<1.00	<2.00
	03/21/07	<80.0	465[4]	<490	0.560	<0.500	<0.500	<1.00	<2.00
	09/19/07	88.7	377[4]	<500	1.72	<0.500	<0.500	<1.00	<2.00
	03/25/08	132	<238	<476	1.47	<0.500	0.600	<1.00	<2.00
U-16	09/27/06	-	2,530	<500	0.440	<0.500	5.43	<1.00	<2.00
	03/21/07	277	3,630[5]	860[6]	0.220	<0.500	0.930	<1.00	<2.00
	09/19/07	456	2,800[5]	590	<0.200	<0.500	<0.500	<1.00	<2.00
	03/25/08	308	1,410[3]	<476	<0.200	<0.500	<0.500	<1.00	<2.00
U-17	09/27/06	-	4,540	<500	<0.200	<0.500	<0.500	<1.00	<2.00
	03/21/07	305	5,560[4]	<500	<0.450	<0.500	<0.500	<1.00	<2.00
	09/19/07	277	2,810[5]	<500	<0.200	<0.500	<0.500	<1.00	<2.00
	03/25/08	780	941[3]	<476	0.640	1.26	<1.00	<2.00	<4.00
U-18	03/21/07	207	16,300	6,000	0.210	0.540	<0.500	<1.00	<2.00
	09/19/07	517	9,980[5]	1,860	3.06	0.890	<0.500	1.05	<2.00
	03/25/08	239	607[3]	<476	2.36	0.850	<0.500	<1.00	<2.00
U-19	03/21/07	2,540	2,020	<490	<0.200	<0.500	0.670	<1.00	9.31
	09/19/07	3,160	1,470[3]	<485	<0.200	<0.500	1.02	<1.00	22.0
	03/25/08	1,950	522[3]	<476	<0.400	<1.00	<1.00	<2.00	<4.00
U-20	03/20/07	561	4,530	561[8]	<0.200	<0.500	<0.500	<1.00	4.28
	09/19/07	512	1,460[3]	<526	<0.200	<0.500	<0.500	<1.00	6.90
	03/25/08	240	631[3]	<490	<0.200	<0.500	<0.500	<1.00	5.51
dup	03/25/08	244	600[3]	<490	<0.200	<0.500	<0.500	<1.00	5.82
U-21	03/20/07	2,060	3,600[7]	<490	0.270	<0.500	2.50	<1.00	<2.00
	09/19/07	2,070	3,050[3]	<500	<1.00[10]	<2.50[10]	3.60	<5.00[10]	<10.0[10]
	03/26/08	1,230	945[3]	<490	<1.00[10]	<2.50[10]	<2.50[10]	<5.00[10]	<10.0[10]
U-22A	03/27/08	322[11]	10,000[5]	490	<0.400	<1.00	<1.00	<2.00	<4.00
U-22B	03/27/08	<80.0	473[4]	<481	<0.200	<0.500	<0.500	<1.00	<2.00
U-23	03/27/08	1,010	1,740[3]	<476	<1.00	<2.50	<2.50	<5.00	<10.0
U-24A	03/27/08	<400	<243	<485	<1.00	<2.50	<2.50	<5.00	<10.0
U-24B	03/27/08	<400	<238	<476	<1.00	<2.50	<2.50	<5.00	<10.0
U-25	03/27/08	722	<240	<481	<0.200	<0.500	<0.500	<1.00	<2.00

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - TPH, BTEX, AND MTBE COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well/Sample Identification	Date Sampled	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)
U-26	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
U-27	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
U-28	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
U-29B	03/26/08	<80.0	430[3]	<490	<0.200	<0.500	<0.500	<1.00	<2.00
U-29C	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00
TB-LB	08/24/00	-	-	-	ND	ND	ND	ND	-
	08/25/00	-	-	-	ND	ND	ND	ND	-
	08/28/00	-	-	-	ND	ND	ND	ND	-
	11/29/00	-	-	-	ND	ND	ND	ND	-
	11/30/00	-	-	-	ND	ND	ND	ND	-
	12/01/00	-	-	-	ND	ND	ND	ND	-
	02/23/01	-	-	-	ND	ND	ND	ND	-

Notes:
2/00 and 5/00 data from IT Corporation
8/00, 11/00, 2/01 and 5/01 data from KHM Environmental Management, Inc.
NS/F = Not sampled floating product present
NS/S = Not sampled sheen present
µg/l = Micrograms per Liter
ND = Not detected at or below detection limit
<0.200 = Not detected above the laboratory method reporting limit (MRL) of 0.200 µg/L.
BTEX analysis by USEPA Method 8021B
dup* = duplicate for B-30 submitted as blind duplicate labeled as B-50
dup** = duplicate for B-30 submitted as blind duplicate labled as B-31
dup*** = duplicate for B-30 submitted as blind duplicate labeled as B-99
TB-LB = trip blank
[1] = The reporting limit for this analyte was raised to compensate for the limited sample quantity available for analysis.
[2] = The reporting limit for this analyte was raised to compensate for the limited sample quantity available for analysis.
[3] = Detected hydrocarbons appear to be due to heavy gas/light diesel range components as well as weathered diesel.
[4] = Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel or possibly biogenic interference.
[5] = Hydrocarbon pattern most closely resembles weathered diesel.
[6] = The hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.
[7] = Detected hydrocarbons appear to be due to heavy gas/light diesel range components as well as biogenic interference.
[8] = Detected hydrocarbons do not have a pattern and range consistent with typical petroleum products and may be due to biogenic interference.
[9] = Hydrocarbon pattern most closely resembles weathered jet fuel or similar light diesel range product.
[10] = The reporting limit was raised due to sample matrix effects.
[11] = Detected hydrocarbons in the gasoline range appear to be due to overlap of diesel range hydrocarbons.
[12] = Heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
[13] = Isopropylbenzene and n-propylbenzene were detected at concentrations of 8.51 µg/L and 10.9 µg/L, respectively.
[14] = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
[15] = Chromatographic fingerprint resembles a petroleum product, but the elution pattern indicates presence of a greater amount of heavier molecular weight constituents than the calibration standard.

COPPOR00006979

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
CHEVRON																		
B-7	02/18/00	-	5.22	ND	ND	ND	ND	ND	ND	ND	0.528	ND	7.26	16.3	ND	ND	17.6	0.982
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.2	ND	ND	13.6	ND
dup	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.9	ND	ND	15.8	ND
	08/25/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	11/30/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	02/22/01	-	1.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.84	ND	ND	2.82	ND
	05/17/01	-	0.934	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.59	ND	ND	0.584	ND
	03/20/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/29/03	-	2.12	ND	0.287	ND	ND	ND	ND	ND	ND	ND	ND	7.74	ND	ND	6.11	ND
	03/30/04	-	1.95	<0.200	0.436	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	7.73	<0.200	<1.60	5.95	<0.200
	03/09/05	-	2.42	<0.800	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.800	<0.400	9.07	<0.400	<1.40	8.82	<0.400
dup	03/09/05	-	2.66	<1.00	<0.250	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	9.74	<0.100	<2.00	7.30	0.154
	09/22/05	-	2.65	<0.990	<0.990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.990	10.4	<0.0990	<1.98	8.16	0.177
	03/25/08	<0.396	0.742	<0.396	<0.396	<0.0990	<0.0495	<0.0495	<0.990	<0.0495	<0.0990	<0.0495	<0.396	2.77	<0.0495	<0.792	1.44	<0.396
B-9	02/18/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.43	ND	ND	1.3	ND
	08/25/00	-	2.60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.40	ND	ND	1.33	ND
	11/30/00	-	0.700	ND	0.600	0.460	0.240	0.400	ND	ND	ND	ND	ND	6.70	ND	0.780	0.200	0.160
	02/22/01	-	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.20	ND	ND	0.528	ND
	05/17/01	-	1.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.60	ND	ND	0.386	ND
	09/19/01	-	1.08	0.240	ND	ND	ND	ND	0.120	ND	ND	0.100	ND	4.00	0.100	0.260	0.780	0.100
	03/21/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/02	-	1.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.09	ND	ND	0.358	ND
	03/20/03	-	0.242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.509	ND	ND	ND	ND
	09/30/03	-	1.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.38	ND	ND	0.265	ND
	03/30/04	-	0.964	<0.300	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	3.10	<0.200	<1.50	0.951	0.234
	03/08/05	-	0.910	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	2.78	<0.100	<0.700	0.879	<0.100
	06/22/05	-	0.887	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	3.05	<0.100	<0.500	0.873	<0.100
	09/21/05	-	0.832	<0.198	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	2.93	<0.0990	<0.891	0.702	<0.0990
	09/26/06	-	0.780	<0.150	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.105	<0.100	0.221	1.98	<0.100	<0.550	0.805	0.226
	03/22/07	-	0.489	<0.146	<0.0976	0.171	0.225	0.328	0.357	0.343	0.389	0.0970	0.519	1.95	0.288	<0.829	0.531	0.610
B-9A	09/19/07	<9.76[5]	<9.76[5]	<9.76[5]	<9.76[5]	0.341	0.189	0.156	<1.85	0.117	0.498	<0.0976	<9.76[5]	68.2	0.120	<19.5[5]	34.1	5.96
	03/25/08	5.39	4.56	<4.95	2.02	0.381	0.290	0.219	<2.48	0.231	0.622	<0.124	1.25	21.2	0.212	<4.95	13.5	<2.48

COPPOR0006980

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-10	02/18/00	-	3.58	ND	ND	0.0670	ND	ND	ND	ND	0.14	ND	0.832	11.8	ND	ND	12.9	0.513
dup	02/18/00	-	4.83	ND	2.9	5.47	ND	0.66	ND	ND	0.689	ND	1.95	15.9	ND	ND	23.4	1.85
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	0.101	ND	ND	11.9	ND	ND	12.7	0.818
	08/25/00	-	1.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.18	ND	ND	2.91	ND
	11/30/00	-	1.42	ND	0.320	ND	ND	ND	ND	ND	ND	ND	ND	2.24	ND	0.980	0.160	0.120
	02/23/01	-	1.01	ND	0.252	ND	ND	ND	ND	ND	ND	ND	0.234	1.25	ND	ND	1.33	0.225
	05/17/01	-	0.635	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.976	ND	ND	0.521	ND
	09/19/01	-	0.420	ND	ND	ND	ND	ND	0.100	ND	ND	ND	0.200	0.300	0.100	0.360	ND	0.240
	03/21/02	-	ND	ND	0.188	ND	ND	ND	ND	ND	ND	ND	0.190	1.23	ND	ND	1.23	0.220
	09/24/02	-	1.04	0.132	1.49	ND	ND	0.170	ND	0.189	ND	ND	ND	1.32	ND	0.717	1.34	0.245
	03/20/03	-	1.05	ND	0.190	ND	ND	ND	ND	ND	ND	ND	0.194	1.30	ND	ND	1.27	0.236
	09/29/03	-	1.09	ND	0.234	ND	ND	ND	ND	ND	ND	ND	0.463	1.91	ND	ND	2.11	0.436
	03/30/04	-	1.65	<0.200	0.671	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.588	5.22	<0.200	<2.40	5.67	0.891
	03/08/05	-	1.41	<0.300	0.638	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	0.814	4.46	<0.200	<1.40	2.76	0.829
	09/21/05	-	1.27	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<1.98	<0.990	2.22	<0.990	<1.98	1.89	<0.990
	03/14/06	-	1.05	<0.200	0.170	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.154	2.15	<0.0200	<1.50	1.66	0.211
	09/26/06	-	1.64	<0.388	0.527	0.0463	0.0590	0.0717	0.110	0.0542	0.0928	0.0285	0.469	4.89	0.0766	<1.17	3.66	0.835
	03/21/07	-	1.18	<0.383[6]	<0.153[6]	0.0376	0.0329	0.0403	0.0420	0.0329	0.0510	0.0121	0.236	6.81	0.0335	<3.44[6]	2.83	0.416
dup	03/21/07	-	1.06	<0.291[6]	<0.194[6]	0.058	0.0606	0.0578	0.0643	0.0677	0.0846	0.0216	0.275	5.28	0.0545	<2.43[6]	1.80	0.440
	09/18/07	<0.962[6]	0.889	<0.192	<0.962[6]	0.0293	0.0288	0.0270	<0.192	0.0292	0.0413	0.0102	<0.962[6]	2.20	0.0218	<3.85[6]	<0.962[6]	1.35
	03/25/08	<0.0990	0.728	<0.198	0.114	<0.0198	<0.00495	0.00544	<0.0990	0.00519	<0.0198	<0.00495	0.214	0.968	<0.00495	<0.594	1.02	0.162
B-11	02/18/00	-	1.75	ND	ND	ND	ND	0.547	ND	ND	ND	ND	ND	2.15	ND	ND	1.53	0.764
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.891	0.169
	08/25/00	-	1.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.47	ND	ND	1.78	ND
	11/30/00	-	2.10	0.400	1.02	0.400	0.180	0.180	ND	ND	ND	ND	ND	2.88	ND	1.20	0.260	ND
	02/22/01	-	ND	ND	0.106	ND	ND	ND	ND	ND	ND	ND	ND	1.12	ND	ND	0.815	ND
	05/17/01	-	0.478	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.729	ND	ND	ND	0.358	ND
	03/30/04	-	0.931	<0.300	<0.300	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	1.08	<0.200	<3.50	0.604	0.418
	03/09/05	-	0.664	<0.150	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	1.15	<0.100	<1.40	0.623	0.172
	09/22/05	-	0.885	<0.150	117	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	0.111	1.04	<0.100	<1.00	0.471	0.181
	09/21/05	-	0.854	<0.149	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	1.38	<0.0990	<1.58	0.743	0.124

COPPOR0006981

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-14	02/18/00	-	1.08	ND	0.222	0.01	ND	ND	ND	ND	0.104	ND	0.561	1.84	ND	7	1.9	0.582
	05/23/00	-	ND	ND	1.85	ND	ND	ND	ND	ND	ND	ND	0.467	ND	ND	ND	1.36	0.621
	08/25/00	-	1.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.75	ND	24.5	2.06	ND
	11/30/00	-	0.920	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.60	ND	0.980	ND	ND
	02/22/01	-	ND	ND	0.187	ND	ND	ND	ND	ND	ND	ND	0.390	1.10	ND	ND	1.16	0.489
	05/17/01	-	0.738	ND	0.106	ND	ND	ND	ND	ND	ND	ND	0.341	0.966	ND	1.72	0.892	0.338
B-19	03/20/03	-	1.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.440	ND.	ND	6.62	ND
	09/29/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.68	ND	ND	13.2	ND
	03/29/04	-	2.12	<1.00	<1.00	<1.00	0.0213	<0.0200	<0.0200	<0.0200	<1.00	<0.0200	<1.00	7.01	<0.0200	<3.50	11.9	<1.00
	03/09/05	-	2.40	<1.00	0.973	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	8.85	<0.500	<3.00	16.0	0.537
	06/22/05	-	2.86	<2.00	0.849	<0.100	<0.100	<0.100	<0.100	<0.100	0.141	<0.200	<0.300	9.59	<0.100	<2.50	15.8	0.277
	09/22/05	-	<1.34	<0.398	<0.297	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.149	4.14	<0.0990	<1.98	6.40	0.209
	03/14/06	-	1.87	<0.472	0.291	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	0.0427	<0.0189	<0.0943	4.60	<0.0189	<2.17	8.98	0.113
B-20	03/20/03	-	0.322	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.577	ND	ND	ND	ND
	09/29/03	-	1.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.86	ND	ND	4.27	ND
	03/30/04	-	1.07	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	3.81	<0.200	<1.50	0.988	<0.200
	03/09/05	-	1.29	<0.400	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	<0.200	4.58	<0.200	<0.800	3.03	<0.200
	09/22/05	-	<0.891	<0.248	<0.347	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	3.13	<0.0990	<0.693	0.812	<0.0990
	03/25/08	<0.390	1.24	<0.390	<0.780	<0.0976	<0.0195	<0.0390	<0.390	<0.0390	<0.0976	<0.0195	<0.390	4.35	<0.0195	<0.780	1.89	<0.390
B-21	09/19/01	-	3.40	0.200	1.78	0.360	0.360	0.320	0.400	0.300	0.540	0.160	1.52	16.1	0.320	1.16	16.8	1.54
	03/21/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.38	ND	ND	3.84	ND
	09/24/02	-	2.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.66	ND	ND	4.15	ND
	03/20/03	-	2.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.0	ND	ND	7.00	ND
	09/29/03	-	3.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.94	ND	ND	8.86	0.394
	03/29/04	-	2.52	<0.500	<0.500	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0396	<0.0200	<0.500	8.76	<0.0200	<3.00	7.58	0.259
	03/08/05	-	2.79	<0.800	<0.600	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.800	<0.400	10.5	<0.400	<2.20	10.8	0.430
	09/22/05	-	2.26	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<1.98	<0.990	8.41	<0.990	<1.98	5.22	<0.990
	03/15/06	-	2.66	<0.755	<0.189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.189	9.04	<0.0189	<1.79	7.34	0.0789
	09/26/06	-	2.39	<0.693	<0.198	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.149	9.45	<0.0990	<1.39	6.85	<0.149
	03/21/07	-	1.87	<0.585[6]	<0.146[6]	0.00839	0.00665	0.00618	<0.00976	<0.00488	0.0172	<0.00488	<0.0976[6]	11.2	<0.00488	<2.63[6]	4.77	0.142
	09/19/07	<0.498	1.92	<1.49[6]	<1.49[6]	<0.0249	<0.0249	<0.0249	<0.498	<0.0249	0.0368	<0.0249	<0.498	11.9	<0.0249	<4.98[6]	6.68	<0.498
	03/26/08	<0.319	2.02	<0.638	<0.319	<0.0160	<0.0160	<0.0160	<0.319	<0.0160	0.0204	<0.0160	<0.319	6.20	<0.0160	<0.957	5.05	<0.319

COPPOR0006982

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-26	03/30/04	-	0.778	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.299	0.649	<0.200	27.5	1.08	0.447
	03/09/05	-	0.778	<0.100	<0.100	<0.100	<0.100	0.140	<0.100	<0.100	<0.100	<0.200	0.236	0.421	<0.100	5.37	0.912	0.371
	06/22/05	-	0.651	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	0.264	0.586	<0.200	10.9	0.639	0.293
	09/22/05	-	0.841	<0.149	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	0.161	0.440	<0.0990	7.80	0.701	0.224
B-28	02/18/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	ND	ND
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/25/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/17/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/20/01	-	ND	ND	ND	ND	ND	ND	0.100	ND	ND	ND	ND	ND	0.100	ND	ND	ND
	03/21/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/20/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/30/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.767	ND	ND
	03/29/04	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0400	<0.0200	<0.100	<0.0400	<0.0200
	03/09/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	1.18	<0.100	<0.100
	09/21/05	-	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	<0.0990	<0.0990	0.395	<0.0990	<0.0990
	03/14/06	-	<0.0404	<0.0404	<0.0404	0.0735	0.0623	0.0839	0.105	0.0695	0.111	<0.0404	0.180	<0.0404	0.0734	<0.0404	0.112	0.179
	09/28/06	-	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0294	<0.0196	<0.0196	<0.0196	<0.0196
	09/18/07	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	0.00584	<0.0971	<0.00485	0.00541	<0.00485	<0.0971	<0.0971	<0.00485	0.130	<0.0971	<0.0971
	03/25/08	<0.0971	<0.0971	<0.0971	<0.0971	0.0132	0.0152	0.0156	<0.194	0.0155	0.0178	<0.00971	<0.0971	<0.0971	0.0154	<0.0971	<0.0971	<0.0971
B-29	09/20/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/21/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/20/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/30/03	-	ND	ND	ND	ND	0.121	0.136	0.157	0.114	0.111	ND	0.132	ND	0.123	ND	ND	0.138
	03/29/04	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0300	<0.0200	<0.0600	<0.0200	<0.0200
	03/09/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/21/05	-	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990
	03/14/06	-	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0490	<0.0294	0.0236
	09/28/06	-	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194
	03/22/07	-	<0.00990	<0.00990	<0.00990	<0.00495	<0.00495	0.00524	<0.00990	<0.00495	0.00663	<0.00495	<0.0198	<0.0792	<0.00495	<0.0198	0.126	0.0201
	09/18/07	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	0.00624	<0.0971	0.00561	<0.00485	<0.00485	<0.0971	<0.0971	0.00573	<0.0971	<0.0971	<0.0971
	03/25/08	<0.0980	<0.0980	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.0980	<0.00490	<0.0980	<0.0980	<0.0980

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-30	02/18/00	-	0.121	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.113	0.177	ND	ND	0.175	0.202
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.105	ND
	08/25/00	-	0.385	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.530	ND	ND	0.423	ND
	11/30/00	-	0.280	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.440	ND	0.280	0.300	0.100
	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup**	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/17/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.116	ND	ND	0.108	ND
	09/20/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100	ND	0.100	ND	ND
dup	09/20/01	-	ND	ND	ND	ND	ND	ND	0.100	ND	ND	0.100	ND	ND	0.120	0.100	ND	ND
	03/21/02	-	0.162	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.312	ND	ND	0.157	0.114
dup	03/21/02	-	0.162	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.314	ND	ND	0.164	0.123
	09/24/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/20/03	-	0.142	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.133	ND	ND	0.132	ND
dup*	03/20/03	-	0.108	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.126	ND	ND	0.105	ND
	09/30/03	-	ND	ND	ND	0.582	0.585	0.421	0.323	0.443	0.531	ND	0.827	0.349	0.272	ND	0.451	1.51
dup***	09/30/03	-	ND	ND	ND	0.473	0.416	0.410	0.291	0.357	0.450	ND	0.728	ND	0.248	ND	0.432	1.26
	03/29/04	-	0.119	<0.0200	0.0449	0.0576	0.0507	0.0420	0.0344	0.0393	0.0633	<0.0200	0.123	0.173	0.0295	<0.320	0.170	0.240
dup***	03/29/04	-	<0.280	<0.800	0.0485	0.0805	0.0586	0.0452	0.0417	0.0438	0.0637	<0.0200	0.112	0.216	0.0361	<0.640	0.170	0.244
	03/09/05	-	0.242	<0.200	<0.200	0.223	0.209	<0.200	<0.200	<0.200	0.217	<0.400	0.400	<0.300	<0.200	<0.400	0.284	0.837
	09/21/05	-	0.103	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	0.198	<0.0990	<0.0990	<0.0990	<0.297	<0.0990	<0.0990
dup****	09/21/05	-	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	0.198	<0.0990	<0.0990	<0.0990	<0.248	<0.0990	<0.0990
	03/14/06	-	0.310	<0.142	0.0684	0.0761	0.0628	0.0455	0.0480	0.0368	0.0783	<0.0189	0.152	0.368	0.0353	<0.282	0.260	0.323
dup	03/14/06	-	0.375	<0.182	0.0933	0.106	0.0871	0.0607	0.0674	0.0584	0.109	<0.0404	0.202	0.375	0.0491	<0.404	0.275	0.424
	09/28/06	-	0.157	<0.0891	0.0317	0.0371	0.0391	0.0320	0.0316	0.0216	0.0344	<0.0198	0.0477	0.108	0.0246	<0.297	0.0868	0.133
	03/22/07	-	0.0691	<0.0392	<0.00980	0.0230	0.0222	0.0173	0.0167	0.0193	0.0291	0.00518	0.0242	0.200	0.0134	<0.245	0.201	0.114
	09/18/07	<0.0990	<0.0990	<0.0990	<0.0990	0.00633	<0.00495	0.00528	<0.0990	<0.00495	0.00735	<0.00495	<0.0990	<0.0990	<0.00495	<0.693[5]	<0.0990	0.118
dup	09/18/07	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00495	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.481[5]	<0.0962	<0.0962
B-32	03/20/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.161	ND	ND	ND	0.108
	09/29/03	-	ND	ND	ND	0.114	0.112	0.114	ND	0.114	0.188	ND	0.557	1.06	ND	ND	ND	0.498
	03/09/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/22/05	-	<1.00	<1.00	<0.150	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	0.171	<1.00	<1.00	<0.300	<0.150	0.258
	03/15/06	-	<0.0190	<0.0190	<0.0952	<0.0190	<0.0190	<0.0190	<0.0190	<0.0180	0.0280	<0.0190	0.193	<0.0762	<0.0190	<0.152	<0.0381	0.208

COPPOR0006984

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Number of benzene rings		2-Methyl-naphthalene 2	Acenaphthene 2	Acenaphthylene 2	Anthracene 3	Benzo (a) anthracene 4	Benzo (a) pyrene 5	Benzo (b) fluoranthene 4	Benzo (g,h,i) perylene 5	Benzo (k) fluoranthene 4	Chrysene 4	Dibenzo (a,h) anthracene 5	Fluoranthene 3	Fluorene 2	Indeno (1,2,3-cd) pyrene 5	Naphthalene 2	Phenanthrene 3	Pyrene 4
Well Identification	Date Sampled	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-33	03/20/03	-	0.589	ND	ND	ND	ND	0.385	0.370	ND	0.306	ND	0.449	2.01	0.300	ND	0.914	0.458
	09/30/03	-	11.0	ND	3.30	8.28	19.2	44.0	37.5	26.4	34.1	7.35	20.2	33.3	30.6	ND	39.7	29.5
	03/30/04	-	3.03	<2.00	2.42	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	12.5	<2.00	<4.50	13.6	3.28
	03/09/05	-	2.42	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<1.00	9.36	<1.00	<2.00	10.6	1.07
	06/22/05	-	3.00	<1.50	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<1.00	10.0	<1.00	<2.00	10.2	<1.00
	09/22/05	-	2.56	<0.990	<1.49	<0.990	<0.990	<0.990	<0.990	<0.990	<0.990	<1.98	<0.990	8.31	<0.990	<1.98	8.82	<0.990
	03/15/06	-	1.08	<0.308	<0.154	0.153	0.233	0.270	0.286	0.292	0.400	0.0854	0.336	2.94	0.270	<0.615	2.45	0.533
CR-1	09/20/01	-	0.520	ND	ND	ND	0.120	0.100	0.140	0.100	ND	0.120	ND	1.94	0.140	0.300	0.160	ND
	03/21/02	-	0.216	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.788	ND	ND	0.184	ND
	09/24/02	-	1.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.32	ND	0.687	0.660	ND
	03/20/03	-	0.758	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.53	ND	ND	0.748	ND
	09/30/03	-	1.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.02	ND	ND	1.11	ND
	03/30/04	-	0.473	<0.150	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	1.59	<0.100	<0.650	0.322	<0.100
	03/08/05	-	0.825	<0.150	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	3.18	<0.100	<0.650	0.766	<0.100
	09/21/05	-	1.22	<0.297	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	4.63	<0.0990	<1.63	1.52	<0.0990
	09/27/06	-	0.978	<0.197	0.0747	<0.00985	<0.00985	<0.0197	<0.0493	<0.0197	<0.00985	<0.00985	<0.0493	3.19	<0.00985	<0.768	1.07	0.0513
	03/22/07	-	0.118	<0.0343[5]	<0.0490[5]	<0.00490	<0.00490	<0.00490	<0.00980	<0.00490	<0.0147[5]	<0.00490	<0.0245[5]	0.838	<0.00490	<0.275[5]	0.140	<0.0784[5]
	09/20/07	<0.500[5]	1.01	<0.500[5]	<0.500[5]	<0.0250[5]	0.0112[4]	0.0146[4]	<0.100	0.0120[4]	<0.0250[5]	0.00524[4]	<0.500[5]	9.81	0.00512[4]	<2.50	1.03	<0.500[5]
	03/25/08	<0.0980	<0.0980	<0.0980	<0.0980	<0.0245	<0.00490	<0.00490	<0.0980	<0.00490	<0.0245	<0.00490	<0.0980	<0.0980	<0.00490	<0.0980	<0.0980	<0.0980
CR-3	03/09/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	08/22/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/22/05	-	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990
CR-8	02/18/00	-	0.749	ND	0.264	0.981	2.47	1.8	2.92	1.3	1.28	3.42	1.34	ND	1.96	ND	0.125	1.97
	05/23/00	-	ND	ND	0.223	0.232	0.61	0.46	0.981	0.331	0.328	ND	0.27	ND	0.613	ND	ND	0.458
	08/25/00	-	ND	ND	ND	0.313	0.866	0.445	0.755	0.455	0.434	ND	0.674	ND	ND	ND	ND	0.913
	11/30/00	-	ND	ND	ND	ND	0.120	ND	0.160	ND	ND	ND	ND	ND	0.100	ND	ND	0.180
	02/22/01	-	ND	0.284	0.105	0.536	1.25	0.970	1.46	0.628	0.923	ND	0.749	0.103	0.960	ND	0.108	1.41
	05/16/01	-	ND	ND	ND	ND	0.389	0.301	0.459	ND	0.229	ND	0.371	ND	0.326	ND	ND	0.472

COPPOR0006985

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Number of benzene rings		2-Methyl-naphthalene 2	Acenaphthene 2	Acenaphthylene 2	Anthracene 3	Benzo (a) anthracene 4	Benzo (a) pyrene 5	Benzo (b) fluoranthene 4	Benzo (g,h,i) perylene 5	Benzo (k) fluoranthene 4	Chrysene 4	Dibenzo (a,h) anthracene 5	Fluoranthene 3	Fluorene 2	Indeno (1,2,3-cd) pyrene 5	Naphthalene 2	Phenanthrene 3	Pyrene 4
Well Identification	Date Sampled	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
CR-9	02/18/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/23/00	-	ND	ND	0.115	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/25/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	08/25/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/30/00	-	ND	ND	ND	ND	ND	ND	0.160	0.120	ND	ND	ND	ND	0.120	ND	ND	0.100
dup	11/30/00	-	ND	ND	ND	0.140	0.260	0.260	0.400	0.300	0.200	ND	0.160	ND	0.320	ND	ND	0.240
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CR-11	02/18/00	-	0.333	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.982	ND	ND	0.327	ND
	05/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/25/00	-	0.402	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.20	ND	ND	0.450	ND
	11/30/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	02/22/01	-	0.208	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.457	ND	ND	ND	ND
	05/16/01	-	0.149	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.221	ND	ND	ND	ND
CR-28	03/09/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	0.215	<0.100	<0.200	0.165	<0.100
	08/22/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	0.284	<0.100	<0.100	<0.100	<0.100
	09/22/05	-	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.198	<0.0990	0.172	<0.0990	<0.0990	<0.0990	<0.0990
	03/25/08	<0.0962	<0.0962	<0.0962	<0.0962	0.0118	0.0126	0.0145	<0.0962	0.0135	0.0206	<0.00481	<0.0962	<0.0962	0.0122	<0.0962	<0.0962	<0.0962
CR-27C	03/25/08	<0.0995	<0.0995	<0.0995	<0.0995	0.0375	0.0382	0.0519	<0.0995	0.0478	0.0583	0.0138	<0.0995	<0.0995	0.0415	<0.0995	<0.0995	<0.0995
CR-33	03/26/08	<0.0980	<0.980	<0.980	<0.490	<0.0245	<0.0245	<0.0245	<0.0980	<0.0245	<0.0245	<0.0245	<0.490	<0.980	<0.0245	<0.196	<0.490	<0.0980

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
KINDER MORGAN		-																
MW-8	02/16/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.66	ND	ND
	05/31/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.53	ND	ND
	12/01/00	-	0.240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.680	0.140	0.160
	02/22/01	-	0.221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.104	ND
	05/16/01	-	0.149	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	05/16/01	-	0.123	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/21/01	-	0.160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.260	0.100	ND
	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/27/02	-	0.148	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/03	-	0.181	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/30/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100
	09/27/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.350	<0.100	<0.100
dup	09/27/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.300	<0.100	<0.100
	03/29/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/21/05	-	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204
	03/15/06	-	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.155	<0.0194	<0.0194
dup	03/15/06	-	0.0260	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.125	<0.0192	<0.0192
	09/26/06	-	0.147	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.600[6]	0.0801	0.0328
	03/22/07	-	0.0292	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.314[6]	<0.0196	<0.0196
	09/20/07	<0.0100	0.0625	<0.0150[6]	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<1.55[6]	0.0153	<0.0200[6]
dup	09/20/07	<0.0100	0.0662	<0.0150[6]	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<1.05[6]	0.0143	<0.0150[6]
	03/24/08	<0.0044	<0.0024	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.12	<0.0050	<0.0035

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-10	02/16/00	-	0.113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0759	0.0845
	05/31/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	0.119	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/01/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.180	ND	ND
	02/22/01	-	0.134	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	0.104	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-11	02/16/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.66	ND	410	ND	ND
	05/31/00	-	ND	ND	0.159	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	555	0.256	ND
	08/24/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	451	ND	ND
	12/01/00	-	0.200	0.120	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300	ND	ND	0.160	ND
	02/22/01	-	0.247	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	411	0.184	ND
	05/16/01	-	0.117	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.185	ND	572	0.108	ND
MW-13	02/16/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/31/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/01/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	12/01/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-15	02/17/00	-	0.118	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0743	ND	ND	ND	ND
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/01/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-21	02/17/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/01/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-22	02/17/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.23	ND	356	1.09	ND
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	345	ND	ND
	08/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	386	ND	ND
	12/01/00	-	0.300	0.160	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.500	ND	ND	0.400	ND
	02/21/01	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	05/16/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
MW-23	02/17/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	05/30/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	08/23/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	12/01/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	02/22/01	-	2.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.12	ND	35.0	3.27	ND
	05/16/01	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-25	09/21/01	-	0.240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.120	ND	ND
	03/14/02	-	0.172	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/27/02	-	0.194	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.101
	03/18/03	-	0.163	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/03	-	0.289	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/30/04	-	0.233	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.350	<0.100	<0.100
	09/27/04	-	0.384	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.500	<0.100	<0.100
	03/28/05	-	0.177	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.250	<0.100	<0.100
	09/21/05	-	0.205	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.0344	0.0401
	03/15/06	-	0.112	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.135	<0.0182	0.0255
	09/26/06	-	0.190	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.184[6]	<0.0306[6]	0.0633
	03/22/07	-	0.175	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.382[6]	<0.0294[6]	0.0537
	09/20/07	<0.0150	0.224	<0.0150	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.400[6]	0.0338	0.0577
	03/24/08	<0.0075[5]	0.20	<0.0034	<0.0036	0.015	0.025	0.023	0.027	<0.0025	0.021	0.0050	0.013	<0.0038	0.017	<0.17[6]	0.023	0.14
MW-26	02/17/00	-	2.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19	1.7	ND	2.69	2.27	1.05
dup	02/17/00	-	1.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.99	1.43	ND	2.24	1.74	0.714
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.84	ND	ND	1.84	ND
	08/23/00	-	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.23	1.92	ND	ND	2.39	ND
dup	08/23/00	-	2.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.12	1.98	ND	ND	2.63	ND
	12/01/00	-	0.840	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.580	0.320	ND	0.380	ND	0.360
	02/21/01	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	05/17/01	-	1.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.40	ND	ND	1.88	ND
	09/18/01	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	03/13/02	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	09/27/02	-	1.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.510	1.43	ND	ND	2.36	ND
	03/18/03	-	1.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.641	0.974	ND	7.16	1.51	ND
	09/24/03	-	1.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.596	1.61	ND	ND	2.3	ND
	03/30/04	-	1.33	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	<0.200	1.52	<0.200	<3.80	0.357	0.219
	09/27/04	-	2.33	<0.200	0.277	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	0.985	2.07	<0.200	<2.00	2.01	0.664
	03/28/05	-	2.02	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	1.26	1.63	<0.500	<1.62	2.51	0.924
	09/21/05	-	1.32	<0.200	0.165	0.0459	<0.0400	0.0560	<0.0400	<0.0400	0.0875	<0.0400	0.521	0.967	<0.0400	<0.980	1.48	0.396
	03/15/06	-	1.01	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	0.225	0.883	<0.192	<3.75	0.538	<0.192
	09/26/06	-	1.63	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	0.243	1.24	<0.202	<1.21[6]	1.48	<0.202
dup	09/26/06	-	1.61	<0.0750[6]	0.100	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	0.226	1.17	<0.0500	<1.18[6,7]	1.60	0.151
	03/22/07	-	0.431	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	0.133	0.372	<0.0980	<1.98[6]	0.331	<0.0980
	09/20/07	<0.0500[5]	0.602	<0.0300[6]	0.0440	0.0125	<0.0100	<0.0100	0.0114[4]	<0.0100	0.0198	<0.0100	0.380	0.477	<0.0100	<1.25[6]	0.0903	0.334
	03/25/08	12[6]	0.84	<0.088[6]	0.11	0.098	0.057	0.064	0.054	<0.0025	0.15	0.011	1.0	0.62	0.035	<0.76[6]	0.84	0.81
dup	03/25/08	12[6]	0.78	<0.070[6]	0.084	0.073	0.050	0.042	0.037	<0.0025	0.11	0.0081	0.73	0.55	0.030	<0.68[6]	0.67	0.56

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-28	02/16/00	-	2.68	ND	ND	ND	ND	ND	ND	ND	1.00	ND	0.792	6.69	ND	ND	8.54	2.71
	05/30/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	08/24/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	12/01/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	02/21/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	05/16/01	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
MW-31	02/16/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.988	ND	ND	0.457	0.0887
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/23/00	-	0.243	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.666	ND	ND	0.463	ND
	12/01/00	-	0.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300	ND	ND	ND	ND
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.568	ND	ND	0.363	ND
	05/17/01	-	0.206	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.597	ND	ND	0.352	ND
MW-32	02/18/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/01/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.12	ND	ND
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-33	02/16/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.222	ND	ND
dup	02/22/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.161	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/21/01	-	0.340	ND	ND	0.100	ND	0.220	0.140	0.120	0.200	ND	0.180	ND	0.120	0.160	ND	0.160
	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/27/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/29/04	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0209
	09/27/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	03/29/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/21/05	-	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	0.0321
dup	09/21/05	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0384
	03/15/06	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
	09/27/06	-	<0.00990	<0.00990	<0.00990	<0.00615	<0.00495	0.00540	<0.00990	0.00659	<0.00718	<0.00495	<0.00990	<0.00990	<0.00510	0.0468[4,5]	<0.00990	0.0189
	03/22/07	-	<0.00976	<0.00976	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00976	<0.00488	0.0146	<0.00976	0.0193
dup	03/22/07	-	<0.00971	<0.00971	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00971	<0.00485	0.0145	<0.00971	0.0157
	09/18/07	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	03/25/08	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	0.0030	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.017	<0.0050	<0.0035
MW-34	09/21/01	-	0.280	ND	ND	ND	ND	ND	0.100	ND	ND	ND	ND	ND	0.120	0.120	ND	ND
	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/27/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/03	-	0.151	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/29/04	-	0.0524	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0600	<0.0200	<0.0200
	09/27/04	-	0.135	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.150	<0.100	<0.100
dup	03/29/05	-	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	<0.222	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111
	03/29/05	-	0.129	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/21/05	-	0.332	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0297	<0.0198	<0.218	<0.0198	<0.0222
	03/15/06	-	0.118	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0990	<0.0198	<0.0198
	09/27/06	-	<0.00990	<0.00990	<0.00990	<0.00615	<0.00495	0.00540	<0.00990	0.00659	<0.00718	<0.00495	<0.00990	<0.00990	<0.00510	0.0468[4,5]	<0.00990	0.0189
	03/22/07	-	0.0215	<0.00985	<0.00985	<0.00493	<0.00493	<0.00493	<0.00985	<0.00493	<0.00493	<0.00493	<0.00985	<0.00985	<0.00493	<0.0591[6]	<0.00985	<0.00985
	09/18/07	<0.0971	0.375	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.871[6]	<0.0971	<0.0971
	03/25/08	0.0025	0.071	<0.0034	0.0070	<0.0026	<0.0043	<0.0025	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.075[6]	0.0065	0.012

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-36	02/16/00	-	0.143	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/31/00	-	0.228	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	0.269	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/30/00	-	0.420	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.180	ND	ND
	02/21/01	-	0.304	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	0.247	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/21/01	-	0.240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.140	ND	ND
	03/13/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	0.178	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/03	-	0.307	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/29/04	-	0.248	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.200	0.0525	0.0487
	09/27/04	-	0.710	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.150	<0.100	<1.00	<0.100	<0.100
	09/21/05	-	0.382	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0300	<0.0200	<0.0200	<0.0200	0.0574	0.0618
	03/15/06	-	0.0302	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0388	<0.0194	0.0226
	09/27/06	-	0.606	<0.0200[6]	<0.0200[6]	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	<0.0100	<0.0200[6]	<0.00500	<0.400[6,7]	0.103	0.121
dup	09/27/06	-	0.528	<0.0199[6]	<0.0249[6]	0.00544	<0.00498	<0.00498	<0.00995	0.00498	0.00527	<0.00522	<0.00995	<0.0149[6]	<0.00559	<0.279[6,7]	0.104	0.109
	03/22/07	-	0.289	<0.0146[6]	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00971	<0.00485	<0.320[6]	0.0513	0.0478
	09/18/07	<0.0995	0.564	<0.0995	<0.0995	<0.00498	<0.00498	<0.00498	<0.0995	<0.00498	<0.00498	<0.00498	<0.0995	<0.0995	<0.00498	<0.896[6]	<0.0995	0.148
dup	09/18/07	<0.0980	0.552	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.0980	<0.00490	<0.882[6]	0.110	0.151
	03/25/08	<0.0023	0.088	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	0.0047	<0.0038	<0.0026	<0.032[6]	0.029	0.021
MW-37	02/16/00	-	1.56	ND	0.0862	0.0584	0.0773	0.0564	ND	ND	563	ND	0.158	3.02	ND	ND	0.605	0.214
	05/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.126	ND	ND	ND	0.451	0.153
	08/24/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.25	ND	ND	ND	ND
	11/30/00	-	0.680	0.180	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.600	ND	0.680	0.200	0.120
	02/21/01	-	0.183	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.228	ND	ND	ND	ND
	02/21/01[1]	-	0.588	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.513	ND	ND	0.207	ND
	05/16/01	-	0.401	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.327	ND	ND	0.146	ND
	09/21/01	-	0.140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.280	0.120	ND
	03/13/02	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/27/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.499	ND	ND	0.166	0.122
dup	09/27/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.147	ND
	03/18/03	-	0.435	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.731	ND	ND	ND	ND
	09/27/04	-	<1.00	<1.00	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	0.122	<1.00	<0.100	<1.00	0.184	0.251
	03/29/05	-	2.39	<0.250	0.344	<0.200	<0.200	<0.200	<0.200	<0.200	0.241	<0.400	1.39	1.93	<0.200	<2.00	2.88	1.05
	09/21/05	-	0.77	<0.350	<0.100	<0.100	<0.100	<0.100	0.110	<0.100	<0.100	<0.100	<0.100	0.478	<0.100	<1.90	<0.100	0.131
	03/15/06	-	0.737	<0.433	<0.0962	<0.0962	0.150	<0.0962	0.319	<0.0962	<0.0962	<0.0962	<0.0962	1.18	0.214	<1.49	0.160	0.119
	09/27/06	-	0.653	<0.250[6]	<0.0400[6]	0.0212	0.0486	0.0326	0.0717	0.0314	0.0296	0.0120	0.0582	0.342	0.0456	<1.20[6,7]	0.135	0.123
	03/22/07	-	0.579	<0.194[6]	<0.0971[6]	0.0183	0.0330	0.0190	0.0389	0.0230	0.0270	0.00858	<0.0971[6]	0.820	0.0315	<2.14[6]	<0.0971[6]	0.133
	09/18/07	<0.388[6]	<0.971[6]	<0.971[6]	<0.0971	0.0132	0.0297	<0.0194[6]	<0.388[6]	<0.0194[6]	0.0187	<0.0194[6]	<0.0971	<0.971[6]	0.0334	<3.11[6]	<0.971[6]	0.120
	03/25/08	<0.0023	1.1	<0.46[6]	0.041	0.044	0.083	0.080	0.15	0.025	0.021	0.015	0.098	1.5	0.15	<1.1[6]	0.23	0.17
dup	03/25/08	<0.0023	1.0	<0.44[6]	0.040	0.046	0.11	0.089	0.21	0.031	0.028	0.018	0.074	1.7	0.21	<1.1[6]	0.23	0.15

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Number of benzene rings		2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
Well Identification	Date Sampled	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-39	09/27/04	-	4.30	<0.100	0.159	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	0.338	1.23	<0.100	<1.60	1.18	0.348
	09/21/05	-	2.33	<0.200	0.0920	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.211	0.826	<0.0200	<0.900	0.802	0.239
MW-40	02/18/00	-	0.0972	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/30/00	-	0.124	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/24/00	-	0.141	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/30/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/21/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/16/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/21/01	-	ND	ND	ND	ND	ND	ND	0.120	ND	ND	0.100	0.380	ND	0.140	ND	0.120	0.240
	03/13/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/27/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/03	-	0.109	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	09/24/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/29/04	-	0.0609	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0900	<0.0300	<0.0200
dup	03/29/04	-	0.0588	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0900	0.0286	<0.0200
	09/27/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	03/29/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/21/05	-	0.0732	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	0.105	0.0381	<0.0190
	03/15/06	-	0.0716	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0769	0.0287	<0.0192
	03/22/07	-	0.0655	<0.00971	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00971	<0.00485	<0.126[5]	0.0259	0.0114
	08/18/07	<0.0990	<0.0990	<0.0990	<0.0990	<0.00495	<0.00495	<0.00495	<0.0990	<0.00495	<0.00495	<0.00495	<0.0990	<0.0990	<0.00495	<0.297[6]	<0.0990	<0.0990
	03/25/08	0.0023	0.075	<0.0034	0.010	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.027[6]	0.028	0.011
MW-41B	03/25/08	0.010	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.011	<0.0050	<0.0035
MW-41C	03/25/08	0.012	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.024	<0.0050	<0.0035
MW-42B	03/25/08	0.0060	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.042	<0.0050	<0.0035
MW-42C	03/25/08	<0.0023	0.013	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.012	0.0089	<0.0035

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
CONOCOPHILLIPS																		
B-4	02/17/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	05/26/00	-	13.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.19	17.3	ND	ND	28.4	2.24
dup	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	20.9	1.72
	08/28/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	11/29/00	-	2.50	ND	0.820	0.140	ND	ND	ND	ND	ND	ND	1.60	2.54	ND	8.80	4.72	1.24
	02/20/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/18/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	03/13/02	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	09/26/02	-	2.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.869	3.42	ND	ND	4.26	0.859
	03/17/03	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/25/03	-	2.79	ND	0.857	ND	ND	ND	ND	ND	ND	ND	1.24	5.10	ND	ND	6.24	1.23
	09/26/06	-	2.75	<0.300[6]	0.670	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	1.00	2.86	<0.200	<1.90[6]	3.68	1.00
	03/21/07	-	2.39	<0.680	<2.04	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	0.103	<0.0971	0.420	8.07	<0.0971	<5.34	11.0	1.01
	09/20/07	<0.0500[6]	1.73	<0.125[6]	0.316	0.0232	<0.0100	<0.0100	0.0122[4]	<0.0100	0.0196	<0.0100	0.512	2.55	<0.100	<2.75[6]	2.21	0.623
	03/26/08	<1.92	5.22	<4.81	4.72	0.169	0.0554	0.0543	<0.577	0.0335	0.299	<0.0288	<1.92	19.2	0.0305	<9.62	27.1	2.02
B-17	02/17/00	-	2.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.42	ND	ND	4.25	ND
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	ND	ND	5.33	ND
	08/28/00	-	2.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.5	ND	ND	7.10	
	11/29/00	-	1.72	0.340	0.180	ND	ND	ND	ND	ND	ND	ND	0.320	5.50	ND	0.880	4.98	0.260
	02/23/01	-	2.36	ND	0.139	ND	ND	ND	ND	ND	ND	ND	ND	8.20	ND	ND	2.93	ND
dup	02/23/01	-	2.52	ND	0.238	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.372	ND	3.84	ND
	05/17/01	-	2.19	ND	0.294	ND	ND	ND	ND	ND	ND	ND	ND	7.83	ND	ND	4.24	ND
dup	05/17/01	-	2.19	ND	0.265	ND	ND	ND	ND	ND	ND	ND	ND	8.25	ND	ND	4.14	ND
B-18	02/17/00	-	1.41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.39	ND	ND	1.83	ND
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/28/00	-	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.84	ND	ND	1.17	ND
	11/29/00	-	0.220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.440	ND	ND	0.220	ND
	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11	ND	ND	ND	ND
	05/17/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.529	ND	ND	ND	ND
B-22	02/17/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.4	ND	ND	21.5	ND
	08/28/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	11/29/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	02/20/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	05/17/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Number of benzene rings		2-Methyl-naphthalene 2	Acenaphthene 2	Acenaphthylene 2	Anthracene 3	Benzo (a) anthracene 4	Benzo (a) pyrene 5	Benzo (b) fluoranthene 4	Benzo (g,h,i) perylene 5	Benzo (k) fluoranthene 4	Chrysene 4	Dibenzo (a,h) anthracene 5	Fluoranthene 3	Fluorene 2	Indeno (1,2,3-cd) pyrene 5	Naphthalene 2	Phenanthrene 3	Pyrene 4
Well Identification	Date Sampled	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-35	02/17/00	-	11	ND	5.15	1.19	ND	ND	ND	ND	1.1	ND	8.29	30	ND	ND	35.8	4.33
	05/26/00	-	ND	ND	2.61	ND	ND	ND	ND	ND	ND	ND	2.93	22.5	ND	ND	20.7	1.73
	08/28/00	-	6.77	ND	0.807	0.123	ND	ND	ND	ND	0.127	ND	1.12	13.7	ND	ND	8.35	0.584
	11/29/00	-	2.84	0.360	0.520	0.240	ND	ND	ND	ND	0.200	ND	1.46	6.30	ND	1.22	7.18	0.760
	02/23/01	-	8.44	ND	ND	0.304	ND	0.102	ND	ND	0.330	ND	ND	16.2	ND	ND	17.3	1.15
	05/17/01	-	4.34	ND	0.493	0.103	ND	ND	ND	ND	0.106	ND	0.692	11.3	ND	ND	5.50	0.425
	09/20/01	-	2.92	0.360	0.680	0.200	ND	0.120	ND	ND	0.200	ND	1.20	6.74	ND	1.00	10.0	0.700
	03/14/02	-	3.02	ND	0.620	ND	ND	ND	ND	ND	ND	ND	0.844	7.62	ND	ND	8.78	0.468
	09/26/02	-	4.76	ND	0.740	0.109	ND	ND	ND	ND	ND	ND	1.00	11.6	ND	ND	9.41	0.570
	03/18/03	-	3.46	ND	0.483	ND	ND	ND	ND	ND	ND	ND	0.578	14.3	ND	ND	7.51	0.434
	09/25/03	-	5.36	ND	0.779	ND	ND	ND	ND	ND	ND	ND	0.884	10.2	ND	ND	8.86	0.399
	03/30/04	-	3.52	<0.200	0.456	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.419	7.21	<0.200	<2.10	5.18	0.274
	09/28/04	-	5.25	<0.200	0.579	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	0.662	9.23	<0.200	<2.70	6.80	0.455
	03/28/05	-	<7.25	<1.00	1.13	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	2.12	15.6	<1.00	<3.50	14.7	1.24
	09/20/05	-	7.51	<0.400	2.37	0.792	<0.400	<0.400	<0.400	<0.400	0.787	<0.400	5.150	16.900	<0.400	<3.60	24.9	3.23
	03/14/06	-	4.83	<0.495	0.438	0.107	0.0259	0.0402	<0.0198	0.0201	0.0972	<0.0198	0.419	8.83	<0.0198	<2.23	7.60	0.498
	09/26/06	-	5.99	<0.819[6]	0.609	<0.206	<0.206	<0.206	<0.206	<0.206	<0.206	<0.206	1.03	11.2	<0.206	<2.27[6]	9.46	0.644
	03/20/07	-	9.21	<1.26	2.21	0.549	0.113	0.133	<0.0971	0.123	0.587	<0.0971	3.04	21.7	<0.0971	<7.28	20.8	2.96
	09/20/07	<0.750[6]	7.05	<1.00[6]	0.540	0.086	<0.0500	<0.0500	<0.0500	<0.0500	0.0960	<0.0500	1.03	13.5	<0.0500	<6.00	10.2[6]	0.616
	03/27/08	<0.962	7.73	<2.40	2.36	0.645	0.144	0.218	<0.962	0.156	0.669	<0.0481	3.92	22.1	<0.0481	<7.21	25.4	2.05
B-36	02/17/00	-	0.251	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.537	ND	ND	ND	ND
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/23/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/29/00	-	0.720	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.34	ND	0.520	0.190	ND
	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/17/01	-	0.642	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.91	ND	ND	ND	ND
	09/20/01	-	0.360	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.920	ND	0.320	0.200	ND
dup	09/20/01	-	0.320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.880	ND	0.300	0.100	ND
	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.262	ND	ND	ND	ND
	09/26/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.26	ND	ND	ND	ND
	03/18/03	-	0.240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.811	ND	ND	ND	ND
	09/25/03	-	0.584	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.22	ND	ND	ND	ND
	03/30/04	-	3.51	<0.200	0.490	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.429	6.79	<0.200	<2.10	5.07	0.268
	09/28/04	-	0.653	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	1.51	<0.100	<1.60	<0.100	<0.100
dup	09/28/04	-	0.723	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	1.24	<0.100	<1.35	<0.100	<0.150
	03/28/05	-	0.728	<0.175	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	1.60	<0.100	<1.25	<0.125	<0.100
	09/20/05	-	0.274	<0.0200	<0.0300	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.606	<0.0200	<0.610	<0.0200	0.0285
	03/14/06	-	0.0868	<0.0288	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.259	<0.0192	<0.462	<0.0192	<0.0288
	09/26/06	-	0.706	<0.198[6]	<0.0495[6]	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	1.59	<0.0198	<1.98[6]	<0.0495[6]	<0.0893[6]
	03/20/07	-	<0.245	<0.0686	<0.0686	<0.0392	<0.0196	<0.0196	0.0255	<0.0196	<0.0392	<0.0196	<0.0686	0.724	<0.0196	<1.18	<0.0490	<0.196
	09/20/07	<0.125[6]	0.911	<0.250[6]	<0.250[6]	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250[6]	2.24	<0.0500	<4.25[6]	<0.250[6]	<0.250[6]
	03/27/08	<0.0962	0.187	<0.0962	<0.0962	<0.0481	0.0270	0.0368	<0.192	<0.00962	<0.0481	<0.00962	<0.0962	0.501	<0.00962	<0.385	<0.0962	<0.0962

COPPOR0006995

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
B-37	02/17/00	-	0.0698	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0547
dup	02/17/00	-	0.0583	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0731
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/28/00	-	0.124	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/29/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.128	ND
	05/17/01	-	0.110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/26/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/25/03	-	0.120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
dup	09/25/03	-	0.113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.118	ND
	03/31/04	-	0.0737	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.320	<0.0300	0.0431
	09/28/04	-	0.142	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.300	<0.100	<0.100
	03/28/05	-	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.225	<0.100	<0.100
	09/20/05	-	0.347	<0.0303	<0.0303	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.222	<0.0707	0.0454
	03/14/06	-	0.0725	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.277	<0.0198	<0.0396
dup	03/14/06	-	<0.0891	<0.0198	0.0217	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	0.0217	<0.0198	<0.0198	<0.0198	<0.0198	<0.277	0.0813	0.0591
	09/26/06	-	0.270	<0.0392[6]	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0198	<0.0196	<0.0196	<0.0196	<0.0196	<0.225[6]	0.0214	0.0208
	03/20/07	-	0.186	<0.0288	0.0189	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.962	0.0517	0.0836
	09/20/07	<0.0150[6]	0.208	<0.0300[6]	<0.0500[6]	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0500[6]	<0.0400[6]	<0.0100	<0.550[6]	0.0828	0.0789
	03/27/08	<0.0952	0.144	<0.0952	<0.0952	0.0121	0.0146	0.0114	<0.190	<0.00952	0.0142	<0.00952	<0.0952	<0.0952	0.0128	<0.476	<0.0952	<0.0952
B-40	02/17/00	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	05/26/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	08/28/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	11/29/00	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	02/20/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	05/17/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/26/06[8]	-	8.45	<1.75[6]	1.39	0.189	0.0804	<0.100[6]	<0.500	<0.100[6]	0.337	<0.0500	<0.500	9.06	<0.0500	<213[6]	13.8	1.42
	03/20/07	-	26.0	<9.95	<9.95	2.01	0.749	<0.498	<4.98	<0.498	3.86	0.298	<4.98	40.5	0.167	389	87.0	16.6
	09/20/07	280	5.71	<1.75[6]	<2.00[6]	<0.500	<0.500	<0.500	<0.500[4]	<0.500	0.507	<0.500	<0.500	6.97	<0.500	141	12.7	1.90
	03/26/08	2,080	75.6	<24.0	38.6	6.61	2.36	<1.92	<9.62	<1.92	12.0	0.621	9.75	112	0.589	612	275	33.4

COPPOR0006996

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
OF-1	03/28/08	<0.962	<0.962	<0.962	<1.44	0.0702	0.0356	0.0332	<0.192	0.0188	0.142	<0.00962	<0.962	<0.962	0.0207	<0.962	<0.962	<0.962
P-1	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/31/04	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0405
	09/26/06	-	0.0137	<0.0102	<0.0102	<0.00508	<0.00508	<0.00508	<0.0102	<0.00508	0.00513	<0.00508	<0.0102	0.0225	<0.00508	<0.0457[6,7]	0.0468	0.0195
	03/20/07	-	<0.00976	<0.00976	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00488	<0.00488	<0.00488	<0.00978	<0.00976	<0.00488	<0.0341	0.0139	0.0134
		Well Abandoned																
P-1A	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
P-2	03/17/03	-	2.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.62	ND	ND	2.05	ND
	9/25/03[2]	-	1.93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.85	ND	ND	4.23	ND
	03/30/04	-	1.97	<0.200	<0.300	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	7.66	<0.200	<1.70	3.28	<0.200
	09/28/04	-	2.28	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.400	<0.200	8.23	<0.200	<1.40	3.56	<0.200
	03/28/05	-	2.62	<0.600	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.800	<0.400	8.77	<0.400	<1.60	3.48	<0.400
	03/14/06	-	3.45	<0.777	<0.777	<0.0388	<0.0388	<0.0388	<0.0388	<0.0388	<0.0388	<0.0388	<0.777	12.1	<0.0388	<1.94	4.17	<0.0583
U-2	02/17/00	-	0.140	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.883	0.224	ND	ND	0.104	0.0856
	05/26/00	-	0.119	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.239	ND	ND	0.122	ND
	08/28/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND
	11/29/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/23/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/17/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/20/01	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/14/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/26/02	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/25/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/31/04	-	0.166	<0.0200	0.0201	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.100	0.237	<0.0200	<1.12	0.0880	0.0787
	09/28/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.150	<0.100	<0.100
	03/28/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/20/05	-	0.0232	<0.0196	0.0308	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0197	0.0283	<0.0196	<0.118	0.0318	0.0292
	03/14/06	-	0.352	<0.106	0.0232	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	0.0392	0.454	<0.0192	<4.71	0.135	0.0798
	09/27/06	-	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.168[6]	<0.0198	0.0414
	03/21/07	-	0.135	<0.0291	0.0310	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.0447	0.451	<0.0194	<2.43	0.163	0.0874
	09/19/07	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	0.00585	<0.00493	<0.0985	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985
	03/25/08	1.73	0.377	<0.0962	<0.0962	0.0120	<0.00962	<0.00962	<0.192	<0.00962	0.0152	<0.00962	0.0993	0.736	<0.00962	<2.40	0.203	0.129
U-3	02/17/00	-	0.142	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17	ND	ND	0.068	ND
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.119	ND	ND	ND	ND
	08/28/00	-	0.145	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.163	ND	ND	ND	ND
	11/29/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.120	ND	0.160	ND	ND
dup	11/29/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.120	ND	ND
	02/23/01	-	0.117	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.152	ND	ND	ND	ND
	05/17/01	-	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.134	ND	ND	ND	ND

COPPOR0006997

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
U-4	02/16/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.92	ND	ND	7.42	ND
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.44	ND	ND	7.11	ND
	08/28/00	-	5.05	ND	1.32	ND	ND	ND	ND	ND	ND	ND	ND	11.6	ND	ND	12.4	1.17
dup	08/28/00	-	4.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.387	10.4	ND	ND	6.48	0.544
	11/29/00	-	1.66	ND	0.660	ND	ND	ND	ND	ND	ND	ND	0.220	3.38	ND	0.760	1.92	0.340
	02/23/01	-	13.0	ND	4.14	ND	ND	ND	ND	ND	0.727	ND	ND	31.6	ND	ND	40.6	4.08
	05/17/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/18/01	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	03/13/02	-	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S
	09/26/02	-	2.88	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.60	ND	ND	8.14	0.571
dup	09/26/02	-	3.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.72	ND	ND	9.70	0.842
	03/17/03	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/27/06	-	2.13	<0.990[6]	0.443	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	0.113	5.81	<0.0990	<2.97[6]	4.59	0.351
	03/21/07	-	2.92	<0.980	<1.96	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	0.104	<0.0980	0.263	11.2	<0.0980	<4.51	6.69	1.06
	09/19/07	<0.493	1.75	<0.985[6]	<0.985[6]	<0.0246	<0.0246	<0.0246	<0.493	<0.0246	0.0255	<0.0246	<0.493	8.00	<0.0246	<4.43[6]	2.92	<0.493
	03/27/08	<1.92	6.07	<2.88	4.12	0.0956	0.0493	0.0328	<0.385	0.0354	0.168	<0.0192	<1.92	15.8	0.0314	<5.77	18.1	2.37
U-5	02/17/00	-	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.83	ND	ND	1.42	0.0674
	05/26/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.04	ND
	08/28/00	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.52	ND	ND	2.29	ND
	11/29/00	-	0.800	0.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.02	ND	2.60	1.06	ND
	02/23/01	-	ND	ND	0.124	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.28	ND	ND	1.64	ND
	05/17/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/18/01	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	09/26/02	-	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F
	03/18/03	-	ND	ND	ND	1.08	ND	ND	2.54	ND	1.89	ND	ND	36.0	ND	ND	55.0	11.3
	09/25/03	-	5.52	ND	1.13	ND	ND	ND	ND	ND	ND	ND	ND	9.61	ND	4.71	10.7	1.31
	03/31/04	-	3.15	<0.400	0.921	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	5.18	<0.400	<2.50	5.49	1.06
	09/28/04	-	4.54	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	6.51	<0.500	<3.25	5.66	<0.500
	03/28/05	-	4.25	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<1.00	6.87	<1.00	<2.50	7.64	<1.00
	09/20/05	-	3.69	<0.192	0.545	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	5.80	<0.192	<2.31	6.37	0.443
	03/14/06	-	3.50	<0.784	<0.490	<0.196	<0.196	<0.196	<0.196	<0.196	<0.196	<0.196	<0.196	5.78	<0.196	<3.04	6.09	0.374
	09/26/06[8]	-	204	<72.8[6]	108	9.40	5.79	<6.07[6]	28.3	<7.28[6]	23.3	3.69	27.6	374	2.33	<121[6,7]	996	119
	03/20/07	-	4.58	<1.17	<2.14	0.188	0.0981	<0.0971	0.420	<0.0971	0.403	0.0577	<0.388	12.5	0.0459	<5.44	11.8	2.56
	09/20/07	19.2	12.4	<5.00[6]	<15.0[6]	0.548	<0.500	<0.500	1.20[9]	<0.500	0.999	<0.500	<5.00[6]	19.9	<0.500	<12.0[6]	37.8	8.00
U-5A	03/27/08	<0.721	2.95	<1.88	<0.481	<2.40	<0.144	<0.192	<0.962	<0.240	0.388	<0.0481	<0.481	8.56	0.0793	<5.29	2.26	0.519

COPPOR0006998

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
U-10	03/18/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.345	ND	ND
	09/25/03	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/30/04	-	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0302	<0.0200	<0.0200
	09/28/04	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	03/28/05	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
	09/20/05	-	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0297	<0.0198	<0.0198
	03/14/06	-	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0291	<0.0194	<0.0291
U-11	03/18/03	-	0.711	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.44	ND	ND	0.951	ND
	09/25/03	-	1.45	ND	0.229	ND	ND	ND	ND	ND	ND	ND	0.391	4.69	ND	ND	3.25	0.396
	03/30/04	-	1.73	<0.200	0.395	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.610	5.29	<0.200	<2.60	4.32	0.821
	09/28/04	-	<0.171	<0.114	<0.171	<0.114	<0.114	<0.114	<0.114	<0.114	0.114	<0.229	<0.286	<0.343	<0.114	<0.343	<0.343	0.341
	03/28/05	-	1.74	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<1.00	5.56	<1.00	<2.00	4.14	<1.00
	09/20/05	-	1.39	<0.102	0.296	0.200	<0.102	<0.102	<0.102	<0.102	0.175	<0.102	0.608	3.19	<0.102	<1.68	3.30	0.830
	03/14/06	-	1.78	<0.481	0.579	0.281	<0.192	<0.192	<0.192	<0.192	0.238	<0.192	0.926	4.54	<0.192	<2.64	4.10	1.59
U-12	03/18/03	-	1.72	ND	0.308	ND	ND	ND	ND	ND	ND	ND	0.384	7.94	ND	ND	3.91	0.541
	09/25/03	-	0.277	ND	0.138	ND	ND	ND	ND	ND	ND	ND	ND	1.25	ND	0.231	1.69	ND
	03/30/04	-	0.151	<0.0400	<0.0600	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	<0.0400	0.621	<0.0400	<0.320	0.238	0.0434
	09/28/04	-	1.21	<0.100	0.304	0.193	<0.100	<0.100	<0.100	<0.100	0.153	<0.200	0.616	2.56	<0.100	<1.20	2.58	0.832
	03/28/05	-	<0.325	<0.275	<0.225	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	1.00	<0.100	<0.275	0.815	<0.100
	09/20/05	-	<0.0816	<0.0408	<0.0408	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	<0.0204	0.313	<0.0204	<0.153	<0.0714	0.0344
	04/06/06[3]	-	0.502	<0.410	0.256	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	0.0425	<0.0190	0.0749	1.15	<0.0190	<0.524	2.20	0.0762
U-14	09/27/06	-	0.328	<0.202[6]	<0.0303[6]	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	<0.0202	0.0242	0.750	<0.0202	<4.14[6]	0.189	0.0400
	03/21/07	-	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	0.0264	<0.0194	<0.369	0.0262	<0.0194
	09/19/07	<0.498[6]	<0.498[6]	<0.498[6]	<0.0995	0.00719	<0.00498	<0.00498	<0.0995	<0.00498	0.0114	<0.00498	<0.0995	1.58	<0.00498	<2.49[6]	<0.0995	<0.0995
	03/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	0.00967	<0.00962	<0.0962	<0.0962	<0.00962	<0.144	<0.0962	<0.0962
U-15	09/27/06	-	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0198	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0784[6]	<0.0196	0.0261
	03/21/07	-	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	0.0211	<0.0196	<0.123	<0.0196	<0.0196
	09/19/07	<0.0990	<0.0990	<0.0990	<0.0990	0.00654	0.00874	0.00875	<0.0990	0.00808	0.00725	<0.00495	<0.0990	<0.0990	0.00785	<0.0990	<0.0990	<0.0990
	03/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-16	09/27/06	-	0.577	<0.303	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	<0.202	1.14	<0.202	<1.92[6]	0.655	<0.202
	03/21/07	-	<0.583	<0.233	<0.311	<0.0777	<0.0777	<0.0777	<0.0777	<0.0777	0.0979	<0.0777	0.107	1.50	<0.0777	<1.71	0.824	0.339
	09/19/07	<0.498[6]	0.449	<0.398[6]	<0.398[6]	0.0264	0.0106	<0.00995	<0.199	<0.00995	0.0404	<0.00995	<0.199	1.93	<0.00995	<3.48[6]	0.364	0.351
	03/25/08	<0.192	0.382	<0.192	<0.192	0.0181	<0.00962	<0.00962	<0.192	<0.00962	0.0280	<0.00962	<0.192	1.13	<0.00962	0.962	<0.192	<0.192
U-17	09/27/06	-	<0.404[6]	<0.404[6]	<0.404[6]	0.0241	<0.0202	<0.0202	<0.0202	<0.0202	0.0221	<0.0202	<0.0202	0.898	<0.0202	<1.62[6]	0.406	0.124
	03/21/07	-	<0.713	<0.238	0.113	<0.0792	<0.0792	<0.0792	<0.0792	<0.0792	<0.0792	<0.0792	0.135	1.15	<0.0792	<3.72	1.57	0.327
	09/19/07	<0.490[6]	<0.490[6]	<0.490[6]	<0.490[6]	0.0291	0.00937	0.00833	<0.0980	0.00666	0.0272	<0.00490	<0.490[6]	0.739	<0.00490	<2.45[6]	<0.490[6]	0.553
	03/25/08	<0.385	0.920	<0.385	<0.385	0.0308	<0.00962	<0.00962	<0.192	<0.00962	0.0300	<0.00962	<0.385	1.70	<0.00962	2.40	1.46	<0.385

COPPOR0006999

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Number of benzene rings		2-Methyl-naphthalene 2	Acenaphthene 2	Acenaphthylene 2	Anthracene 3	Benzo (a) anthracene 4	Benzo (a) pyrene 5	Benzo (b) fluoranthene 4	Benzo (g,h,i) perylene 5	Benzo (k) fluoranthene 4	Chrysene 4	Dibenzo (a,h) anthracene 5	Fluoranthene 3	Fluorene 2	Indeno (1,2,3-cd) pyrene 5	Naphthalene 2	Phenanthrene 3	Pyrene 4
Well Identification	Date Sampled	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
U-18	03/21/07	-	1.60	<0.385	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	<0.192	5.40	<0.192	<3.08	1.76	0.277
	09/19/07	<4.98[6]	<4.98[6]	<4.98[6]	<4.98[6]	<0.0249	<0.0249	<0.0249	<0.498	<0.0249	0.0338	<0.0249	<4.98[6]	5.91	<0.0249	<4.98[6]	<4.98[6]	<0.498
	03/25/08	<0.192	0.732	<0.192	<0.192	<0.0385	<0.0192	<0.0192	<0.385	<0.0192	<0.0385	<0.0192	<0.192	2.31	<0.0192	<0.962	0.439	<0.192
U-19	03/21/07	-	<0.175	<0.0583	<0.175	0.0606	<0.0388	<0.0388	<0.0388	<0.0388	0.0878	<0.0388	0.222	0.451	<0.0388	<5.83	0.239	0.239
	09/19/07	<0.396	<0.396	<0.396	<0.396	<0.0198	<0.0198	<0.0198	<0.396	<0.0198	<0.0198	<0.0198	<0.396	<0.396	<0.0198	<4.75[6]	<0.396	<0.396
	03/25/08	<0.0962	<0.0962	<0.0962	<0.0962	0.0294	0.0167	0.0165	<0.192	0.0138	0.0408	0.0124	<0.0962	0.108	0.00984	<1.92	<0.0962	<0.0962
U-20	03/20/07	-	1.42	<0.505	<0.233	<0.0777	<0.0777	<0.0777	<0.0777	<0.0777	0.0921	<0.0777	0.0954	3.49	<0.0777	<5.44	4.58	0.195
	09/19/07	<0.493[6]	1.01	<0.591[6]	<0.394[6]	<0.00985	<0.00985	<0.00985	<0.197	<0.00985	<0.00985	<0.00985	<0.197	2.78	<0.00985	<2.96[6]	1.50	<0.197
	03/25/08	<0.0962	0.720	<0.240	<0.0962	<0.0192	<0.00962	<0.00962	<0.192	<0.00962	<0.0192	<0.00962	<0.0962	1.71	<0.00962	<1.25	1.10	<0.0962
dup	03/25/08	<0.0962	0.772	<0.288	<0.0962	<0.0192	<0.00962	<0.00962	<0.192	<0.00962	<0.0192	<0.00962	<0.0962	1.91	<0.00962	<1.30	1.10	<0.0962
U-21	03/20/07	-	1.29	<0.854	0.170	0.0845	<0.0777	<0.0777	<0.0777	<0.0777	0.0987	<0.0777	0.298	1.24	<0.0777	<8.16	0.694	0.330
	09/19/07	<4.93[6]	1.07	<0.985[6]	<0.493[6]	0.0158	<0.00493	<0.00493	<0.0985	<0.00493	0.0188	<0.00493	<0.493[6]	1.39	<0.00493	<9.85[6]	<0.493[6]	0.352
	03/26/08	<0.192	1.12	<0.481	<0.192	0.0300	<0.00962	<0.00962	<0.192	<0.00962	0.0373	<0.00962	0.208	2.11	<0.00962	<2.88	0.220	<0.192
U-22A	03/27/08	<0.0962	1.82	<0.337	<0.240	<0.0385	<0.00962	<0.0192	<0.192	<0.0192	<0.0385	<0.00962	0.105	6.55	<0.00962	<1.44	<0.288	0.121
U-22B	03/27/08	<0.0952	0.163	<0.0952	<0.0952	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.0952	<0.0952	0.746	<0.00952	<0.238	<0.0952	<0.0952
U-23	03/27/08	<0.0952	0.259	<0.0952	0.155	<0.0288	<0.00952	<0.00952	<0.190	<0.00952	<0.0288	<0.00952	<0.0952	0.973	<0.00952	<0.762	1.20	<0.0952
U-24A	03/27/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-24B	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.0952	<0.0952	<0.00952	<0.0952	<0.0952	<0.0952
U-25	03/27/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.240	<0.0962	<0.0962
U-26	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-27	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-28	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-29B	03/26/08	1.23	0.163	<0.0962	<0.0962	0.0113	0.0138	0.0125	<0.192	<0.00962	0.0162	<0.00962	<0.0962	0.257	0.0104	<0.192	<0.0962	<0.0962
U-29C	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962

COPPOR00007000

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Number of benzene rings		2	2	2	3	4	5	4	5	4	4	5	3	2	5	2	3	4
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)

NOTES:
- = Not sampled, not analyzed, not applicable
µg/l = Micrograms per Liter
ND = Not detected at or above method detection limit
2/00 and 5/00 data from IT Corporation
8/00, 11/00, 2/01 and 5/01 data from KHM Environmental Management, Inc.
IT Corp Data recorded as reported in Second Quarter 2000 Report
Analytes reported in alphabetical order
NS/F = Not sampled floating product present
NS/S = Not sampled sheen present
[1] = Sample rerun outside of hold time due to low surrogate recovery reported in the initial sample as a result of an extraction error.
[2] = Sample ID was misidentified by the laboratory as D-2
[3] = Analytical results are from a re-sample due to container breakage at the laboratory of the sample collected on 3/14/06.
[4] = Analyte was detected in the associated Method Blank.
[5] = Naphthalene was detected in the Method Blank at 0.0165 µg/L. Sample has a detection for naphthalene at 0.0468 µg/L. The result has been qualified and should be considered an estimate. Unable to perform corrective action due to insufficient volume left.
[6] = The reporting limit for this analyte was raised due to matrix interference or sample matrix effects.
[7] = Analyte was detected in the blank at greater than one-half of the MRL, but samples are ND.
[8] = The reporting limit was raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte, and/or matrix interference.
[9] = Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10 times the concentration found in the method blank.
[10] = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
dup* = duplicate for B-30 submitted as blind duplicate labeled as B-50
dup**= duplicate for B-30 submitted as blind duplicate labled as B-31
dup***= duplicate for B-30 submitted as blind duplicate labeled as B-130
PAHs by EPA Method 8270M-SIM

COPPOR0007001

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
CHEVRON												
B-7	02/18/00	0.028	0.122	0.00107	0.0086	0.0134	0.00425	NA	ND	0.00125	ND	0.0234
	05/23/00	0.0268	0.228	ND	0.0264	0.0441	0.0115	NA	ND	0.00193	ND	0.0863
dup	05/23/00	0.0276	0.259	ND	0.0304	0.051	0.0137	NA	ND	0.00211	ND	0.104
	08/25/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	11/30/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	02/22/01	0.0310	0.0719	ND	ND	0.00311	ND	NA	ND	ND	ND	0.00513
	05/17/01	0.0364	0.0587	ND	ND	0.00157	ND	NA	ND	ND	ND	ND
	03/20/03	0.0275	0.0642	ND	ND	0.0209	ND	NA	ND	ND	ND	ND
	09/29/03	0.0304	0.0815	ND	0.00278	0.00608	0.00121	NA	ND	0.00132	ND	0.00782
	03/30/04	0.0303	0.0869	0.00138	0.00320	0.00647	0.00175	NA	<0.000200	<0.00100	<0.00100	0.0135
	03/09/05	0.0342	0.110	<0.00100	0.00434	0.00822	0.00239	NA	<0.000200	<0.00200	<0.00100	0.0193
dup	03/09/05	0.0338	0.108	<0.00100	0.00490	0.00978	0.00273	NA	<0.000200	<0.00200	<0.00100	0.0218
	09/22/05	0.0363	0.0857	<0.00100	0.00241	0.00483	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00787
	03/25/08	0.00799	-	<0.000380	0.00141	0.00947	<0.000540	4.11	<0.000200	<0.00500	<0.000120	<0.0330
B-9	05/23/00	0.0177	0.139	ND	0.0176	0.0286	0.00848	NA	ND	0.00123	ND	0.0616
	08/25/00	0.0116	0.0534	ND	0.00270	0.00750	0.00214	NA	ND	ND	ND	0.0228
	11/30/00	0.0108	0.153	0.00149	0.0159	0.0354	0.0114	NA	ND	0.00125	ND	0.0823
	02/22/01	0.0173	0.0460	ND	ND	0.00213	ND	NA	ND	0.00127	ND	ND
	05/17/01	0.0208	0.0706	ND	0.00444	0.00634	0.00241	NA	ND	ND	ND	0.0161
	09/19/01	0.0161	0.0753	ND	0.00256	0.00993	0.00266	NA	ND	ND	ND	0.0136
	03/21/02	0.0105	0.0488	ND	0.00257	0.00683	0.00398	NA	ND	ND	ND	0.0506
	09/24/02	0.0185	0.0469	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	0.00992	0.0401	ND	0.00165	0.00421	0.00317	NA	ND	ND	ND	0.0283
	09/30/03	0.00905	0.137	0.00136	0.00812	0.0285	0.0155	NA	ND	ND	ND	0.0532
	03/30/04	0.0384	0.349	0.00382	0.0395	0.0991	0.0467	NA	<0.000200	0.00147	<0.00100	0.331
	03/08/05	0.0305	0.0592	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00759
	09/22/05	0.0268	0.0481	<0.00100	<0.00100	0.00225	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0187
	09/21/05	0.0338	0.0579	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00648
	09/26/06	0.0298	0.0708	<0.00100	<0.00100	0.00315	0.00218	NA	<0.000200	<0.00100	<0.00100	0.0338
	03/22/07	0.0198	0.0724	0.000352	0.00575	0.0165	0.0268	2.43	0.00000989	<0.00160	<0.000800	0.0711
B-9A	09/19/07	0.00760	0.341	<0.0000752	0.0545	0.0638	0.0240	2.28	<0.000200	<0.00160	0.000138	0.177
	03/25/08	0.0209	-	<0.000380	0.0140	0.0218	0.0115	3.26	<0.000200	<0.00500	<0.000120	0.0724

COPPOR0007002

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
B-10	02/18/00	0.0367	0.337	0.00084	0.0355	0.0572	0.0202	NA	ND	0.00053	0.00019	0.0965
dup	02/18/00	0.0394	0.375	0.00141	0.0448	0.0745	0.027	NA	ND	0.00525	0.0002	0.123
	05/23/00	0.0354	0.211	ND	0.0265	0.0384	0.0115	NA	ND	0.00229	ND	0.0631
	08/25/00	0.0314	0.0657	ND	0.00199	0.00366	0.00141	NA	ND	0.00105	ND	0.177
	11/30/00	0.0307	0.0946	ND	0.00590	0.00800	0.00257	NA	ND	0.00131	ND	0.0165
	02/23/01	0.0323	0.0611	ND	ND	ND	ND	NA	ND	0.00184	ND	ND
	05/17/01	0.0395	0.0567	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/19/01	0.0234	0.194	ND	0.0249	0.0466	0.0161	NA	ND	0.00104	ND	0.0793
	03/21/02	0.0301	0.0644	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/24/02	0.0290	0.0607	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	0.0327	0.0620	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	0.0337	0.0820	ND	0.00285	0.00441	0.00217	NA	ND	0.00165	ND	0.0132
	03/30/04	0.0332	0.128	<0.00100	0.0100	0.0162	0.00783	NA	<0.000200	<0.00100	<0.00100	0.0402
	03/08/05	0.0395	0.0881	<0.00100	0.00231	0.00359	0.00305	NA	<0.000200	<0.00200	<0.00100	0.0111
	09/21/05	0.0369	0.0641	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/14/06	0.0366	0.0659	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	09/26/06	0.0274	0.0902	0.0000800	0.00227	<0.00160	0.00155	NA	<0.00500	<0.0100	<0.0000960	0.0103
	03/21/07	0.0286	0.0808	0.0000800	0.00339	0.00435	0.00215	4.29	0.00000618	<0.00160	<0.0000960	0.0142
dup	03/21/07	0.0310	0.0877	0.0001040	0.00450	0.00581	0.00290	3.95	0.00000833	<0.00160	<0.0000960	0.0169
	09/18/07	0.0360	0.0843	<0.0000752	0.00316	0.00591	0.00187	4.66	<0.000200	<0.00160	<0.0000970	0.0151
	03/25/08	0.0324	-	<0.000380	<0.00100	<0.00270	<0.000540	3.86	<0.000200	<0.00500	<0.000120	<0.0330
B-11	02/18/00	0.0386	0.985	0.00408	0.130	0.214	0.0959	NA	ND	0.0034	0.00047	0.356
	05/23/00	0.0219	0.236	ND	0.0258	0.0407	0.0172	NA	ND	0.00233	ND	0.0732
	08/25/00	0.0292	0.0809	ND	0.00543	0.00765	0.00398	NA	ND	ND	ND	0.0273
	11/30/00	0.0277	0.113	ND	0.00986	0.0127	0.00575	NA	ND	0.00146	ND	0.0288
	02/22/01	0.0234	0.0573	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/17/01	0.0291	0.0553	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/30/04	0.0241	0.115	0.00164	0.00904	0.0152	0.00896	NA	<0.000200	<0.00100	<0.00100	0.0315
	03/09/05	0.0265	0.0972	0.00208	0.00534	0.00943	0.00615	NA	<0.000200	<0.00200	<0.00100	0.0261
	06/22/05	0.0269	0.106	<0.00100	0.00978	0.0123	0.00543	NA	<0.000200	<0.00200	<0.00100	0.0258
	09/21/05	0.0308	0.0603	<0.00100	0.00182	0.00313	0.00166	NA	<0.000200	<0.00200	<0.00100	0.00732
B-14	02/18/00	0.0367	0.297	0.0006	0.029	0.053	0.0403	NA	0.000095	0.00134	0.00016	0.0874
	05/23/00	0.0327	0.155	ND	0.0152	0.0264	0.0186	NA	ND	0.00168	ND	0.0421
	08/25/00	0.0300	0.0774	ND	0.00175	0.00339	0.00568	NA	ND	0.00113	ND	0.0207
	11/30/00	0.0292	0.0724	ND	ND	ND	0.00326	NA	ND	0.00124	ND	ND
	02/22/01	0.0299	0.0603	ND	ND	0.00202	0.00102	NA	ND	0.00104	ND	0.00696
	05/17/01	0.0373	0.0553	ND	ND	ND	ND	NA	ND	ND	ND	ND
B-19	03/20/03	0.0453	0.0693	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	0.0404	0.208	ND	0.0203	0.0297	0.00909	NA	0.000234	ND	ND	0.0577
	03/29/04	0.0435	0.104	<0.00100	0.00487	0.00831	0.00279	NA	<0.000200	<0.00100	<0.00100	0.0192
	03/09/05	0.0407	0.210	<0.00100	0.0181	0.0307	0.00918	NA	<0.000200	<0.00200	<0.00100	0.0545
	06/22/05	0.0478	0.223	<0.00100	0.0265	0.0370	0.00922	NA	<0.000200	<0.00200	<0.00100	0.0633
	09/22/05	0.0481	0.101	<0.00100	0.00347	0.0060	0.00159	NA	<0.000200	<0.00200	<0.00100	0.0105
	03/14/06	0.0523	0.113	<0.00100	0.00391	0.0057	0.00167	NA	<0.000200	<0.00200	<0.00100	0.0117

COPPOR0007003

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
B-20	03/20/03	0.0107	0.0459	ND	0.00109	0.00389	ND	NA	ND	ND	ND	0.00501
	09/29/03	0.130	4.35	0.0494	0.808	1.14	0.643	NA	0.000934	0.00840	ND	3.96
	03/30/04	0.00165	0.0417	<0.00100	0.00184	0.00508	0.00121	NA	<0.00200	<0.00100	<0.00100	0.00910
	03/09/05	0.0360	0.0795	<0.00100	0.00113	0.00212	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	09/22/05	0.0374	0.0691	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/25/08	0.00801	-	<0.000380	<0.00100	<0.00270	<0.000540	3.01	<0.000200	<0.00500	<0.000120	<0.0330
B-21	09/19/01	0.0306	0.107	ND	0.00833	0.0107	0.00322	NA	ND	ND	ND	0.0259
	03/21/02	0.0405	0.0662	ND	ND	ND	ND	NA	ND	ND	0.00109	0.00852
	09/24/02	0.0412	0.0695	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	0.0740	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	0.0474	0.0759	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/29/04	0.0469	0.132	<0.00100	0.00984	0.0141	0.00478	NA	<0.00200	<0.00100	<0.00100	0.0340
	03/08/05	0.0559	0.179	<0.00100	0.0143	0.0188	0.00535	NA	<0.000200	<0.00200	<0.00100	0.0374
	09/22/05	0.0554	0.0884	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/15/06	0.0531	0.0866	<0.00100	0.00102	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	09/26/06	0.0432	0.0854	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.000200	<0.00100	<0.00100	<0.0100
	03/21/07	0.0390	0.0547	0.0000880	0.00213	0.00362	0.00262	2.76	0.0000144	<0.00160	<0.0000960	0.0136
	09/19/07	0.0430	0.130	<0.000800	0.00880	0.0108	0.00378	2.74	<0.000200	<0.00160	<0.000800	0.0185
	03/26/08	0.0412	0.0770	<0.000380	0.00209	0.00387	0.00200	2.51	0.000444	<0.00500	<0.000120	<0.0330
B-26	03/30/04	0.00345	0.232	0.0305	0.0220	0.0485	0.0415	NA	<0.000200	<0.00100	<0.00100	0.140
	03/09/05	0.0345	0.0852	0.00411	0.00274	0.00801	0.00696	NA	<0.000200	<0.00200	<0.00100	0.0176
	06/22/05	0.0397	0.146	0.0130	0.0152	0.0319	0.0208	NA	<0.000200	<0.00200	<0.00100	0.0689
	09/22/05	0.0351	0.0812	0.00601	0.00320	0.0103	0.00754	NA	<0.000200	<0.00200	<0.00100	0.0261
B-28	02/16/00	0.0122	0.422	0.00368	0.0437	0.104	0.0496	NA	0.000088	0.00156	0.00025	0.165
	05/23/00	0.00956	0.245	0.00144	0.0258	0.0468	0.0205	NA	ND	0.00277	ND	0.0913
	08/25/00	0.00530	0.120	ND	0.00825	0.0152	0.00565	NA	ND	0.00134	ND	0.0504
	11/30/00	0.0179	0.459	ND	0.0421	0.0640	0.0303	NA	ND	0.00271	ND	0.149
	02/23/01	0.00756	0.131	ND	0.00896	0.0142	0.00555	NA	ND	0.00181	ND	0.0363
	05/17/01	0.00561	0.0914	ND	0.00498	0.00737	0.00272	NA	ND	0.00199	ND	0.0200
	09/20/01	0.0434	0.0821	ND	0.00166	0.00546	ND	NA	ND	0.00109	ND	0.00782
	03/21/02	0.00407	0.0692	ND	0.00311	0.0115	0.00292	NA	ND	ND	ND	0.0148
	09/24/02	0.00298	0.0519	ND	ND	ND	ND	NA	ND	0.00244	ND	ND
	03/20/03	0.00220	0.0489	ND	ND	ND	ND	NA	ND	0.00164	ND	ND
	09/30/03	0.0219	0.483	0.00173	0.0572	0.109	0.0404	NA	ND	ND	ND	0.205
	03/29/04	0.00600	0.111	0.00118	0.00942	0.0287	0.00852	NA	<0.000200	<0.00100	<0.00100	0.0341
	09/21/05	0.00508	0.0838	<0.00100	0.00364	0.00980	0.00268	NA	<0.000200	<0.00200	<0.00100	0.0179
	03/14/06	0.00640	0.192	0.00287	0.0316	0.139	0.172	NA	<0.000200	<0.00200	<0.00100	0.451
	09/28/06	0.00396	0.0880	<0.00100	0.00417	0.0451	0.00370	NA	<0.000200	<0.00200	<0.00100	0.0201
	09/18/07	0.00277	0.0530	0.000228	<0.000800	0.00288	0.000989	1.27	<0.000200	<0.00160	<0.0000970	0.00712
	03/25/08	0.00446	0.108	0.00152	0.00490	0.0681	0.00675	1.20	<0.000200	<0.00500	<0.000120	<0.0330
B-29	09/20/01	0.0110	0.292	ND	0.0286	0.0531	0.0264	NA	ND	0.00385	ND	0.122
	03/21/02	0.00126	0.0600	ND	ND	0.00372	ND	NA	ND	ND	ND	0.00710
	09/24/02	ND	0.0601	ND	ND	ND	ND	NA	ND	0.00103	0.00102	ND
	03/20/03	ND	0.0593	ND	ND	0.00263	ND	NA	ND	0.00143	ND	ND
	09/30/03	0.00332	0.322	0.0133	0.0295	0.167	0.0280	NA	ND	ND	ND	0.125
	03/29/04	0.00528	0.367	0.0206	0.0293	0.162	0.0457	NA	<0.000200	<0.00100	<0.00100	0.146
	09/21/05	0.00308	0.193	0.00290	0.0159	0.059	0.0127	NA	<0.000200	<0.00200	<0.00100	0.0720
	03/14/06	0.00126	0.0986	<0.00100	0.00234	0.00834	0.00352	NA	<0.000200	<0.00200	<0.00100	0.0136
	09/28/06	<0.00100	0.0641	<0.00100	<0.00100	0.0122	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0132
	03/22/07	0.00155	0.156	0.00346	0.0110	0.0882	0.0122	3.47	<0.00000500	<0.00160	<0.000800[6]	0.0367[7]
	09/18/07	0.00162	0.120	0.00309	0.00709	0.0954	0.00629	3.89	<0.000200	<0.00160	<0.0000970	0.0429
	03/25/08	0.000920	0.0629	<0.000380	<0.00100	<0.00270	<0.000540	2.79	<0.000200	<0.00500	<0.000120	<0.0330

COPPOR0007004

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
B-30	02/16/00	0.0185	0.327	0.0355	0.0269	0.0671	0.0482	NA	ND	0.00265	0.00021	0.238
	05/23/00	0.0141	0.117	0.00978	0.00904	0.0713	0.0108	NA	ND	0.00267	ND	0.0527
	08/25/00	0.0221	0.0497	0.01460	0.00153	0.0176	0.00449	NA	ND	ND	ND	0.0632
	11/30/00	0.0175	0.0513	ND	ND	ND	ND	NA	ND	0.00103	ND	0.0116
	02/23/01	0.0144	0.0704	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup**	02/23/01	0.0140	0.0670	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/17/01	0.0177	0.0477	ND	ND	ND	ND	NA	ND	0.00175	ND	ND
	09/20/01	0.00211	0.0825	0.00167	0.00347	0.0208	0.0161	NA	ND	0.00190	ND	0.0308
dup	09/20/01	0.0138	0.0564	ND	ND	0.00218	ND	NA	ND	0.00110	ND	ND
	03/21/02	0.0177	0.0438	0.00823	0.00111	0.00533	0.00227	NA	ND	ND	0.00100	0.0191
dup	03/21/01	0.0210	0.0489	0.00302	0.00142	0.00698	0.00458	NA	ND	ND	ND	0.0220
	09/24/02	0.0126	0.0495	ND	ND	ND	ND	NA	ND	0.00197	0.00126	ND
	03/20/03	0.0158	0.0483	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup*	03/20/03	0.0144	0.0486	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/30/30	0.0238	0.193	0.0221	0.0195	0.0631	0.0392	NA	ND	ND	ND	0.159
dup***	09/30/30	0.0267	0.276	0.0301	0.0268	0.0842	0.0574	NA	ND	ND	ND	0.211
	03/29/04	0.0183	0.0529	0.00229	0.00106	0.00405	0.00330	NA	<0.000200	<0.00100	<0.00100	0.00752
	09/21/05	0.0179	0.0567	0.00180	<0.00100	0.00501	0.00332	NA	<0.000200	<0.00200	<0.00100	0.0113
dup****	09/21/05	0.0177	0.0544	<0.00100	0.00117	0.00384	0.00294	NA	<0.000200	<0.00200	<0.00100	0.0106
	03/14/06	0.0206	0.0668	<0.00100	<0.00100	0.00269	0.00202	NA	<0.000200	<0.00200	<0.00100	0.00557
dup	03/14/06	0.0204	0.0692	0.00102	0.00103	0.00323	0.00255	NA	<0.000200	<0.00200	<0.00100	0.00750
	09/28/06	0.0164	0.058	<0.00100	<0.00100	<0.00200	0.00202	NA	<0.000200	<0.00200	<0.00100	0.00910
	03/22/07	0.0136	0.0725	0.000800	0.00283	0.00719	0.00308	2.10	0.0000235	<0.00160	<0.000800[g]	0.0146
	09/18/07	0.0211	0.0511	0.000394	0.000941	0.00531	0.00155	3.17	<0.000200	<0.00160	<0.0000970	0.00893
dup	09/18/07	0.0192	0.0517	0.000280	0.000970	0.00533	0.00184	3.39	<0.000200	<0.00160	<0.0000970	0.00892
B-32	03/20/03	0.00367	0.0429	ND	0.00110	ND	ND	NA	ND	ND	ND	ND
	09/29/03	0.122	6.84	0.0170	1.04	1.64	1.15	NA	0.000754	0.0190	ND	3.74
	03/29/04	0.00917	0.434	0.00202	0.0615	0.108	0.0387	NA	0.000221	0.0224	<0.00100	0.215
	03/09/05	0.00780	0.128	<0.00100	-	0.0180	0.00660	NA	<0.000200	0.00203	<0.00100	0.0394
	09/22/05	0.0100	0.227	<0.00100	0.0230	0.0336	0.01180	NA	<0.000200	<0.00200	<0.00100	0.0737
	03/15/06	0.00684	0.0823	<0.00100	0.00316	0.00551	0.00222	NA	<0.000200	<0.00200	<0.00100	0.0110
B-33	03/20/03	0.00483	0.0430	ND	0.00437	0.0114	0.0124	NA	ND	ND	ND	0.0223
	09/30/03	0.0342	0.242	0.00699	0.0711	0.248	0.128	NA	ND	0.00124	ND	0.385
	03/30/04	0.0155	0.199	0.00830	0.0451	0.164	0.110	NA	<0.00200	<0.00100	<0.00100	0.389
	03/09/05	0.0264	0.175	0.00106	0.0342	0.0668	0.0513	NA	<0.000200	0.00204	<0.00100	0.157
	06/22/05	0.0156	0.140	<0.00100	0.0221	0.0560	0.0264	NA	<0.000200	<0.00200	<0.00100	0.0998
	09/22/05	0.0237	0.111	<0.00100	0.00916	0.0250	0.0109	NA	<0.000200	<0.00200	<0.00100	0.0484
	03/15/06	0.00579	0.0494	<0.00100	0.00261	0.00665	0.00441	NA	<0.000200	<0.00200	<0.00100	0.0683
CR-1	09/21/01	0.0143	0.0606	ND	0.00203	0.00468	0.00283	NA	ND	0.00118	ND	0.00846
	03/21/02	0.00173	0.0188	ND	0.00113	0.00397	ND	NA	ND	ND	ND	0.0163
	09/24/02	0.00204	0.0274	ND	ND	ND	ND	NA	ND	ND	ND	0.00609
	03/20/03	0.0119	0.0300	ND	0.00156	0.0112	0.00211	NA	ND	ND	ND	0.0179
	09/30/03	0.00832	0.0479	ND	0.00249	0.00836	0.00391	NA	ND	0.00189	ND	0.0139
	03/30/04	0.00210	0.261	0.00583	0.0220	0.0535	0.0676	NA	<0.000200	<0.00100	<0.00100	0.212
	03/08/05	0.00167	0.0245	<0.00100	<0.00100	0.00262	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0102
	09/21/05	0.00325	0.0215	<0.00100	<0.00100	0.00231	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	09/27/06	0.00194	0.0207	0.000144	<0.000800	0.00277	0.000440	NA	<0.00500	<0.00200	<0.0000960	0.0109
	03/22/07	0.000912	0.0122	<0.0000752	<0.000800[g]	0.00392	<0.000432[g]	0.19	<0.00000500	<0.00160	<0.000800[g]	0.00958
	09/20/07	0.00141	0.0201	<0.000800	<0.000800	<0.00160	<0.000800	0.86	<0.000200	<0.00160	<0.000800	<0.00400
	03/25/08	0.000510	0.0128	<0.000380	<0.00100	0.00340	<0.000540	0.0761	<0.000200	<0.00500	<0.000120	<0.0330

COPPOR00007005

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
CR-3	03/09/05	0.0156	0.414	0.00283	0.0239	0.0591	0.0410	NA	<0.000200	<0.00200	<0.00100	0.216
	06/22/05	0.0259	0.431	0.00206	0.0414	0.0708	0.0504	NA	<0.000200	<0.00200	<0.00100	0.218
	09/22/05	0.00191	0.0280	<0.00100	<0.00100	0.00346	0.00123	NA	<0.000200	<0.00200	<0.00100	0.00706
CR-8	02/18/00	0.0827	0.762	0.00345	0.0578	0.127	0.0997	NA	ND	0.00321	0.00037	0.404
	05/23/00	0.0256	0.342	0.00312	0.0228	0.0684	0.0365	NA	ND	0.00204	ND	0.155
	08/25/00	0.0203	0.105	ND	0.00697	0.0151	0.0101	NA	ND	ND	ND	0.0442
	11/30/00	0.0167	0.0890	ND	0.00565	0.0149	0.00781	NA	ND	0.00158	ND	0.0331
	02/22/01	0.0215	0.116	ND	0.00485	0.0123	0.00666	NA	ND	ND	ND	0.0288
	05/16/01	0.0135	0.0374	ND	0.00128	0.00231	0.00147	NA	ND	ND	ND	ND
CR-9	02/18/00	0.0167	0.236	0.00026	0.0194	0.0286	0.0156	NA	ND	0.00187	0.0001	0.0769
	05/23/00	0.00298	0.0413	ND	0.003	0.00381	0.00188	NA	ND	0.00112	ND	0.00893
	08/25/00	0.00160	0.0305	ND	ND	0.00143	ND	NA	ND	ND	ND	ND
dup	08/25/00	0.00160	0.0305	ND	ND	0.00170	ND	NA	ND	ND	ND	0.0165
	11/30/00	0.00162	0.0222	ND	ND	ND	ND	NA	ND	0.00283	ND	0.00503
dup	11/30/00	ND	0.0222	ND	ND	ND	ND	NA	ND	0.00114	ND	ND
	02/22/01	ND	0.0235	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/16/01	0.00142	0.0291	ND	ND	0.00246	ND	NA	ND	ND	ND	ND
	05/16/01	0.00145	0.0339	ND	0.00151	0.00205	ND	NA	ND	ND	ND	ND
CR-11	02/18/00	0.0656	0.440	0.00559	0.0252	0.0571	0.0296	NA	ND	0.00463	0.00014	0.123
	05/23/00	0.0493	0.382	0.00659	0.0358	0.0685	0.0391	NA	ND	0.00321	ND	0.168
	08/25/00	0.0631	0.0834	ND	0.00101	0.00325	0.00137	NA	ND	0.00183	ND	0.0179
	11/30/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	02/22/01	0.0536	0.126	ND	0.00104	0.00356	ND	NA	ND	0.00324	ND	0.00784
	05/16/01	0.0587	0.111	ND	0.00362	0.00628	0.00314	NA	ND	0.00243	ND	0.0193
CR-26	03/09/05	0.143	0.319	<0.00100	0.0182	0.0229	0.0109	NA	<0.000200	0.00209	<0.00100	0.0670
	06/22/05	0.157	0.212	<0.00100	0.00599	0.00661	0.00268	NA	<0.000200	<0.00200	<0.00100	0.0175
	09/22/05	0.210	0.164	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/25/08	0.134	-	<0.000380	0.0279	0.0374	0.0220	7.06	<0.000200	<0.00500	0.000180	0.0973
CR-27C	03/25/08	0.00702	-	<0.000380	<0.00100	<0.00270	0.00107	0.470	<0.000200	<0.00500	<0.000120	<0.0330
[1]	03/25/08	0.00725	-	<0.000380	<0.00100	<0.00270	<0.000540	0.489	<0.000200	<0.00500	<0.000120	<0.0330
CR-33	03/26/08	0.00442	-	<0.000380	0.00439	0.00812	0.00525	3.86	<0.000200	<0.00500	<0.000120	<0.0330
[1]	03/26/08	0.000910	-	<0.000380	<0.00100	<0.00270	<0.000540	3.92	<0.000200	<0.00500	<0.000120	<0.0330

COPPOR0007006

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
KINDER MORGAN												
MW-8	02/16/00	0.00974	0.0566	0.00073	0.00396	0.00476	0.00569	NA	ND	ND	ND	0.0344
	05/31/00	0.00348	0.0226	ND	ND	ND	ND	NA	ND	ND	ND	0.00788
	08/24/00	0.0136	0.0381	ND	ND	ND	ND	NA	ND	ND	ND	0.00799
	12/01/00	0.0177	0.0710	0.00236	0.00195	0.00272	0.00250	NA	ND	0.00239	ND	0.0207
	02/22/01	0.0111	0.0249	ND	0.00130	0.00234	ND	NA	ND	ND	ND	0.00720
	05/16/01	0.00942	0.0308	ND	ND	0.00119	ND	NA	ND	ND	ND	ND
dup	05/16/01	0.00931	0.0316	ND	ND	0.00135	ND	NA	ND	ND	ND	0.0208
	09/21/01	0.0168	0.0637	0.00141	0.00219	0.00350	ND	NA	ND	ND	ND	0.0138
	03/14/02	0.00198	0.0213	ND	ND	0.00376	ND	NA	ND	ND	ND	0.00824
dup	03/14/02	0.00281	0.0220	ND	ND	0.00337	ND	NA	ND	ND	ND	0.0115
	09/27/02	0.0116	0.0592	0.00130	0.00258	0.00514	0.00294	NA	ND	ND	ND	0.0230
	03/18/03	0.00412	0.0408	ND	ND	NS	ND	NA	ND	ND	ND	NS
dup	03/18/03	0.00352	0.0408	ND	ND	NS	ND	NA	ND	ND	ND	NS
	09/24/03	0.01080	0.0281	ND	ND	ND	ND	NA	ND	ND	ND	0.00670
	03/30/04	0.00150	0.0238	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00100	<0.00100	0.0107
	09/27/04	0.0160	0.0858	0.00268	0.00598	0.00898	0.00562	NA	<0.000200	<0.00100	<0.00100	0.0613
dup	09/27/04	0.0167	0.110	0.00395	0.00454	0.0130	0.00705	NA	<0.000200	<0.00100	<0.00100	0.0888
	03/29/05	0.00373	0.0147	0.00146	0.000360	0.00164	0.00115	NA	<0.000200	<0.00100	<0.00100	0.0229
	09/21/05	0.00867	0.0268	0.00128	<0.00100	0.00425	0.00181	NA	<0.000200	<0.00200	<0.00100	0.0217
	03/15/06	0.00216	0.0244	<0.00100	<0.00100	0.00234	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0234
dup	03/15/06	0.00164	0.0245	<0.00100	<0.00100	0.00204	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0222
	09/26/06	0.00884	0.0276	0.00408	<0.00100	0.00298	0.00149	NA	<0.000200	<0.00200	<0.00100	0.0430
	03/22/07	0.00208	0.0205	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.000200	<0.00100	<0.00100	0.0138
	09/20/07	0.00720	0.0222	<0.00100	0.00209	0.00522	0.00268	NA	<0.000200	<0.00200	<0.00100	0.0209
dup	09/20/07	0.00690	0.0137	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0122
	03/25/08	0.00080	0.0137	0.000272	0.00022	0.00159	0.000248	0.0305	NA	<0.0002	0.000009[V]	0.0104
MW-10	02/16/00	0.0311	0.266	0.00027	0.025	0.0493	0.0256	NA	ND	0.00200	<0.00100	0.113
	05/31/00	0.0158	0.199	ND	0.0155	0.0292	0.0182	NA	ND	0.00179	ND	0.0756
	08/24/00	0.0196	0.0518	ND	ND	ND	ND	NA	ND	0.00130	ND	0.00549
	12/01/00	0.0284	0.0284	ND	0.00424	0.00704	0.00437	NA	ND	0.00125	ND	0.0181
	02/22/01	0.0222	0.0670	ND	0.00169	0.00331	0.00102	NA	ND	ND	ND	0.00893
	05/16/01	0.0199	0.0729	ND	ND	ND	ND	NA	ND	ND	ND	ND
MW-11	02/16/00	0.0677	0.398	0.00018	0.0344	0.0672	0.0786	NA	0.000065	0.00134	0.00015	0.168
	05/31/00	0.0595	0.454	ND	0.0291	0.0577	0.0705	NA	0.000201	0.00296	ND	0.153
	08/24/00	0.0509	0.111	ND	0.00484	0.00828	0.0210	NA	ND	0.00315	ND	0.0203
	12/01/00	0.0478	0.125	ND	0.00719	0.0114	0.0372	NA	ND	0.00438	ND	0.0311
	02/22/01	0.0509	0.113	ND	0.00590	0.0110	0.0399	NA	ND	ND	ND	0.0310
	05/16/01	0.0445	0.0816	ND	0.00184	0.00388	0.0300	NA	ND	ND	ND	0.0158

COPPOR0007007

TABLE 6
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
MW-13	02/16/00	0.017	0.305	0.00011	0.0285	0.0438	0.0235	NA	ND	0.00072	0.00016	0.130
	05/31/00	0.0115	0.411	ND	0.0264	0.0409	0.0228	NA	ND	0.002	ND	0.114
	08/24/00	0.00331	0.0854	ND	0.00500	0.00817	0.00373	NA	ND	0.00431	ND	0.0207
	12/01/00	0.00384	0.0784	ND	0.00494	0.00752	0.00139	NA	ND	0.00146	ND	0.0201
dup	12/01/00	0.00465	0.0795	ND	0.00504	0.00682	0.00344	NA	ND	0.00162	ND	0.0207
	02/22/01	0.00146	0.0621	ND	0.00409	0.00581	0.00237	NA	ND	ND	ND	0.0176
	05/16/01	0.00174	0.0523	ND	0.00218	0.00308	0.00169	NA	ND	ND	ND	0.0123
MW-15	02/17/00	0.0017	0.0874	0.00004	0.00651	0.00546	0.00206	NA	ND	0.00034	ND	0.0219
dup	02/17/00	0.00152	0.0877	0.00008	0.00655	0.00532	0.0034	NA	-	0.00046	ND	0.021
	05/31/00	ND	0.0941	ND	0.006	0.00597	0.00322	NA	ND	ND	ND	0.0298
	08/24/00	ND	0.141	ND	0.00989	0.00879	0.00420	NA	ND	0.00481	ND	0.0388
	12/01/00	0.00316	0.148	ND	0.0133	0.0120	0.00697	NA	ND	0.00115	ND	0.0534
	02/22/01	0.00129	0.108	ND	0.00840	0.00951	0.00664	NA	ND	ND	ND	0.208
	05/16/01	ND	0.0681	ND	0.00126	0.00154	0.00113	NA	ND	ND	ND	0.0246
MW-21	02/17/00	0.004	0.188	0.00219	0.00777	0.0091	0.00988	NA	ND	0.00071	ND	0.0459
	05/30/00	0.00599	0.335	0.00701	0.0196	0.0248	0.0247	NA	ND	0.00185	ND	0.126
	08/23/00	0.00339	0.185	ND	0.00202	0.00295	0.00126	NA	ND	0.00153	ND	0.0140
	12/01/00	0.00344	0.141	0.00148	ND	ND	ND	NA	ND	0.00176	ND	0.0140
	02/22/01	0.00350	0.184	ND	0.00117	ND	ND	NA	ND	ND	ND	0.0107
	05/16/01	0.00471	0.0219	ND	ND	0.00127	0.00103	NA	ND	ND	ND	0.0182
MW-22	02/17/00	0.0928	0.251	0.00017	0.0121	0.00834	0.0391	NA	ND	0.00121	ND	0.0492
dup	02/17/00	-	-	-	-	-	-	NA	ND	-	-	-
	05/30/00	0.0945	0.244	ND	0.0097	0.0095	0.0216	NA	ND	0.00242	ND	0.0388
	08/23/00	0.104	0.194	ND	0.00125	0.00201	0.00695	NA	ND	0.00274	ND	ND
	12/01/00	0.0831	0.295	ND	0.00199	0.00213	0.0105	NA	ND	0.00300	ND	0.0265
	02/21/01	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	05/16/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
MW-23	02/17/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	05/30/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	08/23/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	11/30/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	02/22/01	0.00909	0.0582	ND	0.00175	0.00817	0.00441	NA	ND	ND	ND	0.00983
	05/16/01	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S

COPPOR0007008

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
MW-25	09/21/01	0.0563	0.0958	ND	0.00339	0.00365	0.00411	NA	ND	ND	ND	0.0258
	03/14/02	0.0406	0.115	ND	0.00573	0.00832	0.00969	NA	ND	ND	0.00115	0.0278
	09/27/02	0.116	0.186	ND	0.00606	0.00897	0.00990	NA	ND	ND	ND	0.0334
	03/18/03	0.0388	0.0440	ND	ND	NS	ND	NA	ND	0.00115	0.00110	NS
	09/24/03	0.0661	0.181	0.00125	0.0144	0.0230	0.0201	NA	ND	0.00179	ND	0.0712
	03/30/04	0.0521	0.0580	<0.00100	0.00157	<0.00200	<0.00115	NA	<0.000200	<0.00100	<0.00100	0.00810
	09/27/04	0.0712	0.140	<0.00100	0.00506	0.0112	0.0112	NA	<0.000200	<0.00100	<0.00100	0.0304
	03/28/05	0.0616	0.0941	<0.00100	0.00116	0.00253	0.00474	NA	<0.000200	0.000400	<0.00100	0.0118
	09/21/05	0.0622	0.0647	<0.00100	0.00140	0.00299	0.00189	NA	<0.000200	<0.00200	<0.00100	0.00838
	03/15/06	0.0607	0.0701	<0.00100	<0.00100	0.00469	0.00183	NA	<0.000200	<0.00200	<0.00100	0.00920
	09/26/06	0.0529	0.0763	<0.00100	0.00179	0.00258	0.0034	NA	<0.000200	<0.00200	<0.00100	0.0117
	03/22/07	0.0468	0.0771	<0.00100	0.00288	0.00393	0.00452	NA	<0.000200	<0.00100	<0.00100	0.0162
	09/20/07	0.121	0.201	<0.00100	0.00885	0.0126	0.0157	NA	<0.000200	<0.00200	<0.00100	0.0436
	03/24/08	0.0402	0.119	0.000372	0.00528	0.0120	0.0122	4.79	NA	<0.0002	0.000035	0.0271
MW-26	02/17/00	0.0474	0.0943	0.00005	0.00468	0.00368	0.00342	NA	ND	0.0006	ND	0.0141
dup	02/17/00	0.0487	0.0904	0.0005	0.00434	0.00496	0.00312	NA	ND	0.00033	ND	0.0422
	05/30/00	0.0443	0.102	ND	0.00453	0.00501	0.00492	NA	ND	ND	ND	0.0162
	08/23/00	0.0530	0.0594	ND	0.00218	0.00249	0.00228	NA	ND	ND	ND	ND
dup	08/23/00	0.0576	0.0642	ND	0.00227	0.00384	0.00228	NA	ND	ND	ND	0.00791
	12/01/00	0.0526	0.0620	ND	0.00158	ND	0.00254	NA	ND	0.00116	ND	0.00796
	02/21/01	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	05/17/01	0.0590	0.0678	ND	0.00221	0.00170	0.00225	NA	ND	ND	ND	0.0120
	09/27/02	0.0450	0.0524	ND	0.00123	ND	0.00220	NA	ND	ND	ND	0.0169
	03/18/03	0.0205	0.0670	ND	ND	NS	ND	NA	ND	ND	0.00109	
	09/24/03	0.0510	0.0512	ND	ND	ND	0.00214	NA	ND	ND	ND	0.00507
	03/30/04	0.0431	0.0661	<0.00100	<0.00100	<0.00100	0.00102	NA	<0.000200	<0.00100	<0.00100	<0.00500
	09/27/04	0.0657	0.0662	<0.00100	0.00206	0.00448	0.00654	NA	<0.000200	<0.00100	<0.00100	0.0188
	03/28/05	0.0554	0.0749	0.00104	0.00129	0.00313	0.00586	NA	<0.000200	0.000530	<0.00100	0.0158
	09/21/05	0.0623	0.0462	<0.00100	<0.00100	<0.00200	0.00122	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/15/06	0.0476	0.0771	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	09/26/06	0.0457	0.0684	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00505
dup	09/26/06	0.0480	0.0692	<0.00100	<0.00100	0.00212	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/22/07	0.0438	0.0710	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.000200	<0.00100	<0.00100	0.0135
	09/20/07	0.0501	0.0685	<0.00100	<0.00100	<0.00200	0.00118	NA	<0.000200	<0.00200	<0.00100	0.00764
	03/24/08	0.0395	0.0740	0.000048	0.00106	0.00118	0.002220	5.64	NA	<0.0002	0.000006[9]	0.00585
dup	03/24/08	0.0379	0.0875	0.000099	0.00166	0.00196	0.003350	5.58	NA	<0.0002	0.000011[9]	0.00957
MW-28	02/16/00	0.00032	0.00803	ND	0.00047	0.002	0.00387	NA	ND	ND	ND	0.0172
	05/30/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	08/23/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	11/30/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	02/21/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	05/16/01	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
MW-31	02/16/00	0.00504	0.016	ND	0.00042	0.00222	0.00135	NA	ND	ND	ND	0.00218
	05/30/00	0.00564	0.019	ND	ND	ND	ND	NA	ND	ND	ND	ND
	08/23/00	0.0181	0.0200	ND	ND	ND	ND	NA	ND	ND	ND	ND
	12/01/00	0.0134	0.0179	ND	ND	ND	0.00280	NA	ND	ND	ND	ND
	02/22/01	0.0148	0.0228	ND	ND	ND	ND	NA	ND	ND	ND	0.00723
	05/17/01	0.0150	0.0210	ND	ND	ND	0.00244	NA	ND	ND	ND	0.0132

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TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
MW-32	02/16/00	0.00071	0.0189	0.00007	0.00297	0.00399	0.00309	NA	ND	ND	ND	0.00603
	05/30/00	0.00147	0.0268	ND	0.00195	0.0043	0.00159	NA	ND	ND	ND	0.0069
	08/23/00	ND	0.0147	ND	ND	0.00251	ND	NA	ND	ND	ND	ND
	12/01/00	0.00193	0.0142	ND	ND	ND	ND	NA	ND	0.00120	ND	ND
	02/22/01	ND	0.00921	ND	0.00119	ND	ND	NA	ND	ND	ND	ND
	05/16/01	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
MW-33	02/16/00	0.00842	0.0768	0.00006	0.00162	0.00423	0.00368	NA	ND	ND	ND	0.00746
	05/30/00	0.00655	0.111	ND	0.00179	0.00338	0.00154	NA	ND	ND	ND	0.00721
	08/24/00	0.0103	0.227	ND	0.00104	0.00246	ND	NA	ND	0.00259	ND	ND
	11/30/00	0.0580	0.563	ND	0.00223	0.00343	ND	NA	ND	0.00163	ND	0.00882
	02/22/01	0.0142	0.0910	ND	0.00179	0.00339	0.00103	NA	ND	ND	ND	0.00944
dup	02/22/01	0.0142	0.104	ND	0.00188	0.00390	0.00155	NA	ND	ND	ND	0.0110
	05/16/01	0.0178	0.184	ND	ND	0.00128	ND	NA	ND	ND	ND	ND
	09/21/01	0.0100	0.0757	ND	ND	ND	ND	NA	ND	0.00151	ND	ND
	03/14/02	0.00975	0.0722	ND	ND	ND	ND	NA	ND	ND	0.00202	ND
	09/27/02	0.0302	0.356	ND	0.00206	0.00303	0.00136	NA	ND	ND	ND	0.0205
	03/18/03	0.00867	0.0401	ND	ND	NS	ND	NA	ND	ND	0.00140	NS
	09/24/03	0.0232	0.191	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/29/04	0.0124	0.0552	<0.00100	0.00114	<0.00200	<0.00100	NA	<0.000200	<0.00100	<0.00100	<0.00500
	09/27/04	0.132	1.41	<0.00200	0.00628	0.0135	<0.00200	NA	0.000490	<0.00200	<0.00200	0.0319
	03/29/05	0.00757	0.325	<0.00100	0.000360	0.00244	0.000210	NA	<0.000200	<0.00100	<0.00100	0.00737
	09/21/05	0.0181	0.398	<0.00100	0.00165	0.00290	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00580
dup	09/21/05	0.0163	0.366	<0.00100	0.00151	0.00292	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00516
	03/15/06	0.0112	0.0588	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00600
	09/27/06	0.0263	0.409	<0.0000752	<0.000800	<0.00160	<0.000432	NA	0.00724	<0.00160	<0.0000960	0.0244
	03/22/07	0.0139	0.123	0.000205	<0.000800	<0.00160	<0.000432	NA	0.00000767	<0.00160	<0.0000960	0.00827
dup	03/22/07	0.0373	0.380	0.000952	0.00110	0.00242	<0.000432	NA	<0.00000500	<0.00160	<0.0000960	0.0184
	09/18/07	0.0329	0.488	<0.00100	0.00133	0.00273	<0.00100	NA	0.0000166	<0.00200	<0.00100	0.0245
	03/25/08	0.0121	0.0714	0.000047	0.00058	0.00141	0.000478	1.10	0.0000235	<0.0002	0.000009[9]	0.00314
MW-34	09/21/01	0.0697	0.381	0.00239	0.0143	0.144	0.0146	NA	ND	0.00146	ND	0.104
	03/14/02	0.0376	0.178	ND	0.00582	0.0132	0.00549	NA	ND	ND	0.00151	0.0321
	09/27/02	0.162	0.670	0.00164	0.0264	0.0676	0.0226	NA	ND	0.00130	ND	0.126
	03/18/03	0.0148	0.0834	ND	0.00602	NS	0.00541	NA	ND	ND	0.00113	NS
	09/24/03	0.0109	0.0654	ND	0.00106	0.00236	0.00117	NA	ND	ND	ND	0.00994
	03/29/04	0.00364	0.0350	<0.00100	0.00114	<0.00200	<0.00100	NA	<0.000200	<0.00100	<0.00100	<0.00500
	09/27/04	0.0879	0.355	<0.00100	0.0114	0.0285	0.0111	NA	<0.000200	0.00131	<0.00100	0.0547
dup	03/29/05	0.0126		<0.00100	0.000530	0.00475	0.00158	NA	<0.000200	0.000350	<0.00100	0.0127
	03/29/05	0.0125	0.0756	<0.00100	0.000460	0.00382	0.00148	NA	<0.000200	0.000430	<0.00100	0.0119
	09/21/05	0.0537	0.133	<0.00100	0.00105	0.00354	0.00113	NA	<0.000200	<0.00200	<0.00100	0.00754
	03/15/06	0.00590	0.0572	<0.00100	0.00308	0.00329	0.00246	NA	<0.000200	<0.00200	<0.00100	0.0132
	09/27/06	0.0143	0.0700	0.000103	0.000899	0.00318	0.00139	NA	<0.00000500	<0.00160	<0.0000960	0.0150
	03/22/07	0.0252	0.117	0.000176	0.00401	0.00922	0.00501	NA	0.00000877	<0.00160	<0.0000960	0.0329
	09/18/07	0.0325	0.114	<0.00100	0.00314	0.00800	0.00351	NA	0.0000208	<0.00200	<0.00100	0.0202
	03/25/08	0.00433	0.0454	0.000203	0.00127	0.00225	0.001610	1.20	0.0000098	<0.0002	0.000008[9]	0.00569

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TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
MW-36	02/16/00	0.0146	0.0575	0.00005	0.00413	0.00614	0.00355	NA	ND	0.00022	ND	0.0131
	05/31/00	0.0149	0.0512	ND	0.0018	0.00308	ND	NA	ND	ND	ND	ND
	08/24/00	0.0187	0.0570	ND	ND	0.00222	ND	NA	ND	0.00111	ND	0.0108
	11/30/00	0.0225	0.0701	ND	ND	ND	ND	NA	ND	0.00147	ND	ND
	02/21/01	0.0201	0.0560	ND	0.00151	0.00280	ND	NA	ND	ND	ND	0.00677
	05/16/01	0.0297	0.0826	ND	ND	0.0169	ND	NA	ND	ND	ND	0.0149
	09/21/01	0.0168	0.0541	ND	ND	ND	ND	NA	ND	0.00108	ND	ND
	03/13/02	0.00442	0.0252	ND	ND	0.00297	ND	NA	ND	ND	ND	0.0122
	03/18/03	0.00541	0.0316	ND	0.00122	NS	ND	NA	ND	ND	ND	NS
	09/24/03	0.0436	0.116	ND	0.00103	0.00234	ND	NA	ND	ND	ND	ND
	3/29/04	0.0108	0.0339	<0.00100	0.00131	0.00385	0.00144	NA	<0.000200	<0.00100	<0.00100	<0.00500
	9/27/2004	0.0320	0.0679	<0.00100	0.00238	0.00739	0.00334	NA	<0.000200	0.00140	<0.00100	0.00575
	09/21/05	0.0336	0.0567	<0.00100	<0.00100	0.00307	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/15/06	0.00590	0.0238	<0.00100	<0.00100	0.00364	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500
	09/27/06	0.0176	0.0545	<0.0000752	<0.000800	0.00170	<0.000432	NA	<0.00000500	<0.00160	<0.0000960	0.00450
dup	09/27/06	0.0157	0.0480	<0.0000752	<0.000800	0.00160	<0.000432	NA	<0.00000500	<0.00160	<0.0000960	<0.00400
	03/22/07	0.00858	0.0334	<0.0000752	<0.000800	0.00264	0.000652	NA	0.00000540	<0.00160	<0.0000960	0.00628
	09/18/07	0.0189	0.0510	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.00000500	<0.00200	<0.00100	<0.00500
dup	09/18/07	0.0304	0.0783	<0.00100	<0.00100	0.00449	0.00107	NA	<0.00000500	<0.00200	<0.00100	0.00978
	03/25/08	0.00828	0.0286	0.000032	0.00064	0.00385	0.000702	1.51	0.0000071	<0.0002	0.000005[9]	0.00545
MW-37	02/16/00	0.0184	0.0748	0.00022	0.00721	0.0118	0.00469	NA	ND	0.00032	ND	0.0184
	05/30/00	0.0199	0.0567	ND	0.00356	0.00572	0.0018	NA	ND	0.00158	ND	0.0111
dup	05/30/00	0.0189	0.0586	ND	0.00408	0.00637	0.00205	NA	ND	ND	ND	0.0121
	08/24/00	0.0227	0.0453	ND	ND	ND	ND	NA	ND	0.00158	ND	0.00598
	11/30/00	0.0221	0.0693	ND	0.00419	0.00605	0.00353	NA	ND	0.00123	ND	0.0123
	02/21/01	0.0223	0.0404	ND	0.00153	0.00206	ND	NA	ND	ND	ND	0.00526
	05/16/01	0.0209	0.0403	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/21/01	0.0222	0.0432	ND	0.00127	ND	0.00147	NA	ND	ND	ND	ND
	09/27/02	0.0190	0.0429	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup	09/27/02	0.0194	0.0423	ND	ND	ND	ND	NA	ND	ND	ND	0.00923
	03/18/03	0.00864	0.0259	ND	ND	NS	ND	NA	ND	ND	0.00141	NS
	09/27/04	0.0242	0.0679	<0.00100	0.00308	0.00565	0.00334	NA	<0.000200	<0.00100	<0.00100	0.0181
	03/29/05	0.0153	0.0300	<0.00100	0.000230	<0.00100	0.000580	NA	<0.000200	<0.00100	<0.00100	0.00449
	09/21/05	0.0194	0.0390	<0.00100	<0.00100	<0.00200	0.00144	NA	<0.000200	<0.00200	<0.00100	<0.00500
	03/15/06	0.0120	0.0493	<0.00100	<0.00100	<0.00200	0.00141	NA	<0.000200	<0.00200	<0.00100	0.00959
	09/27/06	0.0199	0.0394	<0.0000752	<0.000800	<0.00160	<0.000432	NA	<0.00000500	<0.00160	<0.0000960	<0.00400
	03/22/07	0.0210	0.0468	0.000173	<0.000800	<0.00160	0.000810	NA	<0.00000500	<0.00160	<0.0000960	0.00843
	09/18/07	0.0236	0.0378	<0.00100	<0.00100	<0.00200	0.00308	NA	<0.00000500	<0.00200	<0.00100	0.00803
	03/25/08	0.0221	0.0542	0.000617	0.00126	0.00277	0.001910	2.30	0.0000034	<0.0002	0.000016[9]	0.0114
dup	03/25/08	0.0249	0.0680	0.001010	0.00155	0.00299	0.002520	2.18	0.0000078	<0.0002	0.000019[9]	0.0109
MW-39	03/29/04	0.0174	0.110	<0.00100	0.00988	0.0163	0.00823	NA	<0.000200	<0.00100	<0.00100	0.0346
	09/27/04	0.0304	0.281	<0.00100	0.0248	0.0832	0.0190	NA	<0.000200	0.00140	<0.00100	0.113
	09/21/05	0.0199	0.0891	<0.00100	0.00218	0.0110	0.00238	NA	<0.000200	<0.00200	<0.00100	0.0139

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TABLE 6
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
MW-40	02/16/00	0.0221	0.185	0.00011	0.0202	0.0289	0.0254	NA	ND	0.00047	0.00012	0.0669
	05/30/00	0.025	0.107	ND	0.00783	0.0107	0.00837	NA	ND	ND	ND	0.0245
	08/24/00	0.0270	0.123	ND	0.00162	0.00316	0.00141	NA	ND	0.00385	ND	0.0160
	11/30/00	0.0319	0.144	ND	0.00433	0.00734	0.00491	NA	ND	0.00187	ND	0.0178
	02/21/01	0.0387	0.119	ND	0.00375	0.00607	0.00330	NA	ND	ND	ND	0.0183
	05/16/01	0.0239	0.102	ND	0.00224	0.00314	0.00193	NA	ND	ND	ND	0.00862
	09/21/01	0.0248	0.106	ND	0.00306	0.00343	0.00254	NA	ND	0.00232	ND	0.0107
	03/13/02	0.0126	0.0538	ND	0.00197	0.00336	0.00194	NA	ND	ND	ND	0.0124
	09/27/02	0.0281	0.219	ND	0.00881	0.0104	0.00808	NA	ND	ND	ND	0.0250
	03/18/03	0.0174	0.0485	ND	0.00135	NS	0.00130	NA	ND	ND	ND	NS
	09/24/03	0.0448	0.254	ND	0.00895	0.0131	0.0316	NA	ND	ND	ND	0.0326
dup	09/24/03	0.0678	0.397	ND	0.0179	0.0249	0.0538	NA	ND	ND	ND	0.0627
	03/29/04	0.0190	0.0897	<0.00100	0.00124	0.00264	0.00124	NA	<0.000200	<0.00100	<0.00100	<0.00500
dup	03/29/04	0.0178	0.0797	<0.00100	0.00719	<0.00200	0.00128	NA	<0.000200	<0.00100	<0.00100	<0.00500
	9/27/2004	0.0611	0.343	<0.00100	0.0179	0.0293	0.0308	NA	<0.000200	<0.00100	<0.00100	0.0764
	3/29/2005	0.0198	0.0527	<0.00100	0.000380	0.00360	0.00229	NA	<0.000200	0.000480	<0.00100	0.00718
	09/21/05	0.0295	0.0807	<0.00100	<0.00100	0.00434	0.00126	NA	<0.000200	<0.00200	<0.00100	0.00592
	03/15/06	0.0162	0.0540	<0.00100	0.00139	0.00368	0.00157	NA	<0.000200	<0.00200	<0.00100	0.00758
	03/22/07	0.0191	0.0538	<0.0000752	<0.000800	0.00205	0.000886	NA	0.00000558	<0.00180	<0.0000960	0.00751
	09/18/07	0.0220	0.0914	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.00000500	<0.00200	<0.00100	0.00558
	03/25/08	0.0157	0.0466	0.000008	0.00043	0.00056	0.000365	1.95	0.0000023	0.0004[a]	<0.000003	0.00525
MW-41B	03/25/08	0.00968	0.0982	0.000132	0.00493	0.00791	0.005740	2.13	0.0000099	<0.0002	0.000037	0.0226
MW-41C	03/25/08	0.00455	0.144	0.000126	0.00299	0.00916	0.005740	1.44	0.0000107	<0.0004	0.000021	0.0276
MW-42B	03/25/08	0.0265	0.159	0.000168	0.00810	0.00927	0.005820	9.09	0.0000106	<0.0002	0.000054	0.0187
MW-42C	03/25/08	0.00197	0.151	0.000086	0.00389	0.0107	0.005880	0.979	0.000006	<0.0002	0.000032	0.0209

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TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
CONOCOPHILLIPS												
B-4	05/26/00	0.035	0.245	ND	0.0275	0.0425	0.014	NA	ND	ND	ND	0.075
dup	05/26/00	0.0367	0.259	ND	0.0283	0.0443	0.0147	NA	ND	ND	ND	0.0785
	08/28/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	11/29/00	0.0316	0.106	ND	0.00532	0.00968	0.00285	NA	ND	0.00165	ND	0.0176
	02/20/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	05/17/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	09/26/02	0.0308	0.0999	ND	0.00541	0.00885	0.00272	NA	ND	0.00129	ND	0.0259
	09/25/03	0.0316	0.0928	ND	0.00258	0.00497	0.00155	NA	ND	0.00129	ND	0.0147
	09/26/05	0.0361	0.113	<0.00100	0.00384	0.00673	0.00231	NA	<0.000200	<0.00200	<0.00100	0.0216
	03/21/07	0.0338	0.0955	<0.00100	0.00182	0.00362	0.00159	NA	<0.000200	<0.00100	<0.00100	0.0182
	09/20/07	0.0395	0.0891	<0.000800	0.00129	0.00421	0.000898	NA	<0.000200	<0.00160	<0.000800	0.0158
	03/26/08	0.0336	0.268	<0.00100	0.0278	0.0476	0.0170	3.22	<0.000200	<0.00200	<0.00100	0.101
B-17	02/17/00	0.0579	0.549	0.00036	0.091	0.140	0.0676	NA	ND	0.00152	0.00028	0.215
	05/26/00	0.0509	0.195	ND	0.0191	0.029	0.0171	NA	ND	0.00126	ND	0.0485
	08/28/00	0.0532	0.113	ND	0.00279	0.00417	0.00660	NA	ND	ND	ND	0.0120
	11/29/00	0.0525	0.111	ND	0.00217	0.00695	0.00636	NA	ND	0.00220	ND	0.00979
	02/23/01	0.0519	0.0821	ND	0.00130	0.00302	0.00470	NA	ND	ND	ND	0.00966
dup	02/23/01	0.0511	0.0885	ND	0.00305	0.00691	0.00535	NA	ND	0.00119	ND	0.0143
	05/17/01	0.0656	0.125	ND	0.00518	0.00746	0.00812	NA	ND	ND	ND	0.0287
dup	05/17/01	0.0650	0.114	ND	0.00406	0.00546	0.00718	NA	ND	0.00126	ND	0.0150
B-18	02/17/00	0.0223	0.507	0.00044	0.0797	0.110	0.0293	NA	0.000098	0.00158	0.00022	0.174
	05/26/00	0.0228	0.203	ND	0.0211	0.0313	0.00922	NA	ND	ND	ND	0.0558
	08/28/00	0.0221	0.130	0.00111	0.00563	0.00684	0.00315	NA	ND	ND	ND	0.0270
	11/29/00	0.0171	0.128	ND	0.00238	0.00451	0.00120	NA	ND	0.00153	ND	0.0157
	02/23/01	0.0256	0.118	ND	0.00538	0.0107	0.00294	NA	ND	ND	ND	0.0506
	05/17/01	0.0372	0.138	ND	0.00774	0.00959	0.00310	NA	ND	0.00106	0.00101	0.0309
B-22	02/17/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	05/26/00	0.0255	0.126	ND	0.0105	0.0187	0.00561	NA	ND	ND	ND	0.0385
	08/28/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	11/29/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	02/20/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	05/17/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F

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TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
B-35	02/17/00	0.0602	0.480	0.00062	0.0893	0.122	0.0828	NA	ND	0.00164	0.00021	0.311
	05/26/00	0.0102	0.116	ND	0.00786	0.0114	0.00264	NA	ND	0.0013	ND	0.0233
	08/28/00	0.0377	0.128	0.00153	0.00467	0.00612	0.00643	NA	ND	ND	ND	0.0339
	11/29/00	0.0468	0.131	ND	0.00316	0.00691	0.00619	NA	ND	0.00212	ND	0.0208
	02/23/01	0.0347	0.0816	ND	0.00200	0.00380	0.00305	NA	ND	0.00100	ND	0.0308
	05/17/01	0.0504	0.153	ND	0.0107	0.0141	0.0106	NA	ND	ND	ND	0.0511
	09/20/01	0.0344	0.0901	ND	0.00178	0.00420	0.00160	NA	ND	ND	ND	0.00632
	03/14/02	0.0335	0.308	ND	0.0463	0.0534	0.0298	NA	ND	0.00139	0.00145	0.146
	09/26/02	0.0296	0.225	ND	0.0298	0.0314	0.0147	NA	ND	0.00131	ND	0.0816
	03/18/03	0.0387	0.0958	ND	0.00155	0.00422	0.00277	NA	ND	ND	ND	0.00700
	09/25/03	0.0517	0.132	ND	0.00334	0.00631	0.00536	NA	ND	ND	ND	0.0171
	03/30/04	0.0291	0.135	<0.00100	0.0119	0.0149	0.00779	NA	<0.000200	<0.00100	<0.00100	0.0152
	09/28/04	0.0422	0.182	<0.00100	0.00829	NA	0.00993	NA	0.00171	<0.00100	<0.00100	NA
	03/28/05	0.0381	0.160	<0.00100	0.0124	0.0180	0.0156	NA	<0.000200	<0.00100	<0.00100	0.0776
	09/20/05	0.0426	0.282	<0.00100	0.0329	0.0408	0.0306	NA	<0.000200	<0.00200	<0.00100	0.107
	03/14/06	0.0423	0.105	<0.00100	0.00192	0.00534	0.00285	NA	<0.000200	<0.00200	<0.00100	0.0396
	09/26/06	0.0387	0.116	<0.00100	0.00233	0.00424	0.00344	NA	<0.000200	<0.00200	<0.00100	0.0233
	03/21/07	0.0336	0.272	<0.00100	0.0265	0.0270	0.0207	NA	<0.000200	<0.00100	<0.00100	0.114
	09/20/07	0.0398	0.135	<0.000800	0.00766	0.0121	0.0057	NA	<0.000200	<0.00160	<0.000800	0.0386
	03/27/08	0.0610	0.498	<0.00380	0.0825	0.144	0.0914	6.18	<0.000200	<0.0500	0.000255	0.388
B-36	02/17/00	0.0105	0.168	0.00021	0.0222	0.0306	0.00779	NA	ND	0.00064	ND	0.0551
	05/26/00	0.0105	0.120	ND	0.00819	0.012	0.00251	NA	ND	ND	ND	0.025
	08/28/00	0.0224	0.156	ND	0.00784	0.00876	0.00322	NA	ND	ND	ND	0.0474
	11/29/00	0.0223	0.130	ND	0.00525	0.00834	0.00171	NA	ND	0.00202	ND	0.0171
	02/23/01	0.0488	0.174	ND	0.00371	0.00666	0.00142	NA	ND	0.00234	ND	0.0244
	05/17/01	0.0387	0.476	ND	0.05720	0.06960	0.01650	NA	ND	0.00301	ND	0.138
	09/20/01	0.0185	0.0861	ND	0.00154	0.00302	ND	NA	ND	ND	ND	0.00761
dup	09/20/01	0.0204	0.0974	ND	0.00294	0.00411	ND	NA	ND	ND	ND	0.0132
	03/14/02	0.00840	0.0901	ND	0.00874	0.0114	0.00271	NA	ND	ND	ND	0.0294
	09/26/02	0.0170	0.109	ND	0.00688	0.00910	0.00440	NA	ND	ND	ND	0.0334
	03/18/03	0.00402	0.0409	ND	0.00234	0.00393	0.00144	NA	ND	ND	ND	0.00729
	09/25/03	0.0200	0.0644	ND	ND	ND	ND	NA	ND	0.00105	ND	ND
	03/30/04	0.00719	0.0586	<0.00100	0.00313	0.00580	0.00149	NA	<0.000200	<0.00100	<0.00100	0.0152
	09/28/04	0.0233	0.112	<0.00100	0.00349	NA	0.00120	NA	0.000285	<0.00100	<0.00100	NA
dup	09/28/04	0.0221	0.0814	<0.00100	0.00222	NA	<0.00100	NA	<0.000200	<0.00100	<0.00100	NA
	03/28/05	0.0240	0.104	<0.00100	0.00367	0.00482	0.00153	NA	<0.000200	<0.00100	<0.00100	0.0195
	09/20/05	0.0205	0.103	<0.00100	0.00450	0.00637	0.00145	NA	<0.000200	<0.00200	<0.00100	0.0132
	03/14/06	0.00803	0.0401	<0.00100	<0.00100	0.00331	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00531
	09/26/06	0.0217	0.0874	<0.00100	<0.00100	<0.00200	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00671
	03/21/07	0.0151	0.259	<0.0010	0.02840	0.0384	0.00970	NA	<0.000200	<0.00100	<0.00100	0.0812
	09/20/07	0.0241	0.169	<0.000800	0.0112	0.0180	0.00447	NA	<0.000200	<0.00160	<0.000800	0.0500
	03/27/08	0.0180	0.397	<0.000380	0.0467	0.0773	0.0186	3.89	0.000202	<0.00500	0.000203	0.168

TABLE 5
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Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
B-37	02/17/00	0.389	0.152	0.00033	0.0159	0.0297	0.00705	NA	ND	0.00159	ND	0.0544
dup	02/17/00	0.327	0.0344	0.0004	0.00066	0.00145	0.00236	NA	ND	0.00025	ND	0.00159
	05/26/00	0.418	0.092	ND	0.00526	0.0131	0.00234	NA	ND	ND	ND	0.0215
	08/28/00	0.897	0.227	ND	0.00462	0.00938	0.00209	NA	ND	ND	ND	0.0303
	11/29/00	0.391	0.0990	ND	0.00221	0.00608	ND	NA	ND	0.00132	ND	0.0120
	02/23/01	0.198	0.0747	ND	ND	0.00339	ND	NA	ND	ND	ND	0.0170
	05/17/01	0.521	0.168	ND	0.00408	0.00984	0.00164	NA	ND	ND	ND	0.0355
	03/14/02	0.0869	0.252	ND	0.0170	0.0409	0.00746	NA	ND	ND	ND	0.0764
	09/26/02	0.117	0.119	ND	0.00603	0.0100	0.00625	NA	ND	ND	ND	0.0348
	03/18/03	0.0758	0.121	ND	0.00829	0.0178	0.00429	NA	ND	ND	0.00222	0.0539
dup	03/18/03	0.0683	0.0958	ND	0.00572	0.0115	0.00288	NA	ND	ND	0.00141	0.0364
	09/25/03	0.260	0.158	ND	0.00290	0.00853	0.00119	NA	ND	0.00169	ND	0.0215
dup	09/25/03	0.247	0.182	ND	0.00513	0.0143	0.00217	NA	ND	ND	ND	0.0330
	03/31/04	0.125	0.0546	<0.00100	0.00137	0.00454	0.00131	NA	<0.000200	<0.00100	<0.00100	0.00842
	09/28/04	0.131	0.0784	<0.00100	0.00218	NA	<0.00100	NA	<0.000200	<0.00100	<0.00100	NA
	03/28/05	0.0734	0.0798	<0.00100	0.00187	0.00593	0.00157	NA	<0.000200	<0.00100	<0.00100	0.0270
	09/20/05	0.0802	0.0827	<0.00100	0.00115	0.00229	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0133
	03/14/06	0.230	0.0616	<0.00100	<0.00100	0.00434	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00615
dup	03/14/06	0.217	0.0720	<0.00100	0.00110	0.00481	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00820
	09/26/06	0.165	0.0613	<0.00100	<0.00100	0.00288	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0110
	03/21/07	0.151	0.0458	<0.00100	<0.00100	<0.00100	<0.00100	NA	<0.000200	<0.00100	<0.00100	<0.0100
	09/20/07	0.0978	0.0666	<0.000800	0.00128	0.00392	0.000963	NA	<0.000200	<0.00160	<0.000800	0.0143
	03/27/08	0.140	0.0787	<0.000380	0.00455	0.0106	0.00315	1.47	<0.000200	<0.00500	<0.000120	<0.0330
B-40	02/17/00	NS/S	NS/S	NS/S	NS/S	NS/S	NS/S	NA	NS/S	NS/S	NS/S	NS/S
	05/26/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	08/28/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	11/29/00	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	02/20/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	05/17/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	09/26/06	0.0184	0.0673	<0.0000752	<0.000800	0.00367	<0.000432	NA	<0.00000500	<0.00160	<0.0000960	0.0166
	03/20/07	0.0214	0.0808	<0.000752	0.00185	0.00712	0.00201	NA	<0.00000500	<0.00160	<0.000800	0.0570
	09/20/07	0.0242	0.0640	<0.000800	<0.000800	0.00185	<0.000800	<0.000800	<0.00000500	<0.00160	<0.000800	0.0136
	03/26/08	0.0209	0.145	<0.00100	0.0140	0.0328	0.00928	3.16[7]	<0.000200	<0.00200	<0.00100	0.150
OF-1	03/26/08	0.0564	0.290	0.0112	0.0250	0.0749	0.0289	3.96[7]	<0.000200	<0.00200	<0.00100	0.242
P-1	03/17/03	0.0225	1.27	ND	0.216	0.238	0.0946	NA	0.000604	ND	ND	0.625
	03/31/04	0.0527	4.37	<0.0100	0.642	0.848	0.244	NA	0.000816	<0.0100	<0.0100	1.73
	03/14/06	0.00334	0.141	0.00168	0.0205	0.0291	0.00778	NA	<0.000200	<0.00200	<0.00100	0.0646
	09/26/06	0.0140	1.21	0.00458	0.130	0.185	0.0418	NA	0.000300[4,5]	<0.00160	0.000732	0.358
	03/20/07	<0.000800	0.0208	<0.000752	0.00226	0.00311	<0.000800	NA	<0.00000500	<0.00160	<0.000800	0.00698
	09/20/07	NA	NA	NA	NA	NA	NA	NA	0.0000665	NA	NA	NA
		Well Abandoned										
P-1A	03/26/08	0.00699	0.233	<0.00100	0.0283	0.0369	0.0282	0.797[7]	<0.000200	<0.00200	<0.00100	0.151
P-2	03/17/03	0.0111	0.0783	ND	0.00232	0.00722	0.00288	NA	ND	ND	0.00106	0.00979
	09/25/03[1]	0.00966	0.116	ND	0.00443	0.0116	0.00553	NA	ND	0.00109	ND	0.0137
	03/30/04	0.00805	0.131	<0.00100	0.00187	0.00447	0.00126	NA	<0.000200	<0.00100	<0.00100	0.0123
	09/28/04	0.0103	0.163	<0.00100	0.00570	NA	0.00742	NA	0.000214	0.00103	<0.00100	NA
	03/28/05	0.00951	0.141	<0.00100	0.00335	0.00900	0.00454	NA	<0.000200	<0.00100	<0.00100	0.0119
	09/20/05	0.00659	0.144	<0.00100	0.00567	0.0152	0.00728	NA	<0.000200	<0.00200	<0.00100	0.0131
	03/14/06	0.00540	0.0517	<0.00100	<0.00100	0.00268	<0.00100	NA	<0.000200	<0.00200	<0.00100	<0.00500

COPPOR0007015

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
U-2	02/17/00	0.0186	0.0632	0.00023	0.00363	0.0116	0.00499	NA	ND	0.00034	ND	0.0241
	05/26/00	0.011	0.0503	ND	0.00137	0.00537	0.00145	NA	ND	ND	ND	0.0109
	08/28/00	0.0119	0.0503	0.00120	0.00109	0.00377	0.00169	NA	ND	ND	ND	0.0147
	11/29/00	0.00729	0.0499	ND	0.00158	0.00314	0.00109	NA	ND	0.00105	ND	0.0131
	02/23/01	0.00887	0.0373	ND	ND	0.00935	0.00173	NA	ND	ND	ND	0.0212
	05/17/01	0.00953	0.0427	ND	0.00129	0.00916	0.00257	NA	ND	ND	ND	0.0205
	09/20/01	0.00680	0.0397	ND	ND	0.00421	ND	NA	ND	ND	ND	0.00700
	03/14/02	0.0108	0.0534	ND	0.00168	0.00666	0.00183	NA	ND	ND	ND	0.0436
	09/26/02	0.00678	0.0443	ND	ND	0.00277	ND	NA	ND	0.00127	ND	0.0116
	03/18/03	0.00998	0.0487	ND	0.00100	0.00583	0.00111	NA	ND	ND	ND	0.0398
	09/25/03	0.00978	0.0749	ND	0.00658	0.00896	0.00268	NA	ND	ND	ND	0.0636
	03/31/04	0.0158	0.0646	<0.00100	0.00243	0.0107	0.00313	NA	<0.000200	0.00116	<0.00100	0.0500
	09/28/04	0.0111	0.0762	<0.00100	0.00318	NA	0.00282	NA	<0.000200	<0.00100	<0.00100	NA
	03/28/05	0.0132	0.0996	<0.00100	0.00326	0.0187	0.00531	NA	<0.000200	<0.00100	<0.00100	0.0944
	09/20/05	0.0198	0.129	<0.00100	0.00174	0.0170	0.00550	NA	<0.000200	<0.00200	<0.00100	0.0520
	03/14/06	0.0156	0.0451	<0.00100	<0.00100	0.00775	0.00228	NA	<0.000200	<0.00200	<0.00100	0.0327
	09/27/06	0.0160	0.0617	<0.00100	<0.00100	0.0196	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.0106
	03/21/07	0.0181	0.0702	<0.00100	0.00117	-	0.00158	NA	<0.000200	<0.00100	<0.00100	-
	09/19/07	0.0135	0.0925	<0.000800	0.00181	0.00747	0.00236	NA	<0.000200	<0.00160	<0.000800	0.0392
	03/25/08	0.0276	0.0620	<0.00100	0.00213	0.0122	0.00376	4.10	<0.000200	<0.00200	<0.00100	0.0209

COPPOR0007016

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
U-3	02/17/00	0.0421	0.194	0.00023	0.0241	0.0171	0.0225	NA	ND	0.00102	ND	0.268
	05/26/00	0.040	0.171	ND	0.0149	0.0116	0.0182	NA	ND	0.00145	ND	0.139
	08/28/00	0.0365	0.124	ND	0.00704	0.00673	0.0212	NA	ND	0.00202	ND	0.103
	11/29/00	0.0428	0.170	ND	0.00994	0.00949	0.0167	NA	ND	0.00342	ND	0.107
dup	11/29/00	0.0413	0.172	ND	0.00996	0.00932	0.0149	NA	ND	0.00284	ND	0.0973
	02/23/01	0.119	0.631	ND	0.170	0.107	303	NA	ND	ND	ND	1.47
	05/17/01	0.0450	0.111	ND	0.00359	0.00439	0.00427	NA	ND	0.00170	ND	0.0258
U-4	05/26/00	0.0188	0.101	ND	0.00367	0.00749	0.00268	NA	ND	ND	ND	0.0149
	08/28/00	0.0198	0.0930	ND	ND	0.00214	0.00129	NA	ND	ND	ND	0.0150
dup	08/28/00	0.0189	0.0922	ND	ND	0.00299	0.00131	NA	ND	ND	ND	0.0157
	11/29/00	0.0198	0.0911	ND	ND	ND	ND	NA	ND	0.00194	ND	0.00895
	02/23/01	0.0216	0.0802	ND	ND	ND	ND	NA	ND	ND	ND	0.00587
	05/17/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	09/26/02	0.0183	0.106	ND	0.00432	0.0105	0.00484	NA	ND	0.00180	ND	0.0377
dup	09/26/02	0.0183	0.106	ND	0.00403	0.00976	0.00379	NA	ND	0.00128	ND	0.0313
	09/27/06	0.0171	0.0816	<0.00100	<0.00100	0.00234	<0.00100	NA	<0.000200	<0.00200	<0.00100	0.00996
	03/21/07	0.0182	0.0944	<0.00100	0.000308	0.00863	0.00253	NA	<0.000200	<0.00100	<0.00100	0.0294
	09/19/07	0.0184	0.0842	<0.000800	<0.000800	0.00235	<0.000800	NA	<0.000200	<0.00160	<0.000800	0.0105
	03/27/08	0.0190	0.101	<0.000380	0.00402	0.0113	0.00409	2.69	<0.000200	<0.00500	<0.000120	<0.0330
U-5	02/17/00	0.0127	0.164	0.00094	0.0175	0.0456	0.0189	NA	ND	0.00095	ND	0.933
	05/26/00	0.0104	0.0748	ND	0.00225	0.00912	0.0037	NA	ND	ND	ND	0.286
	08/28/00	0.0109	0.219	ND	0.00759	0.0216	0.0143	NA	ND	0.00165	ND	0.884
	11/29/00	0.0123	0.124	ND	0.00547	0.0216	0.00856	NA	ND	0.00216	ND	0.825
	02/23/01	0.0126	0.101	ND	0.00692	0.0345	0.0140	NA	ND	0.00100	ND	1.17
	05/17/01	NS/F	NS/F	NS/F	NS/F	NS/F	NS/F	NA	NS/F	NS/F	NS/F	NS/F
	03/18/03	0.0110	0.170	ND	0.0129	0.0663	0.0158	NA	ND	ND	0.00323	2.59
	09/25/03	0.0126	0.102	ND	0.00736	0.0201	0.00947	NA	ND	0.00118	ND	0.800
	03/31/04	0.00802	0.0852	<0.00100	0.00758	0.0230	0.0115	NA	<0.000200	<0.00100	<0.00100	0.785
	09/28/04	0.00987	0.103	<0.00100	0.00623	NA	0.0106	NA	0.000228	<0.00100	<0.00100	NA
	03/28/05	0.0123	0.131	<0.00100	0.0229	0.0645	0.0381	NA	<0.000200	<0.00100	<0.00100	1.98
	09/20/05	0.00704	0.107	<0.00100	0.00583	0.0188	0.0124	NA	<0.000200	<0.00200	<0.00100	0.720
	03/14/06	0.00816	0.132	<0.00100	0.0117	0.0307	0.0127	NA	<0.000200	<0.00200	<0.00100	0.669
	09/26/06[2]	0.00621	0.122	0.000532	0.00960	0.0310	0.0151	NA	0.0000182	<0.00320[3]	<0.0000960	1.07[3]
	03/20/07	0.0117	0.301	0.00145	0.0268	0.0548	0.0432	NA	0.0000248	<0.00160	<0.000800	2.13
	09/20/07	0.026	0.334	<0.00800	0.0167	0.1310	0.0224	NA	0.0000233	<0.0160	<0.000800	2.97
U-5A	03/27/08	0.0528	0.0630	<0.000380	0.00300	0.0194	0.0530	6.17	<0.000200	<0.00500	<0.000120	0.204
U-10	03/18/03	0.107	3.39	ND	0.313	0.403	0.176	NA	0.000551	ND	ND	1.22
	09/25/03	0.00975	0.196	ND	0.0132	0.0149	0.00904	NA	ND	ND	ND	0.0493
	03/30/04	0.0316	0.128	<0.00100	0.00481	0.00573	0.0225	NA	<0.000200	<0.00100	<0.00100	0.0288
	09/28/04	0.00657	0.201	<0.00100	0.00966	NA	0.00852	NA	<0.000200	<0.00100	<0.00100	NA
	03/28/05	0.00643	0.127	<0.00100	0.00529	0.00600	0.00462	NA	<0.000200	<0.00100	<0.00100	0.0293
	09/20/05	0.00686	0.123	<0.00100	0.00120	0.00258	0.00205	NA	<0.000200	<0.00200	<0.00100	0.0106
	03/14/06	0.00918	0.140	<0.00100	0.00607	0.00933	0.00486	NA	<0.000200	<0.00200	<0.00100	0.0403

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TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
U-11	03/18/03	0.00942	0.372	ND	0.0297	0.0339	0.0336	NA	0.000211	0.00153	ND	0.110
	09/25/03	0.0343	0.0893	ND	0.00220	0.00287	0.00830	NA	ND	0.00101	ND	0.0124
	03/30/04	0.00679	0.363	<0.00100	0.0341	0.312	0.0212	NA	<0.000200	0.00165	<0.00100	0.103
dup	03/30/04	0.0357	0.105	<0.00100	0.00400	0.00594	0.0201	NA	<0.000200	<0.00100	<0.00100	0.0292
	09/28/04	0.0106	0.534	<0.00100	0.05610	NA	0.0684	NA	0.000472	0.00192	<0.00100	NA
	03/28/05	0.0388	0.106	<0.00100	0.00152	0.00218	0.00562	NA	<0.000200	<0.00100	<0.00100	0.0137
	09/20/05	0.0453	0.273	<0.00100	0.0242	0.0309	0.116	NA	0.000270	<0.00200	<0.00100	0.140
	03/14/06	0.0420	0.101	<0.00100	0.00137	0.0172	0.00669	NA	<0.000200	<0.00200	<0.00100	0.0120
U-12	03/18/03	0.0323	0.136	ND	0.00600	0.00711	0.0228	NA	ND	ND	ND	0.0338
	09/25/03	0.0418	1.91	ND	0.362	0.372	0.302	NA	0.000559	0.00480	ND	1.2
	03/30/04	0.00655	0.248	<0.00100	0.0179	0.0233	0.0220	NA	<0.000200	0.00185	<0.00100	0.0728
	09/28/04	0.0369	0.208	<0.00100	0.0102	NA	0.0499	NA	<0.000200	<0.00100	<0.00100	NA
	03/28/05	0.0172	1.01	0.00211	0.132	0.140	0.146	NA	<0.000200	0.00345	<0.00100	0.570
	09/20/05	0.00626	0.176	<0.00100	0.00798	0.00998	0.0125	NA	<0.000200	<0.00200	<0.00100	0.0417
	03/14/06	0.00453	0.216	<0.00100	0.00823	0.0105	0.00692	NA	<0.000200	<0.00200	<0.00100	0.0273
U-14	09/27/06	0.0674	1.97	0.00184	0.122	0.159	0.175	NA	0.000558	<0.00200	<0.00100	0.496
	03/21/07	0.00993	0.266	<0.00100	0.0141	0.0181	0.0250	NA	<0.000200	0.00152	<0.00100	0.0831
	09/19/07	0.163	2.50	<0.000800	0.0833	0.106	0.120	NA	0.000452	0.00310	<0.000800	0.822
	03/25/08	0.0223	0.188	<0.00100	0.0119	0.0147	0.0218	0.949	<0.000200	<0.00200	<0.00100	0.0710
U-15	09/27/06	0.0899	0.777	0.00126	0.0903	0.109	0.179	NA	0.000221	<0.00200	<0.00100	0.292
	03/21/07	0.0751	0.416	<0.00100	0.0461	0.0581	0.08631	NA	<0.000200	0.00115	<0.00100	0.158
	09/19/07	0.126	4.79	0.00199	0.232	0.388	0.508	NA	0.000780	0.00538	0.00142	2.15
	03/25/08	0.0685	0.284	<0.00100	0.0196	0.0464	0.0439	11.9	<0.000200	<0.00200	<0.00100	0.146
U-16	09/27/06	0.0854	0.866	0.00131	0.0847	0.113	0.111	NA	0.00170	<0.00200	<0.00100	0.239
	03/21/07	0.112	0.746	0.00153	0.0764	0.113	0.107	NA	0.00135	0.00174	<0.00100	0.260
	09/19/07	0.105	0.280	<0.000800	0.0156	0.0262	0.0191	NA	0.000247	<0.00160	<0.000800	0.0764
	03/25/08	0.0868	0.153	<0.00100	0.00582	0.00859	0.00797	9.97	<0.000200	<0.00200	<0.00100	0.0548
U-17	09/27/06	0.0581	0.606	<0.00100	0.0694	0.0873	0.0552	NA	<0.000200	<0.00200	<0.00100	0.183
	03/21/07	0.0239	0.141	<0.00100	0.0123	0.0185	0.0252	NA	<0.000200	<0.00100	<0.00100	0.0454
	09/19/07	0.0476	0.294	<0.000800	0.0261	0.0423	0.0381	NA	<0.000200	<0.00160	<0.000800	0.0982
	03/25/08	0.0240	0.0874	<0.00100	0.00198	0.00421	0.00556	4.38	<0.000200	<0.00200	<0.00100	0.0138
U-18	03/21/07	0.0690	0.491	<0.00100	0.0539	0.0920	0.0642	NA	<0.000200	0.00112	<0.00100	0.213
	09/19/07	0.0957	0.259	<0.000800	0.0204	0.0403	0.0219	NA	<0.000200	<0.00160	<0.000800	0.101
	03/25/08	0.0810	0.0953	<0.00100	0.00669	0.0109	0.0128	1.36	<0.000200	<0.00200	<0.00100	0.0453
U-19	03/21/07	0.0766	0.262	<0.00100	0.012	0.0224	0.0232	NA	0.000201	<0.00100	<0.00100	0.139
	09/19/07	0.0968	0.100	<0.000800	0.00442	0.0106	0.00899	NA	<0.000200	<0.00160	<0.000800	0.163
	03/25/08	0.0934	0.160	<0.00100	0.00694	0.0119	0.0130	4.95	<0.000200	<0.00200	<0.00100	0.169
U-20	03/21/07	0.0500	0.352	<0.00100	0.0411	0.0456	0.0534	NA	<0.000200	0.00103	<0.00100	0.157
	09/19/07	0.0281	0.0619	<0.000800	<0.000800	<0.00160	<0.000800	NA	<0.000200	<0.00160	<0.000800	0.00438
	03/25/08	0.0174	0.0617	<0.00100	<0.00100	<0.00200	0.00108	5.35[7]	<0.000200	<0.00200	<0.00100	0.00522
dup	03/25/08	0.0145	0.0575	<0.00100	<0.00100	<0.00200	<0.00100	5.17[7]	<0.000200	<0.00200	<0.00100	<0.00500
U-21	03/21/07	0.00828	0.280	<0.00100	0.0244	0.0306	0.0241	NA	<0.000200	<0.00100	<0.00100	0.0886
	09/19/07	0.00628	0.0748	<0.000800	0.000954	0.00311	0.00400	NA	<0.000200	<0.00160	<0.000800	0.00939
	03/26/08	0.00276	0.0836	<0.00100	0.00110	0.00518	0.00112	1.38[7]	<0.000200	<0.00200	<0.00100	0.0132
U-22A	03/27/08	0.0103	0.134	<0.000380	0.00344	0.00529	0.0242	3.30	<0.000200	<0.00500	<0.000120	0.0410
U-22B	03/27/08	0.00978	0.464	<0.000380	0.0511	0.0630	0.0237	2.08	<0.000200	<0.00500	0.000128	0.179
U-23	03/27/08	0.0136	1.45	<0.000380	0.0571	0.105	0.0831	4.00	0.000295	<0.00500	0.000333	0.383
U-24A	03/27/08	0.0294	0.497	<0.000380	0.0605	0.103	0.0198	13.4	<0.000200	<0.00500	0.000200	0.173
U-24B	03/27/08	0.00158	0.212	<0.000380	0.00179	<0.00270	0.000823	2.97	<0.000200	<0.00500	0.000120	<0.0330
U-25	03/27/08	0.00933	0.0606	<0.000380	0.00344	0.00517	0.00233	4.15	<0.000200	<0.00500	<0.000120	<0.0330
U-26	03/26/08	0.0112	0.959	<0.00100	0.0130	0.0226	0.0436	0.798[7]	<0.000200	<0.00200	<0.00100	0.0872

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TABLE 5
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Manganese (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Zinc (mg/l)
U-27	03/26/08	0.0158	0.149	<0.00100	0.0209	0.0236	0.00745	3.12[7]	<0.000200	<0.00200	<0.00100	0.0436
U-28	03/26/08	0.00437	0.0859	<0.00100	0.00244	0.00394	0.00110	3.70[7]	<0.000200	<0.00200	<0.00100	0.0130
U-29B	03/26/08	0.00574	0.216	<0.00100	0.00538	0.00738	0.00257	1.55[7]	<0.000200	<0.00200	<0.00100	0.0166
U-29C	03/26/08	0.00771	0.106	<0.00100	0.00367	0.00576	0.00720	3.69[7]	<0.000200	<0.00200	<0.00100	0.0254

NOTES:
NA - Not Analyzed
ND - Not detected at laboratory reporting limits
NS/F = Not sampled floating product present
NS/S = Not sampled sheen present
2/00 and 5/00 data from IT Corporation
8/00, 11/00, 2/01 and 5/01 data from KHM Environmental Management, Inc.
Sample locations are shown on Figure 2
Analytical Reports are included in Attachment B
dup* = duplicate for B-30 submitted as blind duplicate labeled as B-50
dup**= duplicate for B-30 submitted as blind duplicate labeled as B-31
dup***= duplicate for B-30 submitted as blind duplicate labeled as B-130
[1] = Sample ID was misidentified by the laboratory as D-2
[2] = Sample ID was misidentified by the laboratory as U-2
[3] = The reporting limit for this analyte was raised due to matrix interference.
[4] = The sample container type or preservation does not meet method specifications using EPA Method 1631 modified. The sample was also analyzed for total mercury by EPA Method 7470A. Total mercury was not detected above the laboratory MRL of 0.000200 mg/l.
[5] = Estimated value
[6] = The laboratory control sample (LCS) and/or LCS Duplicate recovery was above the acceptance limits.
[7] = Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10 times the concentration found in the method blank.
[8] = Dissolved Metals per EPA 6000/7000 Series Methods
[9] = Analyte was detected in the associated method blank at a level that is significant relative to the sample result.
Total Metals Analysis by EPA 6000/7000 Series Methods
Total mercury analysis by EPA 6000/7000 Series Methods, EPA Method 1631 Modified, or EPA Method 245.1

TABLE 6
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA SHALLOW WELLS - TPH, VOCs, AND METALS
Willbridge Terminals
Portland, Oregon

		TPH			VOCs					Metals								
Well Identification	Date Sampled	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Arsenic (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON																		
B-10	09/26/06	-	-	-	0.970	3.17	0.770	4.09	<2.00	27.4	0.08	2.27	<1.60	1.55	<5.00	<10.0	<0.0960	10.3
	03/21/07	-	-	-	0.770	1.79	<1.00	6.20	<1.00	28.6	0.08	3.39	4.35	2.15	0.00618	<1.60	<0.0960	14.2
dup	03/21/07	-	-	-	0.720	1.74	<1.00	5.52	<1.00	31.0	0.104	4.50	5.81	2.90	0.00833	<1.60	<0.0960	16.9
	09/18/07	-	-	-	<0.400[2]	<1.00[2]	<1.00[2]	<2.00[2]	<4.00[2]	36.0	<0.0752	3.16	5.91	1.87	<0.200	<1.60	<0.0970	15.1
	03/25/08	618	695	<500	0.730	1.35	<0.500	4.30	-	32.4	<0.380	<1.00	<2.70	<0.540	<0.200	<5.00	<0.120	<33.0
CR-1	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	1.94	0.144	<0.800	2.77	0.44	<5.00	<2.00	<0.0960	10.9
	03/22/07	-	-	-	<0.200	<1.00	<1.00	<2.00	<1.00	0.912	<0.0752	<0.800	3.92	<0.432	<0.00500	<1.60	<0.800	9.6
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	1.41	<0.800	<0.800	<1.60	<0.800	<0.200	<1.60	<0.800	<4.00
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	0.51	<0.380	<1.00	3.40	<0.540	<0.200	<5.00	<0.120	<33.0
CR-33	01/21/08	-	-	-	0.210	<0.500	0.900	2.29	<2.00	23.5	1.17	93.7	121	78.2	0.395	<5.00	0.392	315
	03/26/08	<400	1,960	<481	<0.400	<1.00	<1.00	<2.00	<4.00	4.42	<0.380	4.39	8.12	5.25	<0.200	<5.00	<0.120	<33.0
KINDER MORGAN																		
MW-33	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	26.3	<0.0752	<0.800	<1.60	<0.432	7.24	<1.60	<0.0960	24.4
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	13.9	0.205	<0.800	<1.60	<0.432	0.00767	<1.60	<0.0960	8.27
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	37.3	0.952	1.10	2.42	<0.432	<0.00500	<1.60	<0.0960	18.4
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00	32.9	<1.00	1.33	2.73	<1.00	0.0166	<2.00	<1.00	24.5
	03/25/08	<13	<13	42	<0.14	<0.11	<0.13	<0.33	<0.20	12.1	0.047	0.58	1.41	0.478	0.0235	<0.2	0.009	3.14
MW-34	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	14.3	0.103	0.899	3.18	1.39	<0.00500	<1.60	<0.0960	15.0
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	25.2	0.176	4.01	9.22	5.01	0.00877	<1.60	<0.0960	32.9
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00	32.5	<1.00	3.14	8.00	3.51	0.0208	<2.00	<1.00	20.2
	03/25/08	20	12	44	<0.14	0.17	<0.13	<0.33	<0.20	4.33	0.203	1.27	2.25	1.61	0.0098	<0.2	0.008	5.69
MW-36	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	17.6	<0.0752	<0.800	1.70	<0.432	<0.00500	<1.60	<0.0960	4.50
dup	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	15.7	<0.0752	<0.800	1.60	<0.432	<0.00500	<1.60	<0.0960	<4.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	8.6	<0.0752	<0.800	2.64	0.652	0.00540	<1.60	<0.0960	6.28
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00	18.9	<1.00	<1.00	<2.00	<1.00	<0.00500	<2.00	<1.00	<5.00
dup	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00	30.4	<1.00	<1.00	4.49	1.07	<0.00500	<2.00	<1.00	9.78
	03/25/08	<13	<12	40	<0.14	<0.11	<0.13	<0.33	<0.20	8.28	0.032	0.64	3.85	0.702	0.0071	<0.2	0.005	5.45
MW-37	09/27/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	19.9	<0.0752	<0.800	<1.60	<0.432	<0.00500	<1.60	<0.0960	<4.00
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	21.0	0.173	<0.800	<1.60	0.81	<0.00500	<1.60	<0.0960	8.43
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00	23.6	<1.00	<1.00	<2.00	3.08	<0.00500	<2.00	<1.00	8.03
	03/25/08	480	12,000	480	<0.14	0.27	<0.13	<0.33	<0.20	22.1	0.617	1.26	2.77	1.91	0.0034	<0.2	0.016	11.4
dup	03/25/08	670	3,500	130	<0.14	0.26	<0.13	0.11	<0.20	24.9	1.01	1.55	2.99	2.52	0.0078	<0.2	0.019	10.9
MW-40	09/26/06	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/22/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	19.1	<0.0752	<0.800	2.05	0.886	0.00558	<1.60	<0.0960	7.51
	09/18/07	-	-	-	<0.400	<0.400	<0.400	<2.00	<1.00	22.0	<1.00	<1.00	<2.00	<1.00	<0.00500	<2.00	<1.00	5.58
	03/25/08	48	14	46	<0.14	<0.11	<0.13	<0.33	<0.20	15.7	0.008	0.43	0.56	0.365	0.0023	0.4	<0.003	5.25

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TABLE 6
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA SHALLOW WELLS - TPH, VOCs, AND METALS
Willbridge Terminals
Portland, Oregon

		TPH			VOCs					Metals								
Well Identification	Date Sampled	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Arsenic (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CONOCOPHILLIPS																		
B-40	09/26/06[1]	-	-	-	21.5	2.94	89.4	225	<4.00	18.4	<0.0752	<0.800	3.67	<0.432	<0.00500	<1.60	<0.0960	16.6
	03/20/07	-	-	-	15.2	2.74	86	213	<4.00	21.4	<0.752	1.85	7.12	2.01	<0.00500	<1.60	<0.800	57.0
	09/20/07	-	-	-	15.9	2.12	63.6	153	<2.00	24.2	<0.800	<0.800	1.85	<0.800	<0.00500	<1.60	<0.800	13.6
	03/26/08	2,860	37,600	5,700	3.40	1.85	61.6	132	<2.00	20.9	<1.00	14.0	32.8	9.28	<0.200	<2.00	<1.00	150
P-1	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	14.0	4.58	130	185	41.8	<0.300	<1.60	0.732	358
	03/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	<0.800	<0.752	2.26	3.11	<0.800	<0.00500	<1.60	<0.800	6.98
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-	-	-	-	-	0.0665	-	-	-
P-1A	01/28/08	<80.0	<238	<476	0.990	0.590	<0.500	<1.00	<2.00	9.79	0.632	32.6	35.3	44.4	0.217	–	–	180
	03/26/08	<80.0	<245	<490	0.240	<0.500	<0.500	<1.00	<2.00	6.99	<1.00	28.3	36.9	28.2	<0.200	<2.00	<1.00	151
RW-5	01/28/08	270	8,550	1,600	<0.200	<0.500	<0.500	<1.00	<2.00	28.6	<0.380	2.99	9.17	2.25	0.00659	–	–	<33.0
U-5	09/26/06[1]	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	6.21	0.532	9.60	31.0	15.1	<0.0182	3.20	<0.0960	1,070
	03/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	11.7	1.45	26.8	6.48	43.2	0.0248	<1.60	<0.800	2,130
	09/20/07	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	26.1	<8.00[2]	16.7	131	22.4	0.0233	<16.0[2]	<0.800	2,970
U-22A	01/23/08	421	11,900	1,100	<0.200	<0.500	<0.500	<1.00	<2.00	10.6	0.76	2.52	4.01	12.6	0.0315	<5.00	<0.120	<33.0
	03/27/08	322	10,000	490	<0.400	<1.00	<1.00	<2.00	<4.00	10.3	<0.380	3.44	5.29	24.2	<0.200	<5.00	<0.120	41
U-22B	01/23/08	548	3,770	<472	<0.200	<0.500	<0.500	<1.00	<2.00	18.4	0.680	106	114	59.7	0.323	<5.00	0.296	219
	03/27/08	<80.0	473	<481	<0.200	<0.500	<0.500	<1.00	<2.00	9.78	<0.380	51.1	63	23.7	<0.200	<5.00	0.128	179
U-23	01/23/08	1,130	1,910	<485	25.0	2.62	1.04	3.14	<2.00	14.8	0.472	81.6	98.6	33.9	0.0744	<5.00	0.240	181
	03/27/08	1,010	1,740	<476	<1.00	<2.50	<2.50	<5.00	<10.0	13.6	<0.380	57.1	105	83.1	0.295	<5.00	0.333	383
U-24A	01/23/08	<80.0	1,520	<485	<0.200	<0.500	<0.500	<1.00	<2.00	9.31	<0.380	8.18	9.40	2.35	0.0291	<5.00	<0.120	<33.0
	03/27/08	<400	<243	<485	<1.00	<2.50	<2.50	<5.00	<10.0	29.4	<0.380	60.5	103	19.8	<0.200	<5.00	0.20	173
U-24B	01/23/08	--	9,010	<481	--	--	--	--	--	8.12	<0.380	60.7	31.0	20.6	0.0337	<5.00	<0.120	97.5
	01/24/08	1,190	6,620	2,030	<0.200	<0.500	<0.500	<1.00	<2.00	0.654	<0.380	<1.00	<2.70	<0.540	<0.200	<2.00	<0.120	<33.0
	03/27/08	<400	<238	<476	<1.00	<2.50	<2.50	<5.00	<10.0	1.58	<0.380	1.79	<2.70	0.823	<0.200	<5.00	0.12	<33.0
U-25	01/23/08	940	1,390	<481	<0.200	<0.500	<0.500	<1.00	<2.00	13.3	<0.380	2.59	2.92	12.2	<0.00500	<5.00	<0.120	<33.0
	03/27/08	722	<240	<481	<0.200	<0.500	<0.500	<1.00	<2.00	9.33	<0.380	3.44	5.17	2.33	<0.200	<5.00	<0.120	<33.0
U-26	01/25/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00	16.8	0.408	70.2	70.4	35.3	0.0649	<2.00	0.192	151
	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	11.2	<1.00	13	22.6	43.6	<0.200	<2.00	<1.00	87.2
U-27	01/25/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00	28.5	0.576	72.2	90.2	17	0.0675	<2.00	0.136	127
	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	15.8	<1.00	20.9	23.6	7.45	<0.200	<2.00	<1.00	43.6
U-28	01/28/08	<80.0	365	<476	<0.200	<0.500	<0.500	<1.00	<2.00	7.19	<0.380	7.68	12.3	2.95	0.014	–	–	<33.0
	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	4.37	<1.00	2.44	3.94	1.1	<0.200	<2.00	<1.00	13

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TABLE 6
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA SHALLOW WELLS - TPH, VOCs, AND METALS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	TPH			VOCs					Metals								
		TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Arsenic (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
Portland Harbor Joint Source Control Screening Level Values																		
MCL		N/A	N/A	N/A	5	1,000	700	10,000	--	10	5	100			2	50	100	5,000
EPA's 2004 NRWQC (organism only)		N/A	N/A	N/A	51	15,000	2,100	N/A	N/A	140	N/A	N/A	N/A	N/A	N/A	4,200	N/A	26,000
DEQ's 2004 AWQC (organism only)		N/A	N/A	N/A	51	N/A	2,100	N/A	N/A	140	N/A	N/A	N/A	N/A	0.146	4,200	N/A	26,000
EPA's 2004 NRWQC ecological receptors (chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	150	0.094	N/A	2.7	0.54	0.77	5	N/A	36
DEQ's 2004 AWQC ecological receptors (chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.38	N/A	3.6	0.54	0.012	35	0.12	33

NOTES:
µg/l = micrograms per Liter
<0.00985 = Analyte not detected above the laboratory method reporting limit (MRL) of 0.00985 µg/L
Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005.
NRWQC = National Recommended Water Quality Criteria
AWQC = Ambient Water Quality Criteria
Shading indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
N/A = Not applicable
TPH = Total Petroleum Hydrocarbons in the gasoline range (TPH-G), diesel range (TPH-D), and heavy oil range (TPH-O)
VOCs = Volatile Organic Compounds
[1] = The reporting limit was raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte, and/or matrix interference.
[2] = The reporting limit for this analyte was raised due to matrix interference or sample matrix effects.

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TABLE 7
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA SHALLOW WELLS - PAHs
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene (µg/l)	Acenaphthene (µg/l)	Acenaphthylene (µg/l)	Anthracene (µg/l)	Benzo (a) anthracene (µg/l)	Benzo (a) pyrene (µg/l)	Benzo (b) fluoranthene (µg/l)	Benzo (g,h,i) perylene (µg/l)	Benzo (k) fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo (a,h) anthracene (µg/l)	Fluoranthene (µg/l)	Fluorene (µg/l)	Indeno (1,2,3-cd) pyrene (µg/l)	Naphthalene (µg/l)	Phenanthrene (µg/l)	Pyrene (µg/l)
CHEVRON																		
B-10	09/26/06	-	1.64	<0.388	0.527	0.0463	0.0590	0.0717	0.110	0.0542	0.0928	0.0265	0.469	4.89	0.0768	<1.17	3.66	0.635
	03/21/07	-	1.18	<0.383[2]	<0.153[2]	0.0376	0.0329	0.0403	0.0420	0.0329	0.0510	0.0121	0.236	6.81	0.0335	<3.44[2]	2.83	0.416
dup	03/21/07	NA	1.06	<0.291[2]	<0.194[2]	0.058	0.0606	0.0576	0.0543	0.0677	0.0846	0.0216	0.275	5.26	0.0545	<2.43[2]	1.80	0.440
	09/18/07	<0.962[2]	0.889	<0.192	<0.962[2]	0.0293	0.0288	0.0270	<0.192	0.0292	0.0413	0.0102	<0.962[2]	2.20	0.0218	<3.85[2]	<0.962[2]	1.35
	03/25/08	<0.0990	0.728	<0.198	0.114	<0.0198	<0.00495	0.00544	<0.0990	0.00519	<0.0198	<0.00495	0.214	0.968	<0.00495	<0.594	1.02	0.162
CR-1	09/27/06	-	0.978	<0.197	0.0747	<0.00985	<0.00985	<0.0197	<0.0493	<0.0197	<0.00985	<0.00985	<0.0493	3.19	<0.00985	<0.788	1.07	0.0513
	03/22/07	-	0.118	<0.0343[2]	<0.0490[2]	<0.00490	<0.00490	<0.00490	<0.00980	<0.00490	<0.0147[2]	<0.00490	<0.0245[2]	0.838	<0.00490	<0.275[2]	0.140	<0.0784[2]
	09/20/07	<0.500[2]	1.01	<0.500[2]	<0.500[2]	<0.0250[2]	0.0112[3]	0.0146[3]	<0.100	0.0120[3]	<0.0250[2]	0.00524[3]	<0.500[2]	9.81	0.00512[3]	<2.50	1.03	<0.500[2]
	03/25/08	<0.0980	<0.0980	<0.0980	<0.0980	<0.0245	<0.00490	<0.00490	<0.0980	<0.00490	<0.0245	<0.00490	<0.0980	<0.0980	<0.00490	<0.0980	<0.0980	<0.0980
CR-33	01/21/08	<0.985	<0.985	<0.985	<0.985	<0.0493	<0.0493	<0.0493	<0.985	<0.0493	<0.0493	<0.0493	<0.985	<0.985	<0.0493	<1.48	<0.985	<0.985
	03/26/08[2]	<0.0980	<0.980	<0.980	<0.490	<0.0245	<0.0245	<0.0245	<0.0980	<0.0245	<0.0245	<0.0245	<0.490	<0.980	<0.0245	<0.196	<0.490	<0.0980
KINDER MORGAN																		
MW-33	09/27/06	-	<0.00990	<0.00990	<0.00990	<0.00615	<0.00495	0.00540	<0.00990	0.00659	<0.00718	<0.00495	<0.00990	<0.00990	<0.00510	0.0468[3,4]	<0.00990	0.0189
	03/22/07	-	<0.00976	<0.00976	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00976	<0.00488	0.0146	<0.00976	0.0193
	03/22/07	-	<0.00971	<0.00971	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00971	<0.00485	0.0145	<0.00971	0.0157
	09/18/07	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	03/25/08	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	0.0030	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.017	<0.0050	<0.0035
MW-34	09/27/06	-	<0.00990	<0.00990	<0.00990	<0.00500	<0.00500	<0.00500	<0.00990	<0.00500	<0.00500	<0.00500	<0.00990	<0.00990	<0.00500	0.0468[3,4]	<0.00990	0.0189
	03/22/07	-	0.0215	<0.00985	<0.00985	<0.00493	<0.00493	<0.00493	<0.00985	<0.00493	<0.00493	<0.00493	<0.00985	<0.00985	<0.00493	<0.0591[2]	<0.00985	<0.00985
	09/18/07	<0.0971	0.375	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.971[2]	<0.0971	<0.0971
	03/25/08	0.0025	0.071	<0.0034	0.0070	<0.0026	<0.0043	<0.0025	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.075[8]	0.0065	0.012
MW-36	09/27/06	-	0.606	<0.0200[2]	<0.0200[2]	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	<0.0100	<0.0200[2]	<0.00500	<0.400[2,5]	0.103	0.121
dup	09/27/06	-	0.528	<0.0199[2]	<0.0249[2]	0.00544	<0.00498	<0.00498	<0.00995	0.00498	0.00527	<0.00522	<0.00995	<0.0149[2]	<0.00559	<0.279[2,5]	0.104	0.109
	03/22/07	-	0.289	<0.0146[2]	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00971	<0.00485	<0.320[2]	0.0513	0.0478
	09/18/07	<0.0995	0.564	<0.0995	<0.0995	<0.00498	<0.00498	<0.00498	<0.0995	<0.00498	<0.00498	<0.00498	<0.0995	<0.0995	<0.00498	<0.896[2]	<0.0995	0.148
dup	09/18/07	<0.0980	0.552	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.0980	<0.00490	<0.882[2]	0.110	0.151
	03/25/08	<0.0023	0.088	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	0.0047	<0.0038	<0.0026	<0.032[6]	0.029	0.021
MW-37	09/27/06	-	0.653	<0.250[2]	<0.0400[2]	0.0212	0.0486	0.0326	0.0717	0.0314	0.0296	0.0120	0.0562	0.342	0.0456	<1.20[2,5]	0.135	0.123
	03/22/07	-	0.579	<0.194[2]	<0.0971[2]	0.0183	0.0330	0.0190	0.0389	0.0230	0.0270	0.00858	<0.0971[2]	0.820	0.0315	<2.14[2]	<0.0971[2]	0.133
	09/18/07	<0.388[2]	<0.971[2]	<0.971[2]	<0.0971	0.0132	0.0297	<0.0194[2]	<0.388[2]	<0.0194[2]	0.0167	<0.0194[2]	<0.0971	<0.971[2]	0.0334	<3.11[2]	<0.971[2]	0.120
	03/25/08	<0.0023	1.1	<0.48[2]	0.041	0.044	0.083	0.080	0.15	0.025	0.021	0.015	0.098	1.5	0.15	<1.1[2]	0.23	0.17
dup	03/25/08	<0.0023	1.0	<0.44[2]	0.040	0.046	0.11	0.089	0.21	0.031	0.026	0.018	0.074	1.7	0.21	<1.1[2]	0.23	0.15
MW-40	09/26/06	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/22/07	-	0.0655	<0.00971	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00485	<0.00485	<0.00485	<0.00971	<0.00971	<0.00485	<0.126[2]	0.0259	0.0114
	09/18/07	<0.0990	<0.0990	<0.0990	<0.0990	<0.00495	<0.00495	<0.00495	<0.0990	<0.00495	<0.00495	<0.00495	<0.0990	<0.0990	<0.00495	<0.297[2]	<0.0990	<0.0990
	03/25/08	0.0023	0.075	<0.0034	0.010	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.027[2]	0.028	0.011

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TABLE 7
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA SHALLOW WELLS - PAHs
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene (µg/l)	Acenaphthene (µg/l)	Acenaphthylene (µg/l)	Anthracene (µg/l)	Benzo (a) anthracene (µg/l)	Benzo (a) pyrene (µg/l)	Benzo (b) fluoranthene (µg/l)	Benzo (g,h,i) perylene (µg/l)	Benzo (k) fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo (a,h) anthracene (µg/l)	Fluoranthene (µg/l)	Fluorene (µg/l)	Indeno (1,2,3-cd) pyrene (µg/l)	Naphthalene (µg/l)	Phenanthrene (µg/l)	Pyrene (µg/l)
CONOCOPHILLIPS																		
B-40	09/26/06[1]	-	8.45	<1.75[2]	1.39	0.189	0.0804	<0.100[2]	<0.500	<0.100[2]	0.337	<0.0500	<0.500	9.06	<0.0500	<213[6]	13.8	1.42
	03/20/07	-	26.0	<9.95	<9.95	2.01	0.749	<0.498	<4.98	<0.498	3.86	0.298	<4.98	40.5	0.167	389	87.0	16.6
	09/20/07	260	5.71	<1.75[2]	<2.00[2]	<0.500[1]	<0.500[1]	<0.500[1]	<0.500[3]	<0.500[1]	0.507	<0.500[1]	<0.500[1]	6.97	<0.500[1]	141	12.7	1.90
	03/26/08	2,080	75.6	<24.0	36.8	6.81	2.36	<1.92	<9.62	<1.92	12.0	0.621	9.75	112	0.589	612	275	33.4
P-1	09/26/06	-	0.0137	<0.0102	<0.0102	<0.00508	<0.00508	<0.00508	<0.0102	<0.00508	0.00513	<0.00508	<0.0102	0.0225	<0.00508	<0.0457[2,5]	0.0468	0.0195
	03/20/07	-	<0.00976	<0.00976	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00488	<0.00488	<0.00488	<0.00976	<0.00976	<0.00488	<0.0341	0.0139	0.0134
	09/20/07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-1A	01/28/08	<0.0952	<0.0952	<0.0952	<0.0952	0.00818	<0.00476	0.00818	<0.0952	0.00881	0.0143	<0.00476	<0.0952	<0.0952	<0.00476	0.572	<0.0952	<0.0952
	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
RW-5	01/28/08	<4.76	<4.76	<4.76	<4.76	0.151	<0.0714	<0.238	<0.952	<0.238	0.253	<0.0476	<4.76	<4.76	<0.0476	<4.76	<4.76	1.51
U-5	09/26/06[1]	-	204	<72.8[2]	108	9.40	5.79	<6.07[2]	28.3	<7.28[2]	23.3	3.69	27.6	374	2.33	<121[2,5]	996	119
	03/20/07	-	4.58	<1.17	<2.14	0.189	0.0981	<0.0971	0.420	<0.0971	0.403	0.0577	<0.388	12.5	0.0459	<5.44	11.6	2.56
	09/20/07	19.2	12.4	<5.00[2]	<15.0[2]	0.548	<0.500[1]	<0.500[1]	1.20[6]	<0.500[1]	0.999	<0.500[1]	<5.00[2]	19.9	<0.500[1]	<12.0[2]	37.6	8.00
U-22A	01/23/08	<0.952	1.43	<0.952	<1.90	<0.0476	<0.0476	<0.0476	<0.952	<0.0476	<0.0476	<0.0476	<1.90	9.04	<0.0476	<2.38	<1.90	<0.952
	03/27/08	<0.0962	1.82	<0.337	<0.240	<0.0385	<0.00962	<0.0192	<0.192	<0.0192	<0.0385	<0.00962	0.105	6.55	<0.00962	<1.44	<0.288	0.121
U-22B	01/23/08	<0.485	<0.485	<0.485	<0.485	<0.0243	<0.0243	<0.0243	<0.485	<0.0243	<0.0243	<0.0243	<0.485	1.30	<0.0243	<0.971	<0.485	<0.485
	03/27/08	<0.0952	0.163	<0.0952	<0.0952	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.0952	<0.0952	0.746	<0.00952	<0.238	<0.0952	<0.0952
U-23	01/23/08	<0.962	<0.962	<0.962	<0.962	<0.0481	<0.0481	<0.0481	<0.962	<0.0481	<0.0481	<0.0481	<0.962	1.01	<0.0481	<1.92	<0.962	<0.962
	03/27/08	<0.0952	0.259	<0.0952	0.155	<0.0286	<0.00952	<0.00952	<0.190	<0.00952	<0.0286	<0.00952	<0.0952	0.973	<0.00952	<0.762	1.20	<0.0952
U-24A	01/23/08	<0.0952	<0.0952	<0.0952	<0.381	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.381	<0.0952	<0.00476	<0.0952	<0.381	<0.0952
	03/27/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-24B	01/23/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/24/08	<0.952	<0.0952	<0.0952	<0.0952	<0.0476	<0.00476	<0.00476	<0.0952	<0.00476	<0.0476	<0.00476	<0.0952	<0.0952	<0.00476	<0.952	<0.0952	<0.952
	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.0952	<0.0952	<0.00952	<0.0952	<0.0952	<0.0952
U-25	01/23/08	<0.476	<0.476	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.476	<0.0238	<2.38	<0.476	<0.476
	03/27/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.240	<0.0962	<0.0962
U-26	01/25/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00714	<0.00476	<0.00714	<0.0952	<0.00714	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-27	01/25/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
U-28	01/28/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952	0.00547	<0.00476	<0.0952	<0.00476	<0.0952	<0.00476	<0.0952	<0.0952	<0.00476	0.273	<0.0952	<0.476
	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
Portland Harbor Joint Source Control Screening Level Values																		
MCL		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
EPA's 2004 NRWQC (organism only)		N/A	990	N/A	40,000	0.018	0.018	0.018	N/A	0.018	0.018	0.018	140	5,300	0.018	N/A	N/A	4,000
DEQ's 2004 AWQC (organism only)		N/A	990	N/A	40,000	0.018	0.018	0.018	N/A	0.018	0.018	0.018	140	5,300	0.018	N/A	N/A	4,000
EPA's 2004 NRWQC ecological receptors (chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DEQ's 2004 AWQC ecological receptors (chronic)		N/A	520	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	620	N/A	N/A

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TABLE 7
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA SHALLOW WELLS - PAHs
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene (µg/l)	Acenaphthene (µg/l)	Acenaphthylene (µg/l)	Anthracene (µg/l)	Benzo (a) anthracene (µg/l)	Benzo (e) pyrene (µg/l)	Benzo (b) fluoranthene (µg/l)	Benzo (g,h,i) perylene (µg/l)	Benzo (k) fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo (a,h) anthracene (µg/l)	Fluoranthene (µg/l)	Fluorene (µg/l)	Indeno (1,2,3-cd) pyrene (µg/l)	Naphthalene (µg/l)	Phenanthrene (µg/l)	Pyrene (µg/l)

NOTES:
µg/l = micrograms per Liter
<0.00985 = Analyte not detected above the laboratory method reporting limit (MRL) of 0.00985 µg/L
Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005.
NRWQC = National Recommended Water Quality Criteria
AWQC = Ambient Water Quality Criteria
Shading indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
N/A = Not applicable
PAHs = Polynuclear Aromatic Compounds
[1] = The reporting limit was raised due to dilution necessary for analysis. Sample contains high levels of reported analyte, non-target analyte, and/or matrix interference.
[2] = The reporting limit for this analyte was raised due to matrix interference or sample matrix effects.
[3] = Analyte was detected in the associated method blank.
[4] = Naphthalene was detected in the Method Blank at 0.0165 µg/L. Sample has a detection for naphthalene at 0.0468 µg/L. The result has been qualified and should be considered an estimate. The lab was unable to perform corrective action due to insufficient volume remaining
[5] = Analyte was detected in the associated blank at greater than one-half the MRL, but samples are ND.
[6] = Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10 times the concentration found in the method blank.
[7] = The laboratory control sample (LCS) and/or LCS Duplicate recovery was above the acceptance limits.
[8] = Result is an estimated value

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TABLE 8
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - TPH, VOCs, AND METALS
Willbridge Terminals
Portland, Oregon

		TPH			VOCs					METALS								
Well Identification	Date Sampled	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Arsenic (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON																		
B-11	03/26/08	--	--	--	7.36	4.04	<1.00	5.05	<1.00	24.7	0.565	4.08	6.63	4.34	<0.200	<5.00	<0.120	<33.0
dup	03/27/08	--	--	--	7.22	4.07	<1.00	5.30	<1.00	21.7	0.409	1.53	<27.0	1.96	<0.200	<5.00	<0.120	<33.0
B-19	03/25/08	--	--	--	<0.400	<2.00	<2.00	<4.00	<2.00	43.7	<0.380	11.3	17.2	5.08	<0.200	<5.00	<0.120	<33.0
B-26	03/26/08	--	--	--	43.3	<1.00	338	11.0	<1.00	33.6	0.700	<1.00	2.90	5.82	<0.200	<5.00	<0.120	163
dup	03/26/08	--	--	--	51.9	1.04	352	13.5	<1.00	39.2	1.80	1.78	8.76	14.7	<0.200	<5.00	<0.120	419
B-33	03/27/08	--	--	--	<2.00	<10.0	<10.0	<20.0	<10.0	24.4	<0.380	5.81	15.2	9.26	<0.200	<5.00	<0.120	331
CR-3	12/19/07	--	--	--	<0.200	<1.00	<1.00	<2.00	<1.00	3.29	<0.0752	5.93	9.57	6.16	<0.200	<1.60	<0.0970	<40.0
	03/27/08	--	--	--	<0.200	<1.00	<1.00	<2.00	<1.00	1.21	<0.380	1.32	3.48	1.95	<0.200	<5.00	<0.120	<33.0
CR-26	12/18/07	--	--	--	<0.200	<1.00	<1.00	<2.00	<1.00	107	<1.00	5.33	6.39	2.77	<0.200	<2.00	<1.00	17.4
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	134	<0.380	27.9	37.4	22	<0.200	<5.00	0.18	97.3
CR-27C	12/18/07	<80.0	827	1,020	<0.200	<1.00	<1.00	<2.00	<1.00	5.95	<1.00	4.81	9.14	11.5	<0.200	<2.00	<1.00	88.6
	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	7.02	<0.380	<1.00	<2.70	1.07	<0.200	<5.00	<0.120	<33.0
CR-28A	12/19/07	10,500	3,940	<490	15.1	<10.0	1,500	155	<10.0	32.8	0.294	73.7	103	83.8	<0.200	1.88	0.241	261
	03/27/08	9,080	3,460	<490	18.1	<10.0	1,770	151	<10.0	29.9	<0.380	22.6	39.4	37.0	<0.200	<5.00	<0.120	85.8
CR-28B	12/19/07	<80.0	391	<490	<0.200	<1.00	<1.00	<2.00	<1.00	4.43	0.31	1.18	2.22	1.34	<0.200	<1.60	<0.0970	<40.0
	03/27/08	<80.0	428	<500	<0.200	<1.00	<1.00	<2.00	<1.00	3.68	<0.380	<1.00	5.46	0.611	<0.200	<5.00	<0.120	<33.0
CR-28C	12/19/07	<80.0	845	1,070	<0.200	<1.00	<1.00	<2.00	<1.00	<0.360	0.189	1.31	3.54	2.2	<0.200	<1.60	<0.0970	<40.0
	03/27/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<2.00	<1.00	0.802	<0.380	<1.00	<2.70	1.68	<0.200	<5.00	<0.120	<33.0
CR 29A	12/18/07	1,720	1,350	<490	--	--	--	--	--	28.1	<1.00	67	110	45	<0.200	<2.00	<1.00	197
	03/27/08	627	721	<485	<0.200	<1.00	2.82	<2.00	<1.00	3.93	<0.380	<1.00	<2.70	<0.540	<0.200	<5.00	<0.120	<33.0
CR 29B	12/18/07	<80.0	<245	510	<0.200	<1.00	<1.00	<2.00	<1.00	4.44	<1.00	1.42	4.51	1.68	<0.200	<2.00	<1.00	27.6
	03/27/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<2.00	<1.00	5.79	<0.380	1.49	<2.70	1.34	<0.200	<5.00	<0.120	<33.0
CR-30A	12/20/07	370	1,550	<490	<0.200	<1.00	<1.00	<2.00	<1.00	15.6	<0.0752	11	10.3	4.59	--	<1.60	<0.0970	<40.0
	03/26/08	92.7	595	<490	<0.200	<1.00	<1.00	<2.00	<1.00	9.43	<0.380	6.11	10.6	7.70	<0.200	<5.00	<0.120	<33.0
CR-30B	12/20/07	<80.0	<245	<490	<0.200	<1.00	<1.00	<2.00	<1.00	--	--	--	3.91	--	--	--	--	<40.0
	03/26/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<2.00	<1.00	13.0	<0.380	<1.00	9.59	<0.540	<0.200	<5.00	<0.120	<33.0
CR-31A	12/19/07	411	7,040	873	<0.200	<1.00	<1.00	<2.00	<1.00	14.5	<0.0752	5.39	6.2	2.88	<0.200	<1.60	<0.0970	<40.0
	03/26/08	134	2,030	<490	<0.400	<2.00	<2.00	<4.00	<2.00	10.4	<0.380	<1.00	<2.70	0.550	<0.200	<5.00	<0.120	<33.0

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TABLE 8
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - TPH, VOCs, AND METALS
Willbridge Terminals
Portland, Oregon

		TPH			VOCs					METALS								
Well Identification	Date Sampled	TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Arsenic (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-31B	12/20/07	<80.0	<243	<485	<0.200	<1.00	<1.00	<2.00	<1.00	--	--	--	5.08	--	--	--	--	<40.0
	03/26/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<2.00	<1.00	118	0.533	2.99	4.89	1.51	<0.200	<5.00	<0.120	<33.0
CR-32A	12/19/07	90.2	3,280	1,110	<1.00	<5.00	<5.00	<15.0	<5.00	6.38	<0.0752	2.47	5.86	1.46	<0.200	<1.60	<0.0970	<40.0
	03/26/08	<80.0	662	<490	<0.400	<2.00	<2.00	<4.00	<2.00	3.52	<0.380	<1.00	<2.70	<0.540	<0.200	<5.00	<0.120	<33.0
CR-32B	12/19/07	<80.0	<245	<490	<0.200	<1.00	<1.00	<2.00	<1.00	52.3	0.403	31.1	8.25	1.4	<0.200	<1.60	<0.0970	<40.0
	03/27/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<2.00	<1.00	31.5	0.381	<1.00	<2.70	<0.540	<0.200	<5.00	<0.120	<33.0
CR-32C	12/19/07	<80.0	844	1,020	<0.200	<1.00	<1.00	<2.00	<1.00	8.21	0.13	4.03	8.89	4.08	<0.200	<1.60	<0.0970	46.1
	03/26/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<2.00	<1.00	5.13	1.38	<1.00	3.95	2.37	<0.200	<5.00	<0.120	110
KINDER MORGAN																		
MW 41B	01/23/08	<13	360	500	<0.14	<0.11	<0.13	<0.22	<0.20	9.03	0.115	2.55	3.00	1.22	0.03	0.2	0.019	14.6
dup	01/23/08	<13	310	320	<0.14	<0.11	<0.13	<0.22	<0.20	9.22	0.096	3.03	4.2	1.82	0.03	0.2	0.018	14.7
	03/25/08	<13	12	52	<0.14	0.13	<0.13	<0.33	<0.20	9.68	0.132	4.93	7.91	5.74	0.0099	<0.2	0.037	22.6
MW 41C	01/23/08	36	1,100	620	0.23	0.30	<0.13	<0.22	<0.20	3.52	0.24	2.14	5.18	7.05	0.03	0.4	0.006	14.8
	03/25/08	42	19	68	<0.14	0.11	<0.13	<0.33	<0.20	4.55	0.126	2.99	9.16	5.74	0.0107	<0.4	0.021	27.6
MW 42B	01/23/08	<13	70	120	<0.14	<0.11	<0.13	<0.22	<0.20	25.6	0.11	7.44	9.72	5.46	0.03	0.2	0.062	17.7
	03/25/08	<13	<12	58	<0.14	0.12	<0.13	<0.33	<0.20	26.5	0.168	8.1	9.27	5.82	0.0106	<0.2	0.054	18.7
MW 42C	01/23/08	<13	450	520	2.3	0.78	<0.13	<0.22	<0.20	2.28	0.078	1.83	3.12	1.24	0.03	1.1	0.012	11.2
	03/25/08	17	16	110	0.14	0.20	<0.13	<0.33	<0.20	1.97	0.086	3.89	10.7	5.88	0.006	<0.2	0.032	20.9
CONOCOPHILLIPS																		
U-29A	01/29/08	414	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	--	--	--	0.176	--	--	--
U-29B	01/29/08	87.6	556	<476	<0.200	<0.500	<0.500	<1.00	<2.00	4.48	<0.380	29.1	31.7	7.94	0.17	--	--	62.4
	03/26/08	<80.0	430	<490	<0.200	<0.500	<0.500	<1.00	<2.00	5.74	<1.00	5.38	7.38	2.57	<0.200	<2.00	<1.00	16.6
U-29C	01/29/08	<80.0	516	<476	0.310	<0.500	<0.500	<1.00	<2.00	84.9	<3.80	22.4	46.2	<5.40	<0.00500	--	--	305
	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	7.71	<1.00	3.67	5.76	7.2	<0.200	<2.00	<1.00	25.4

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TABLE 8
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - TPH, VOCs, AND METALS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	TPH			VOCs					METALS								
		TPH-G (µg/l)	TPH-D (µg/l)	TPH-O (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Arsenic (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
Portland Harbor Joint Source Control Screening Level Values																		
MCL		N/A	N/A	N/A	5	1,000	700	10,000	N/A	10	5	100	N/A	N/A	2	N/A	N/A	5,000
DEQs 2004 AWQC (Organism only)		N/A	N/A	N/A	51	15,000	2,100	N/A	N/A	0.14	N/A	N/A	N/A	N/A	0.146	4,200	N/A	26,000
DEQs 2004 AWQC (Ecologic Receptors)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.38	N/A	3.6	0.54	0.012	35	0.12	33
EPAs 2004 NRWQC (Organism only)		N/A	N/A	N/A	51	15,000	2,100	N/A	N/A	0.14	N/A	N/A	N/A	N/A	N/A	4,200	N/A	26,000
EPAs 2004 NRWQC (Chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	150	0.094	N/A	2.7	0.54	0.77	5	N/A	36
Oak Ridge National Laboratory (Tier II SCV)		N/A	N/A	N/A	130	9.8	7.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:
µg/l = micrograms per Liter
<0.00985 = Analyte not detected above the laboratory method reporting limit (MRL) of 0.00985 µg/L
Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005.
NRWQC = National Recommended Water Quality Criteria
AWQC = Ambient Water Quality Criteria
Shading indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
N/A = Not applicable
TPH = Total Petroleum Hydrocarbons in the gasoline range (TPH-G), diesel range (TPH-D), and heavy oil range (TPH-O)
VOCs = Volatile Organic Compounds

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TABLE 9
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - PAHs
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene (µg/l)	Acenaphthene (µg/l)	Acenaphthylene (µg/l)	Anthracene (µg/l)	Benzo (a) anthracene (µg/l)	Benzo (a) pyrene (µg/l)	Benzo (b) fluoranthene (µg/l)	Benzo (g,h,i) perylene (µg/l)	Benzo (k) fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo (a,h) anthracene (µg/l)	Fluoranthene (µg/l)	Fluorene (µg/l)	Indeno (1,2,3-cd) pyrene (µg/l)	Naphthalene (µg/l)	Phenanthrene (µg/l)	Pyrene (µg/l)
CHEVRON																		
B-11	03/26/08	**0.671**	**0.587**	<0.190	<0.190	<0.0476	<0.0476	<0.0476	<0.952	<0.0476	<0.0476	<0.0476	<0.190	**0.838**	<0.0476	<0.762	<0.190	<0.190
dup	03/27/08	**0.675**	**0.438**	<0.0952	<0.0952	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	**0.0253**	<0.0238	<0.0952	**0.620**	<0.0238		**0.169**	<0.0952
B-19	03/25/08	<0.294	**1.76**	<0.980	**0.466**	<0.00980	<0.0245	<0.0245	<0.0980	<0.0245	<0.00980	<0.0245	<0.196	**5.45**	<0.0245	<0.882	**7.68**	**0.131**
B-26	03/26/08	**20.7**	**0.586**	<0.490	<0.490	**0.0349**	**0.0307**	**0.0616**	<0.490	**0.0490**	**0.0677**	<0.0245	<0.490	**0.824**	**0.0476**	**99.8**	**0.741**	<0.490
dup	03/26/08	**17.9**	**0.584**	<0.488	<0.488	**0.0326**	**0.0273**	**0.0573**	<0.488	**0.0437**	**0.0614**	<0.0244	<0.488	**0.776**	**0.0387**	**85.2**	**0.723**	<0.488
B-33	03/27/08	<0.190	**1.22**	<0.952	<0.190	<0.0476	<0.0476	<0.0476	<0.952	<0.0476	**0.0560**	<0.0476	<0.190	**3.38**	<0.0476	<1.14	**1.45**	<0.190
CR-3	12/19/07	<0.190	<0.190	<0.190	<0.190	**0.0214**	**0.0269**	**0.0261**	<0.190	**0.0206**	**0.0333**	<0.00952	<0.190	<0.190	**0.0187**	<0.190	<0.190	<0.190
	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
CR-26	12/18/07	<0.200	<0.200	<0.200	<0.200	**0.0155**	**0.0214**	**0.0259**	<0.200	**0.0254**	**0.0262**	**0.0171**	<0.200	<0.200	**0.0283**	<0.200	<0.200	<0.200
	03/25/08	<0.0962	<0.0962	<0.0962	<0.0962	**0.0118**	**0.0126**	**0.0145**	<0.0962	**0.0135**	**0.0206**	<0.00481	<0.0962	<0.0962	**0.0122**	<0.0962	<0.0962	<0.0962
CR-27C	12/18/07	<0.0995	<0.0995	<0.0995	<0.0995	**0.561**	**0.347**	**0.439**	<0.995	**0.461**	**0.582**	**0.110**	**1.01**	<0.0995	**0.326**	<0.0995	**0.346**	**0.86**
	03/25/08	<0.0995	<0.0995	<0.0995	<0.0995	**0.0375**	**0.0382**	**0.0519**	<0.0995	**0.0478**	**0.0583**	**0.0136**	<0.0995	<0.0995	**0.0415**	<0.0995	<0.0995	<0.0995
CR-28A	12/19/07	**117**	**0.598**	<0.485	<0.485	**0.107**	**0.0965**	**0.0834**	<0.971	**0.0803**	**0.135**	<0.0485	**0.298**	**1.06**	**0.0755**	**421**	**0.670**	**0.313**
	03/27/08	**85.8**	**0.613**	<0.381	<0.381	**0.0260**	<0.0190	<0.0190	<0.381	<0.0190	**0.0324**	<0.0190	<0.381	**0.808**	<0.0190	**269**	**0.497**	<0.381
CR-28B	12/19/07	<0.0980	<0.0980	<0.0980	<0.0980	**0.0110**	**0.0116**	**0.0169**	<0.0980	**0.0160**	**0.0170**	<0.00490	<0.0980	<0.0980	**0.0106**	<0.0980	<0.0980	<0.0980
	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0143**	**0.0154**	**0.0218**	<0.190	**0.0185**	**0.0245**	<0.00952	<0.0952	<0.0952	**0.0120**	<0.0952	<0.0952	<0.0952
CR-28C	12/19/07	<0.0980	<0.0980	<0.0980	<0.0980	**0.143**	**0.0871**	**0.147**	<0.0980	**0.0964**	**0.149**	**0.0199**	**0.536**	<0.0980	**0.0555**	<0.0980	<0.0980	**0.322**
	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0250**	**0.0211**	**0.0308**	<0.190	**0.0263**	**0.0391**	<0.00952	<0.0952	<0.0952	**0.0161**	<0.0952	<0.0952	<0.0952
CR 29A	12/18/07	**6.30**	**0.411**	<0.149	<0.495	**0.0418**	**0.0555**	**0.0321**	<0.0990	**0.0365**	**0.0504**	**0.00785**	<0.495	**0.491**	**0.0257**	<4.46	**0.621**	<0.495
	03/27/08	**3.48**	**0.145**	<0.0952	<0.0952	**0.00500**	<0.00476	<0.00476	<0.0952	<0.00476	**0.00586**	<0.00476	<0.0952	**0.182**	<0.00476	<3.57	**0.307**	<0.0952
CR 29B	12/18/07	<0.0980	<0.0980	<0.0980	<0.0980	**0.0101**	**0.0118**	**0.0167**	<0.0980	**0.0156**	**0.0177**	<0.00490	<0.0980	<0.0980	**0.0103**	<0.0980	<0.0980	<0.196
	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	**0.00646**	<0.0952	**0.00564**	**0.00669**	<0.00476	<0.0952	<0.0952	**0.00498**	<0.0952	<0.0952	<0.0952
CR-30A	12/20/07	<0.495	**0.572**	<0.495	<0.495	<0.0248	**0.0276**	**0.0164**	<0.0990	**0.0173**	**0.0306**	**0.00561**	<0.495	**1.20**	**0.0167**	<1.98	**0.568**	<0.495
	03/26/08	<0.0976	**0.375**	<0.195	<0.0976	<0.0244	**0.0103**	**0.00751**	<0.0976	**0.00731**	<0.0244	<0.00488	<0.0976	**1.49**	**0.00858**	<0.293	**0.550**	<0.0976
CR-30B	12/20/07	<0.0990	<0.0990	<0.0990	<0.0990	<0.00495	<0.00495	**0.00581**	<0.0990	<0.00495	<0.00495	<0.00495	<0.0990	<0.0990	<0.00495	<0.0990	<0.0990	<0.0990
	03/26/08	<0.0971	<0.0971	<0.0971	<0.0971	**0.00604**	**0.00572**	**0.00825**	<0.0971	**0.00615**	**0.00884**	<0.00485	<0.0971	<0.0971	**0.00573**	<0.0971	<0.0971	<0.0971

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TABLE 9
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - PAHs
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene (µg/l)	Acenaphthene (µg/l)	Acenaphthylene (µg/l)	Anthracene (µg/l)	Benzo (a) anthracene (µg/l)	Benzo (a) pyrene (µg/l)	Benzo (b) fluoranthene (µg/l)	Benzo (g,h,i) perylene (µg/l)	Benzo (k) fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo (a,h) anthracene (µg/l)	Fluoranthene (µg/l)	Fluorene (µg/l)	Indeno (1,2,3-cd) pyrene (µg/l)	Naphthalene (µg/l)	Phenanthrene (µg/l)	Pyrene (µg/l)
CR-31A	12/19/07	<0.990	**1.57**	<0.990	<0.990	<0.0495	<0.00990	<0.00990	<0.0990	<0.00990	<0.0495	<0.00495	<0.990	**7.35**	<0.00495	<3.96	**1.04**	<0.990
	03/26/08	<0.392	**1.12**	<0.392	<0.392	<0.0196	<0.0196	<0.0196	<0.392	<0.0196	<0.0196	<0.0196	<0.392	**6.12**	<0.0196	<0.784	**0.579**	<0.392
CR-31B	12/20/07	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985
	03/26/08	<0.0980	<0.0980	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.0980	<0.00490	<0.0980	<0.0980	<0.0980
CR-32A	12/19/07	<0.0990	**0.348**	<0.149	<0.495	<0.00495	<0.00495	<0.0990	<0.00495	<0.0495	<0.0495	<0.00495	<0.495	**1.41**	<0.00495	<1.49	**0.280**	<0.990
	03/26/08	<0.0995	**0.380**	<0.0995	<0.0995	<0.0249	<0.00498	<0.00995	<0.0995	<0.00995	<0.0249	<0.00498	<0.0995	**1.56**	<0.00498	<0.299	**0.202**	<0.0995
CR-32B	12/19/07	<0.0995	<0.0995	<0.0995	<0.0995	<0.00498	<0.00498	<0.00498	<0.0995	<0.00498	<0.00498	<0.00498	<0.0995	<0.0995	<0.00498	<0.0995	<0.0995	<0.0995
	03/27/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	**0.00567**	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
CR-32C	12/19/07	<0.0995	<0.0995	<0.0995	<0.0995	**0.0192**	**0.0250**	**0.0347**	<0.0995	**0.0307**	**0.0340**	**0.00718**	<0.0995	<0.0995	**0.0212**	<0.0995	<0.0995	<0.0995
	03/26/08	<0.0985	<0.0985	<0.0985	<0.0985	**0.0209**	**0.0175**	**0.0333**	<0.0985	**0.0173**	**0.0253**	**0.00628**	<0.0985	<0.0985	**0.0190**	<0.0985	<0.0985	<0.0985
KINDER MORGAN																		
MW 41B	01/23/08	**0.058**	--	<0.0034	--	<0.0026	<0.0043	--	<0.0029	<0.0025	<0.0034	<0.0025	--	**0.014**	<0.0026	**0.14**	--	**0.0052**
dup	01/23/08	**0.054**	--	<0.0036	--	<0.0027	<0.0045	--	<0.0030	<0.0026	<0.0036	<0.0026	--	**0.017**	<0.0027	**0.13**	--	<0.0037
	03/25/08	**0.010**	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	**0.011**	<0.0050	<0.0035
MW 41C	01/23/08	**0.012**	--	<0.0034	--	<0.0026	<0.0043	--	<0.0029	<0.0025	<0.0034	<0.0025	--	**0.013**	<0.0026	**0.018**	--	<0.0035
	03/25/08	**0.012**	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	**0.024**	<0.0050	<0.0035
MW 42B	01/23/08	**0.0028**	--	<0.0034	--	**0.0041**	<0.0043	--	<0.0029	<0.0025	<0.0034	<0.0025	--	<0.0038	<0.0026	**0.004**	--	<0.0035
	03/25/08	**0.0060**	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	**0.042**	<0.0050	<0.0035
MW 42C	01/23/08	**0.011**	--	<0.0034	--	<0.0026	<0.0043	--	<0.0029	<0.0025	<0.0034	<0.0025	--	<0.0038	<0.0026	**0.017**	--	<0.0035
	03/25/08	<0.0023	0.013	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	**0.012**	0.0089	<0.0035

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TABLE 9
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - PAHs
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	2-Methyl-naphthalene (µg/l)	Acenaphthene (µg/l)	Acenaphthylene (µg/l)	Anthracene (µg/l)	Benzo (a) anthracene (µg/l)	Benzo (a) pyrene (µg/l)	Benzo (b) fluoranthene (µg/l)	Benzo (g,h,i) perylene (µg/l)	Benzo (k) fluoranthene (µg/l)	Chrysene (µg/l)	Dibenzo (a,h) anthracene (µg/l)	Fluoranthene (µg/l)	Fluorene (µg/l)	Indeno (1,2,3-cd) pyrene (µg/l)	Naphthalene (µg/l)	Phenanthrene (µg/l)	Pyrene (µg/l)
CONOCOPHILLIPS																		
U-29A	01/29/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
U-29B	01/29/08	**6.69**	**0.286**	<0.143	<0.0952	**0.0143**	**0.0107**	**0.0110**	<0.0952	**0.0110**	**0.0208**	<0.00476	<0.0952	**1.28**	**0.0059**	<1.90	**1.14**	<0.0952
	03/26/08	**1.23**	**0.163**	<0.0962	<0.0962	**0.0113**	**0.0138**	**0.0125**	<0.192	<0.00962	0.0162	<0.00962	<0.0962	**0.257**	**0.0104**	<0.192	<0.0962	<0.0962
U-29C	01/29/08	**0.191**	<0.0952	<0.0952	<0.0952	**0.033**	**0.0433**	**0.0421**	<0.00476	**0.0288**	**0.0393**	0.00503	<0.0952	<0.0952	**0.0239**	**0.195**	<0.0952	<0.476
	03/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
Portland Harbor Joint Source Control Screening Level Values																		
MCL		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
DEQs 2004 AWQC (Organism only)		990	990	N/A	40000	0.018	0.018	0.018	N/A	0.018	0.018	0.018	140	5300	0.018	N/A	N/A	4000
DEQs 2004 AWQC (Ecologic Receptors)		520	520	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	620	N/A	N/A
EPAs 2004 NRWQC (Organism only)		990	990	N/A	40000	0.018	0.018	0.018	N/A	0.018	0.018	0.018	140	5300	0.018	N/A	N/A	4000
EPAs 2004 NRWQC (Chronic)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oak Ridge National Laboratory (Tier II SCV)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
µg/l = micrograms per Liter
<0.00985 = Analyte not detected above the laboratory method reporting limit (MRL) of 0.00985 µg/L
Screening Level Values (SLVs) taken from Table 3-1 of the Portland Harbor Joint Source Control Strategy (JSCS) guidance document, dated December 2005.
NRWQC = National Recommended Water Quality Criteria
AWQC = Ambient Water Quality Criteria
Shading indicates analyte was detected above the applicable screening levels presented in Table 3-1 of the Portland Harbor JSCS guidance document, dated December 2005.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
NA = Not analyzed
NS = Not sampled
N/A = Not applicable
ND = Not detected
PAHs = Polynuclear Aromatic Compounds

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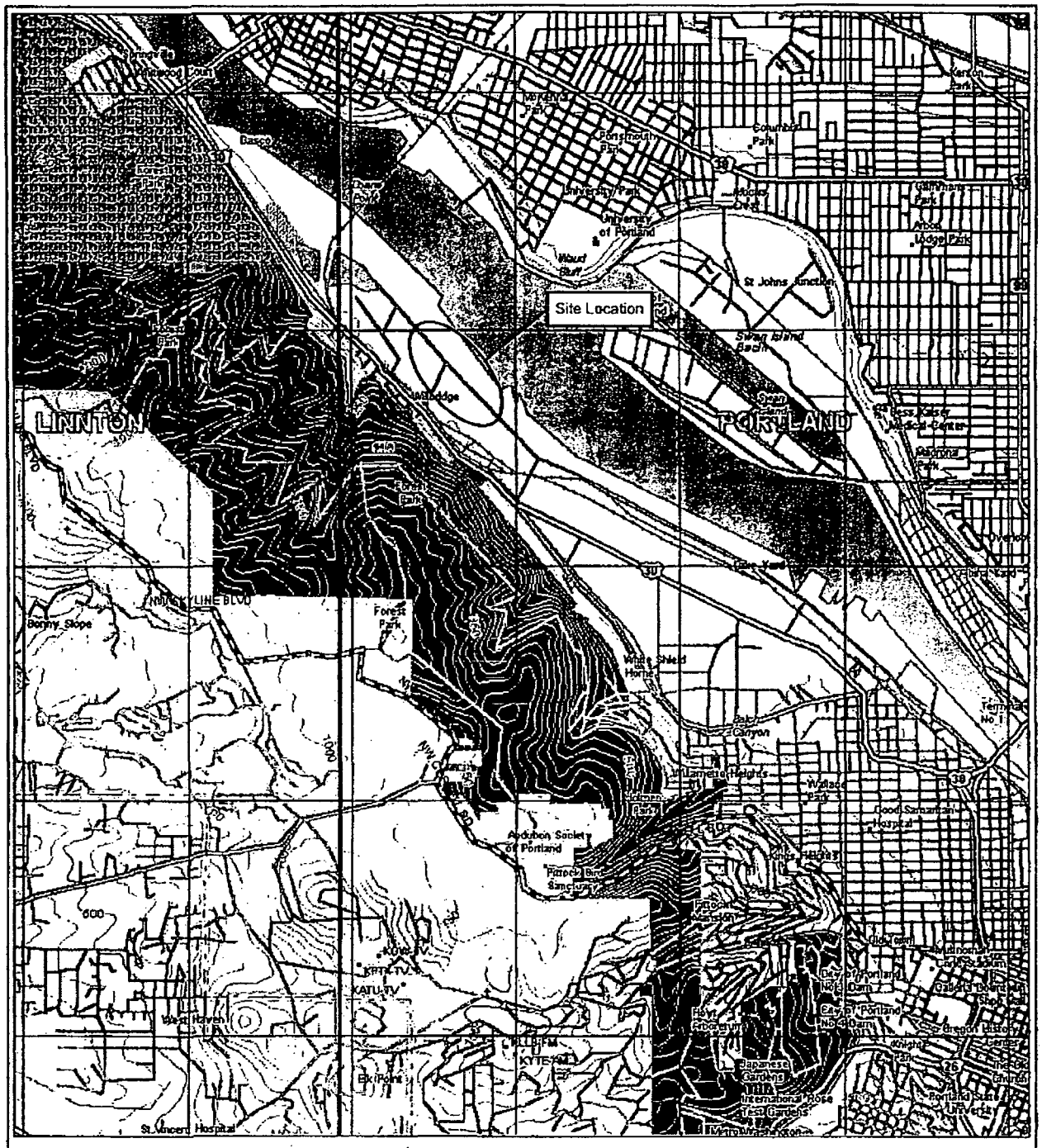


REFERENCES

USGS 7.5 Minute Topographic Maps
Portland, Oregon-Washington
Linnton, Oregon
DeLorme TopoQuads, 1999
SCALE: 1 inch = 3750 feet

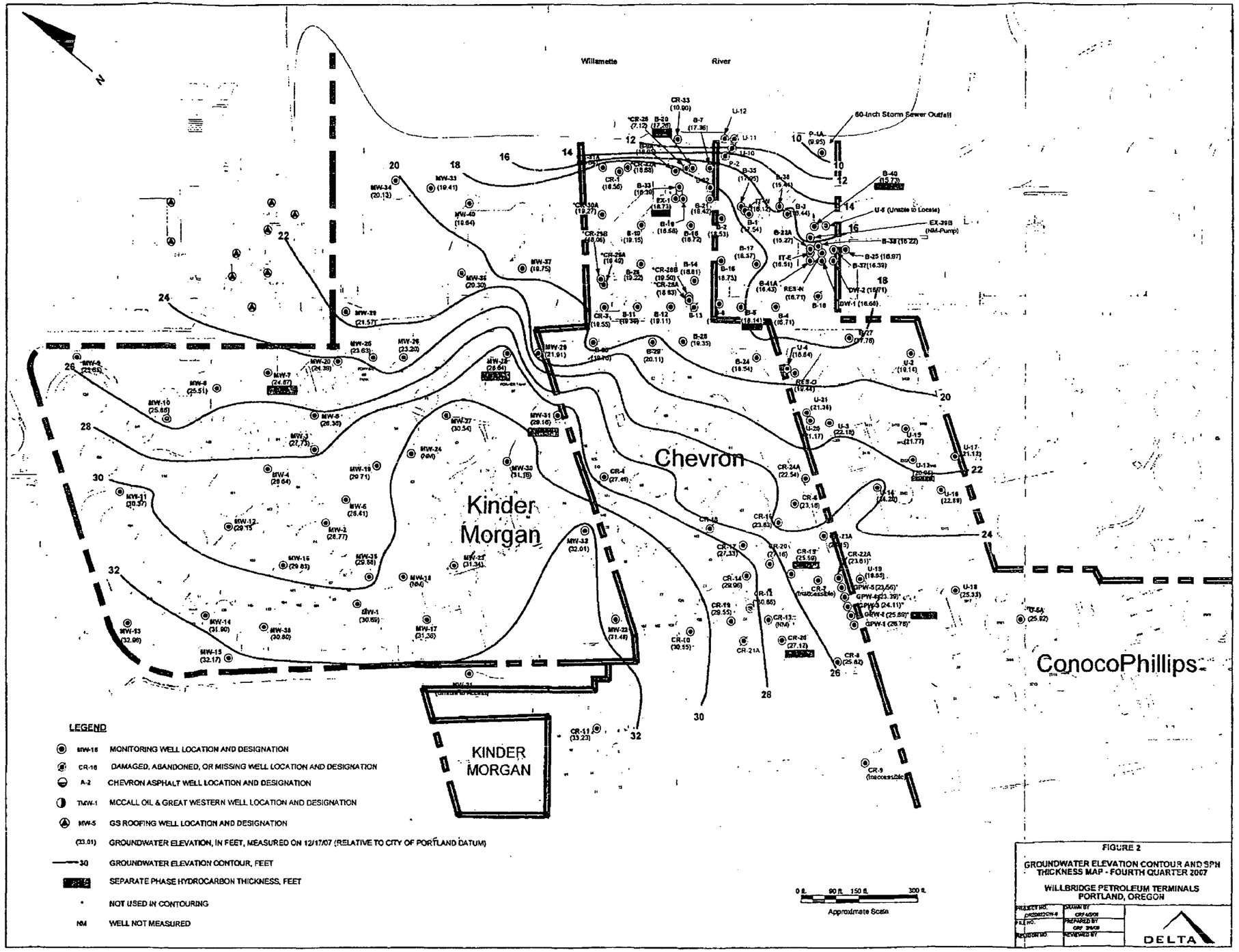
FIGURE 1

SITE LOCATION MAP

Willbridge Petroleum Terminals
Portland, Oregon

PROJECT NO. ORZ0922GW-6	DRAWN BY KNT 6-12-03
FILE NO.	PREPARED BY CRF 11/7/07
REVISION NO.	REVIEWED BY

DELTA



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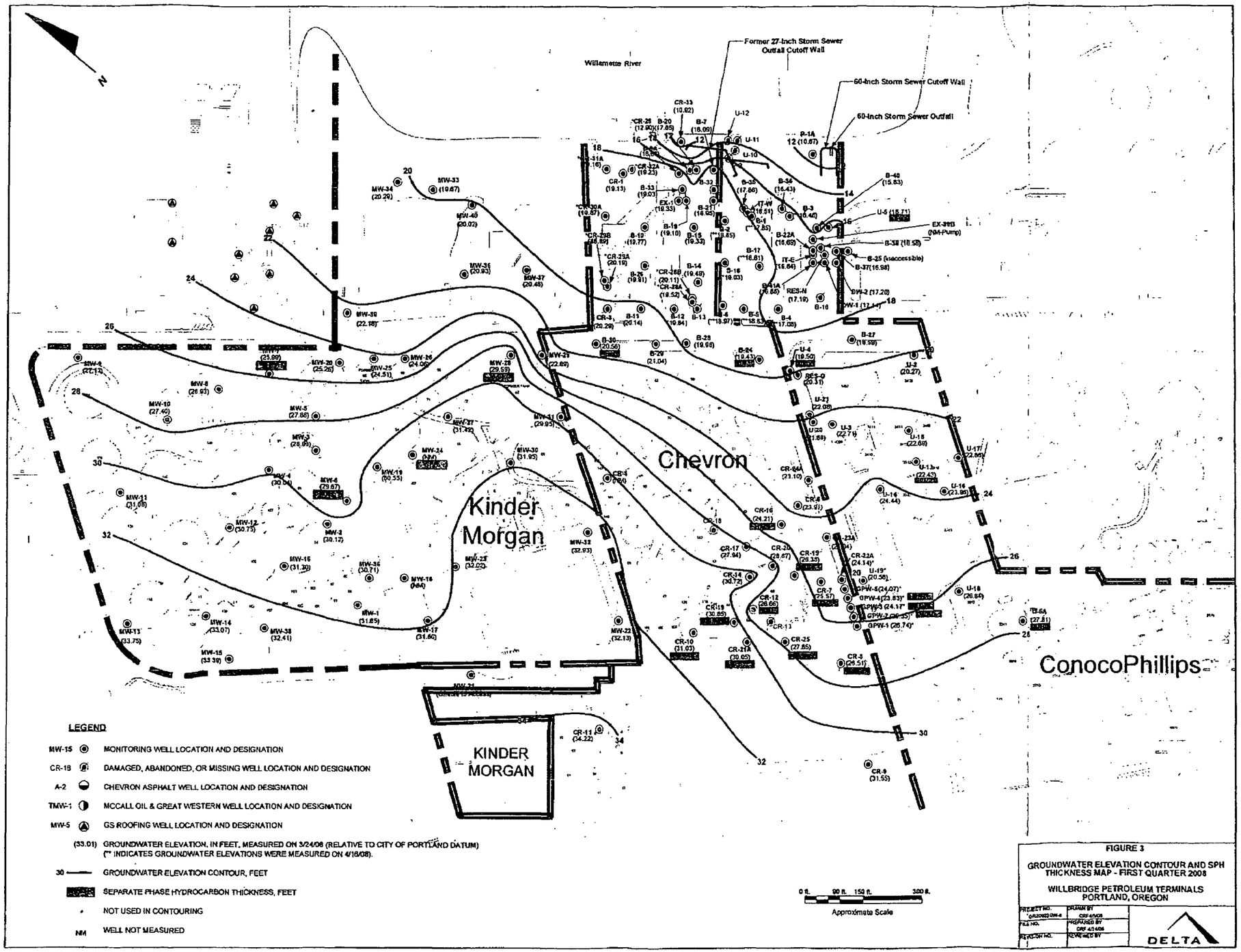


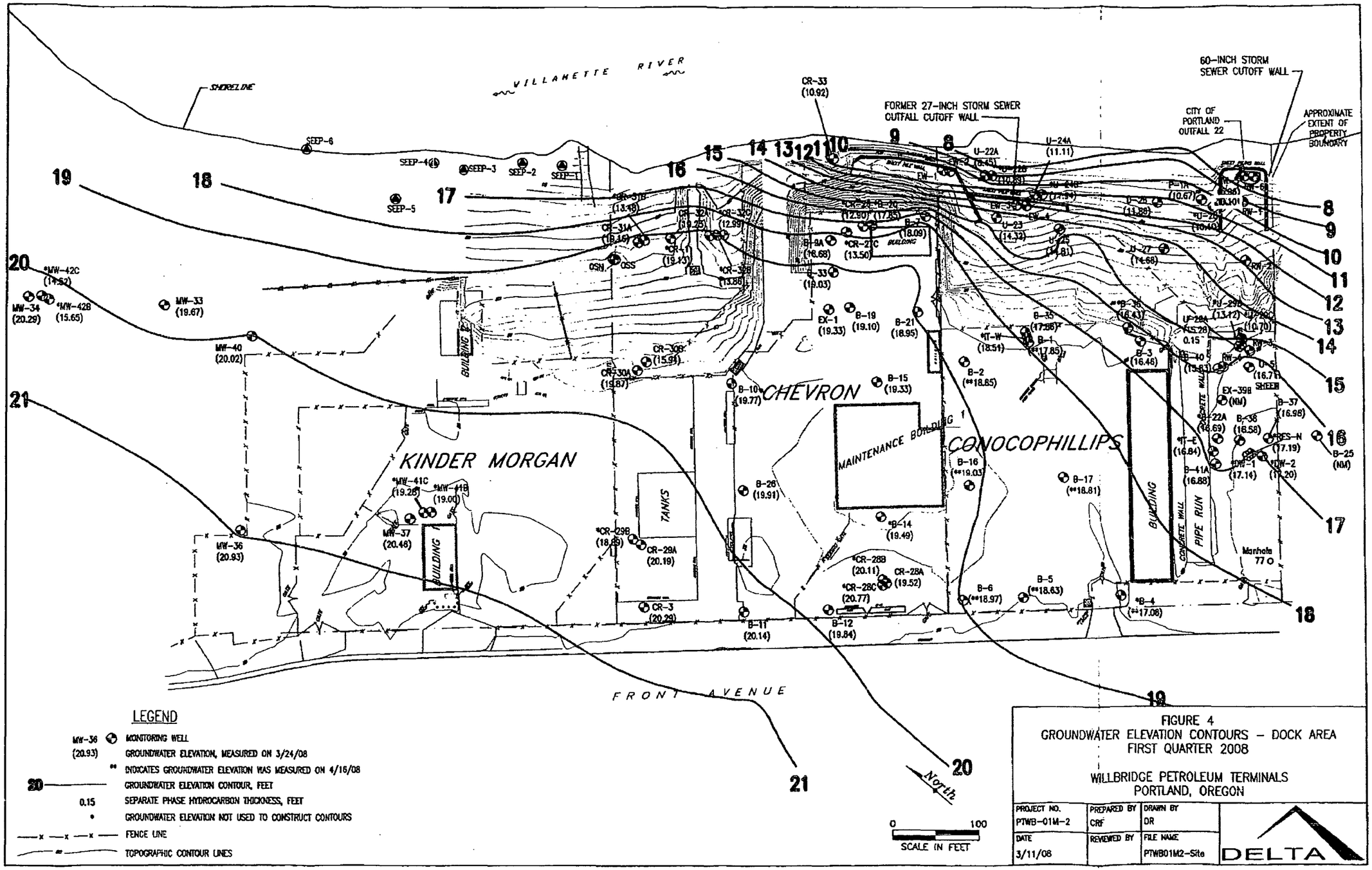
FIGURE 3

GROUNDWATER ELEVATION CONTOUR AND SPH THICKNESS MAP - FIRST QUARTER 2008

WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

DELTA

COPPOR00007034



LEGEND

- MW-36 (20.93) — MONITORING WELL; GROUNDWATER ELEVATION, MEASURED ON 3/24/08
- ** — INDICATES GROUNDWATER ELEVATION WAS MEASURED ON 4/16/08
- 20 — GROUNDWATER ELEVATION CONTOUR, FEET
- 0.15 — SEPARATE PHASE HYDROCARBON THICKNESS, FEET
- • — GROUNDWATER ELEVATION NOT USED TO CONSTRUCT CONTOURS
- —x—x—x— FENCE LINE
- TOPOGRAPHIC CONTOUR LINES

FIGURE 4
GROUNDWATER ELEVATION CONTOURS – DOCK AREA
FIRST QUARTER 2008

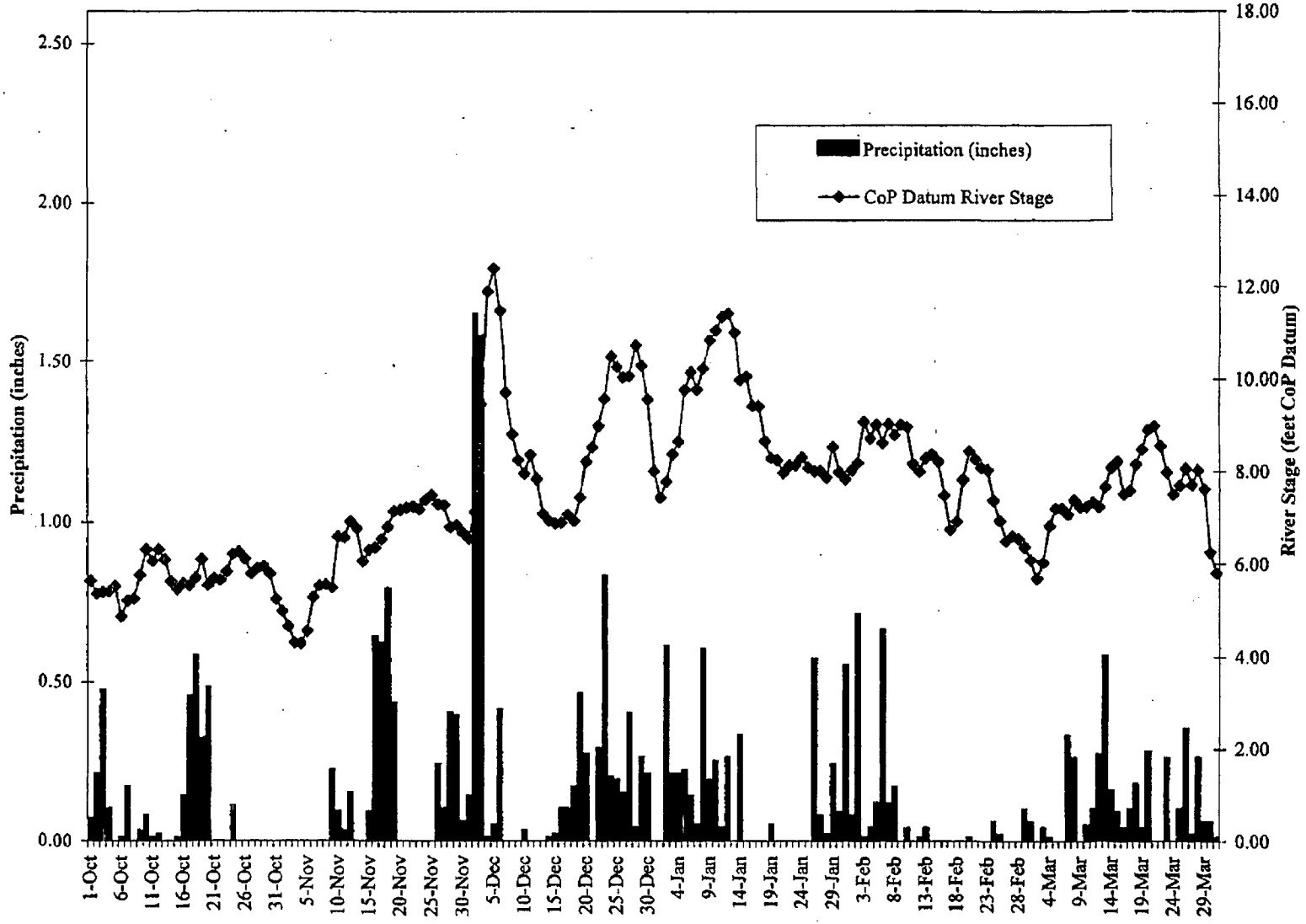
WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
PTWB-01M-2	CRF	DR
DATE	REVIEWED BY	FILE NAME
3/11/08		PTWB01M2-Site

DELTA

COPPOR00007035

FIGURE 5
PRECIPITATION AND RIVER STAGE
OCTOBER 2007 - MARCH 2008
Willbridge Petroleum Terminals
Portland, Oregon



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APPENDIX A

GROUNDWATER MONITORING AND SAMPLING PROCEDURES, CERTIFIED ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

(CD ONLY)

Groundwater Monitoring and Sampling

Before the sampling event, Delta measured depth to water in each groundwater monitoring well at the facility with a Solinst Electronic Oil/Water Interface Probe. This information was recorded on waterproof field sheets. Groundwater elevations (GWE) were measured to an accuracy of 0.01 feet. Wells were sampled after purging three casing volumes of water from the well (or until dry). Wells with observable amounts of SPH were not sampled. After the well had recharged to approximately 80% of static level, samples were collected using a disposable polyethylene bailer and placed in the appropriate laboratory-provided containers. Samples were labeled, placed into ice filled coolers, logged onto chain-of-custody forms and transported to the laboratory.